CONEC®

TECHNOLOGY IN CONNECTORS™

# I/O CONNECTORS

# CONEC®

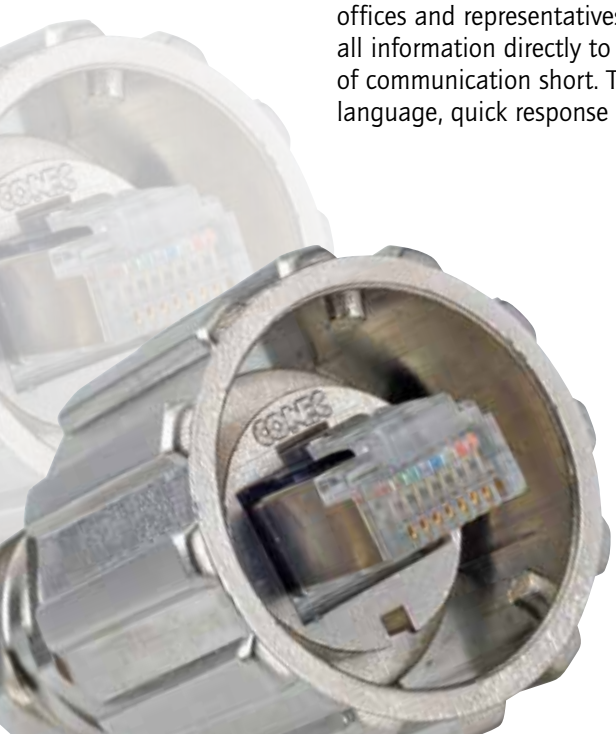
## TECHNOLOGY IN CONNECTORS™

GERMANY

As a leading manufacturer of connectors, CONEC develops, produces and markets its products around the world to customers in the machine-tool, electronics and communications industries.

CONEC has dedicated itself to make a contribution to progress in the connector industry and to satisfy its customers through innovation, quality and excellent service. Around the world, our organization operates as a customer-oriented team.

CONEC is present in numerous countries with its own branch offices and representatives. Our local sales consultants transmit all information directly to the responsible departments to keep the paths of communication short. This provides support in the local language, quick response and competent consulting.

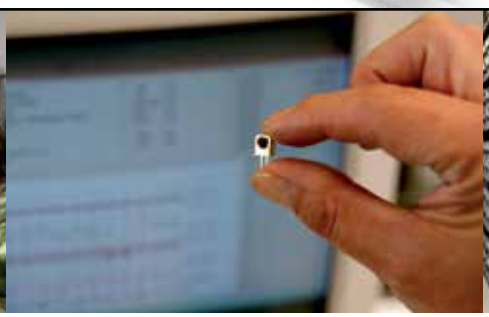


CANADA

USA

CONEC designs and manufactures a wide variety of electronic connector products. CONEC provides reliable and effective solutions to problems faced by electronic equipment manufacturers, contract manufacturers and cable assembly operations.

## Our philosophy – Customer satisfaction.



Quality is realized right from the beginning with Total Quality Management concept. Therefore our customers are included into all our processes, starting with design phase, first sampling, series production release and continuous sales support. The phases will be accompanied by drawings, samples and test reports. The entire quality process is documented and approved. CONEC is certified to ISO/TS16949:2002.

CONEC inhouse is equipped with modern test systems. We can verify the requirements and implement a continuous product improvement process to meet and exceed future requirements. To fulfill international and national requirements most of CONEC product series are registered by UL, CSA or VDE

# CONEC IS YOUR SPECIALIST FOR DESIGN AND PRODUCTION OF SPECIAL CUSTOMIZED PRODUCTS.

Flexibility, quality assurance and rapid response are required in today's market more than ever before. CONEC fulfills these demands with central order-processing and well implemented quality control systems. Statistical process control as well as just in time deliveries are a common practice. Numerous customers honored this performance by approving CONEC to a "Preferred Supplier" status.

**Are you looking for application-specific solutions?**
**Standard products do not meet your needs?**
**The implementation deadline is tight?**

**CONEC experienced design team can create your solution for you:**

- **Special Interconnect solutions to customers specifications**
- **Prototypes and small series production batches**
- **Connectors with increased IP ratings for harsh environments.**

Contact us to discuss your special requirements.

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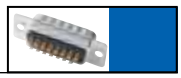

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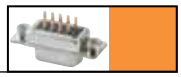

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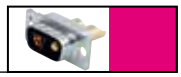

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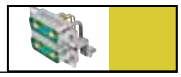

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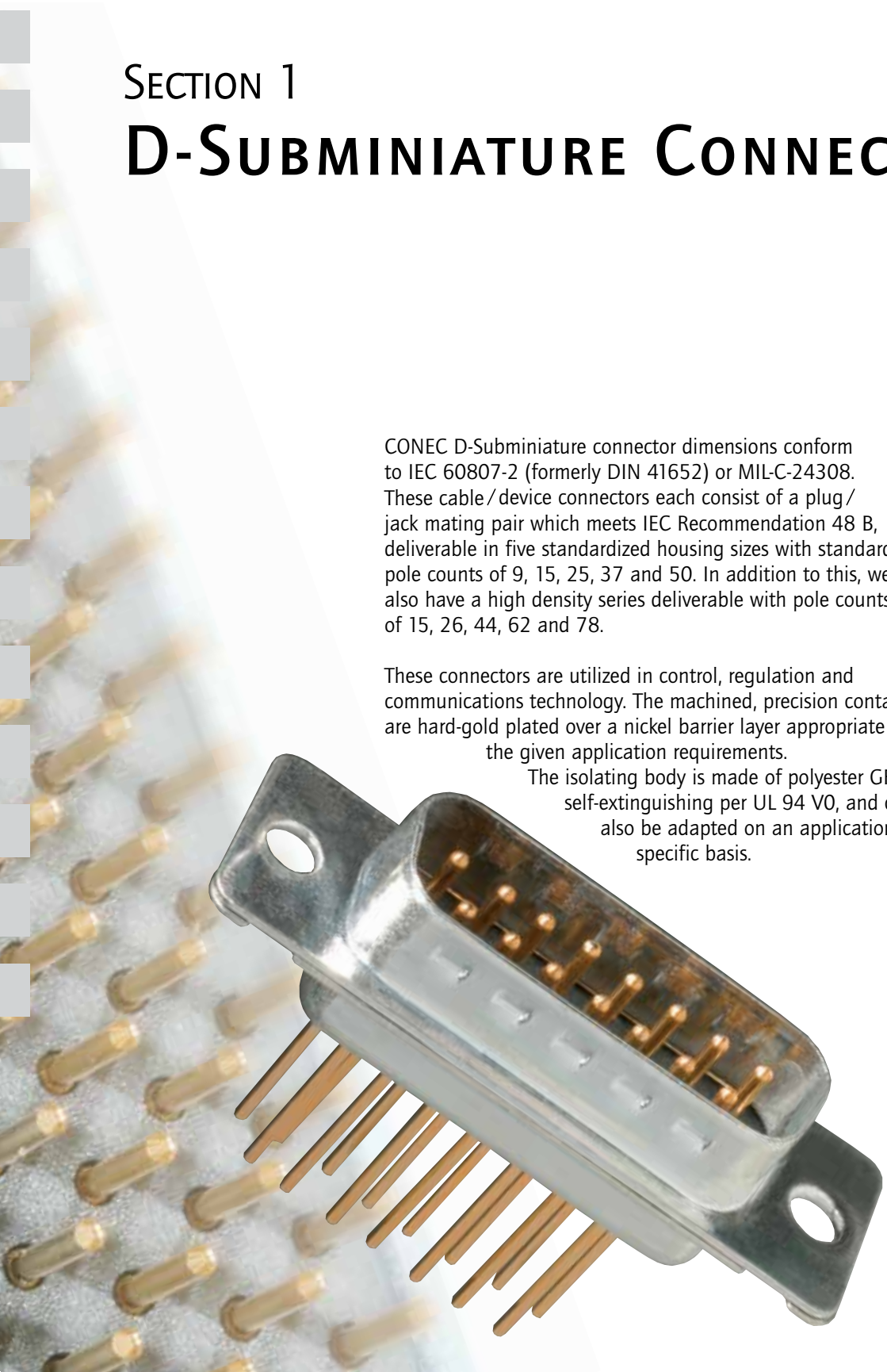
## Section 1

# D-Subminiature Connectors

CONEC D-Subminiature connector dimensions conform to IEC 60807-2 (formerly DIN 41652) or MIL-C-24308. These cable / device connectors each consist of a plug / jack mating pair which meets IEC Recommendation 48 B, deliverable in five standardized housing sizes with standard pole counts of 9, 15, 25, 37 and 50. In addition to this, we also have a high density series deliverable with pole counts of 15, 26, 44, 62 and 78.

These connectors are utilized in control, regulation and communications technology. The machined, precision contacts are hard-gold plated over a nickel barrier layer appropriate to the given application requirements.

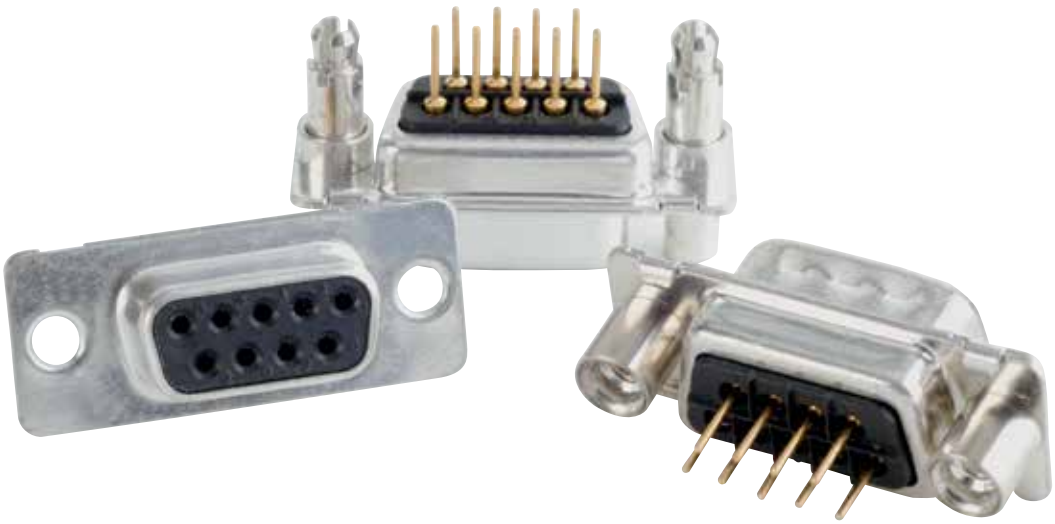
The isolating body is made of polyester GF, self-extinguishing per UL 94 V0, and can also be adapted on an application-specific basis.



The trapezoid shaped housing (shell) provides mechanical protection, electrical shielding and ensures proper plug-in alignment. CONEC connectors are compatible with industry standards. Hoods and Backshells are configures for either straight or side cable entry.

An extensive assortment consisting of protective caps, hard ware and latches can be supplied.

Need a custom design? Please contact us.



# D-SUB Standard

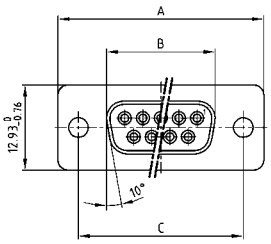
## Solder cup – Precision machined contacts – For wire size AWG 20

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

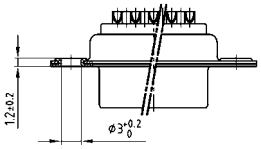
- Suitable for wire size **AWG 20**
- Mounting styles:
  - with through-hole, Ø .118"/3 mm
  - with M3 or 4-40 UNC threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

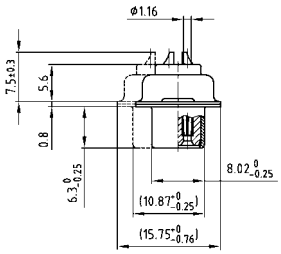
### Socket connector




| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 +0.12 |
| 15 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |
| 50 | 67.31 | 52.55 | 61.10 +0.14 -0.11 |

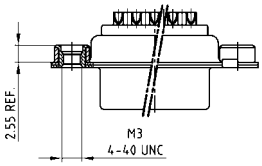
Mounting style: Through-hole



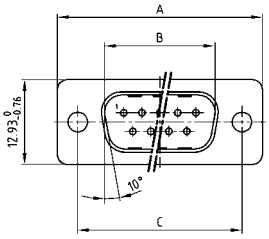




50 pos. = Dim. in (_ _)

Mounting style: Threaded insert

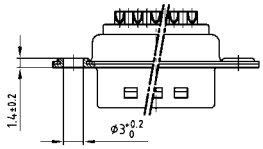


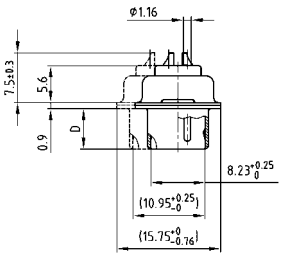

### Plug connector




| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 +0.12 | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 50 | 67.31 | 52.68 | 61.10 +0.14 -0.11 | 5.99 |

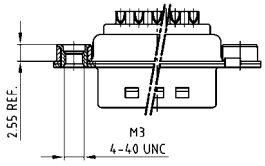
Mounting style: Through-hole




50 pos. = Dim. in (_ _)

Mounting style: Threaded insert




### Order data

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 164A10019X |
| 15 | Through-hole | 164A10029X |
| 25 | Through-hole | 164A10039X |
| 37 | Through-hole | 164A10049X |
| 50 | Through-hole | 164A10059X |
| 09 | 4-40 UNC Threaded insert | 164A10219X |
| 15 | 4-40 UNC Threaded insert | 164A10229X |
| 25 | 4-40 UNC Threaded insert | 164A10239X |
| 37 | 4-40 UNC Threaded insert | 164A10249X |
| 50 | 4-40 UNC Threaded insert | 164A10259X |
| 09 | M3 Threaded insert | 164A10269X |
| 15 | M3 Threaded insert | 164A10279X |
| 25 | M3 Threaded insert | 164A10289X |
| 37 | M3 Threaded insert | 164A10299X |
| 50 | M3 Threaded insert | 164A10309X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 163A11069X |
| 15 | Through-hole | 163A11079X |
| 25 | Through-hole | 163A11089X |
| 37 | Through-hole | 163A11099X |
| 50 | Through-hole | 163A11109X |
| 09 | 4-40 UNC Threaded insert | 163A11269X |
| 15 | 4-40 UNC Threaded insert | 163A11279X |
| 25 | 4-40 UNC Threaded insert | 163A11289X |
| 37 | 4-40 UNC Threaded insert | 163A11299X |
| 50 | 4-40 UNC Threaded insert | 163A11309X |
| 09 | M3 Threaded insert | 163A11319X |
| 15 | M3 Threaded insert | 163A11329X |
| 25 | M3 Threaded insert | 163A11339X |
| 37 | M3 Threaded insert | 163A11349X |
| 50 | M3 Threaded insert | 163A11359X |

# D-SUB Standard

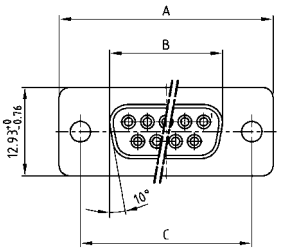
## Solder cup – Stamped contacts – For wire size AWG 20

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

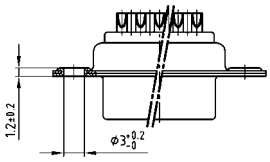
- Suitable for wire size **AWG 20**
- Mounting style:
  with through-hole, Ø .118"/3 mm
- Quality class 3 (other quality classes on request)
- Shell: Steel tin plated

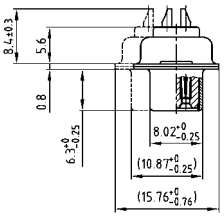
### Socket connector




| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 +0.12 |
| 15 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |
| 50 | 67.31 | 52.55 | 61.10 +0.14 -0.11 |

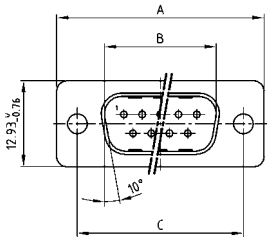
Mounting style: Through-hole





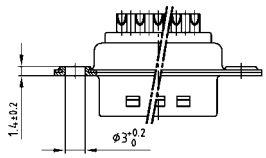
50 pos. = Dim. in (_ _)

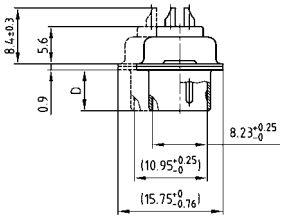
### Plug connector




| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 +0.12 | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 50 | 67.31 | 52.68 | 61.10 +0.14 -0.11 | 5.99 |

Mounting style: Through-hole





50 pos. = Dim. in (_ _)

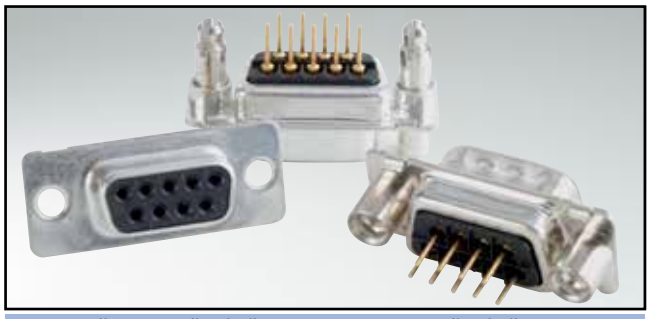
### Order data

| Socket connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 09 | Through-hole | 302A10019X |
| 15 | Through-hole | 302A10029X |
| 25 | Through-hole | 302A10059X |
| 37 | Through-hole | 302A10069X |
| 50 | Through-hole | 302A10079X |

| Plug connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 09 | Through-hole | 301A10019X |
| 15 | Through-hole | 301A10029X |
| 25 | Through-hole | 301A10059X |
| 37 | Through-hole | 301A10069X |
| 50 | Through-hole | 301A10079X |

# D-SUB Standard

## Solder pin – Straight – Precision machined contacts

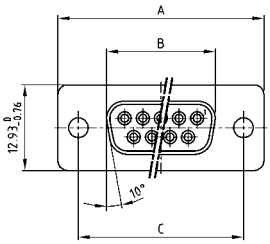


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

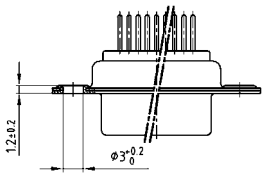
- Mounting styles:
  - with through-hole, Ø .118"/3 mm
  - with 4-40 UNC or M3 threaded insert
  - with 4-40 UNC or M3 threaded rear spacer
  - with 4-40 UNC or M3 front and threaded rear spacer
  - with 4-40 UNC front/M3 threaded rear spacer
  - with M3 front/4-40 UNC or M3 threaded rear spacer with PCB clip
  - with 4-40 UNC or M3 Front/Threaded rear spacer with PCB clip
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

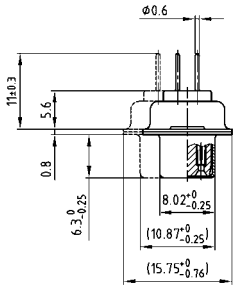
### Socket connector




| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 +0.12 |
| 15 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |
| 50 | 67.31 | 52.55 | 61.10 +0.14 -0.11 |

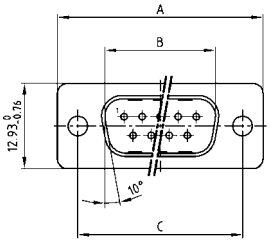
PCB-Layout: Kat1kFUA



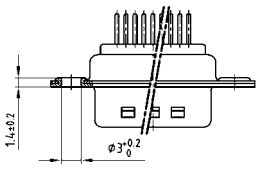

50 pos. = Dim. in (_ _)

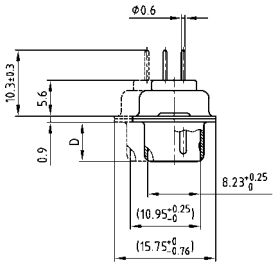
### Plug connector




| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 +0.12 | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 50 | 67.31 | 52.68 | 61.10 +0.14 -0.11 | 5.99 |

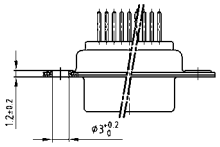
PCB-Layout: Kat1kFUA



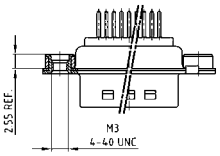

50 pos. = Dim. in (_ _)

### Order data




| Socket connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 09 | Through-hole | 164A10069X |
| 15 | Through-hole | 164A10079X |
| 25 | Through-hole | 164A10089X |
| 37 | Through-hole | 164A10099X |
| 50 | Through-hole | 164A10109X |

| Plug connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 09 | Through-hole | 163A11119X |
| 15 | Through-hole | 163A11129X |
| 25 | Through-hole | 163A11139X |
| 37 | Through-hole | 163A11149X |
| 50 | Through-hole | 163A11159X |



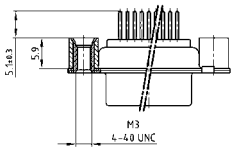

| Socket connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 09 | 4-40 UNC Threaded insert | 164A10319X |
| 15 | 4-40 UNC Threaded insert | 164A10329X |
| 25 | 4-40 UNC Threaded insert | 164A10339X |
| 37 | 4-40 UNC Threaded insert | 164A10349X |
| 50 | 4-40 UNC Threaded insert | 164A10359X |
| 09 | M3 Threaded insert | 164A10369X |
| 15 | M3 Threaded insert | 164A10379X |
| 25 | M3 Threaded insert | 164A10389X |
| 37 | M3 Threaded insert | 164A10399X |
| 50 | M3 Threaded insert | 164A10409X |

| Plug connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 09 | 4-40 UNC Threaded insert | 163A11369X |
| 15 | 4-40 UNC Threaded insert | 163A11379X |
| 25 | 4-40 UNC Threaded insert | 163A11389X |
| 37 | 4-40 UNC Threaded insert | 163A11399X |
| 50 | 4-40 UNC Threaded insert | 163A11409X |
| 09 | M3 Threaded insert | 163A11419X |
| 15 | M3 Threaded insert | 163A11429X |
| 25 | M3 Threaded insert | 163A11439X |
| 37 | M3 Threaded insert | 163A11449X |
| 50 | M3 Threaded insert | 163A11459X |

# D-SUB Standard – Mounting styles

## Solder pin – Straight – Precision machined contacts

### Order data

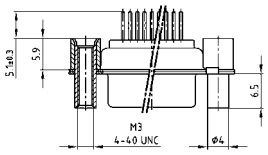



**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer | 164A12029X |
| 15 | 4-40 UNC Threaded rear spacer | 164A12039X |
| 25 | 4-40 UNC Threaded rear spacer | 164A12049X |
| 37 | 4-40 UNC Threaded rear spacer | 164A12059X |
| 50 | 4-40 UNC Threaded rear spacer | 164A12069X |
| 09 | M3 Threaded rear spacer | 164A12079X |
| 15 | M3 Threaded rear spacer | 164A12089X |
| 25 | M3 Threaded rear spacer | 164A12099X |
| 37 | M3 Threaded rear spacer | 164A12109X |
| 50 | M3 Threaded rear spacer | 164A12119X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer | 163A13629X |
| 15 | 4-40 UNC Threaded rear spacer | 163A13639X |
| 25 | 4-40 UNC Threaded rear spacer | 163A13649X |
| 37 | 4-40 UNC Threaded rear spacer | 163A13659X |
| 50 | 4-40 UNC Threaded rear spacer | 163A13669X |
| 09 | M3 Threaded rear spacer | 163A13679X |
| 15 | M3 Threaded rear spacer | 163A13689X |
| 25 | M3 Threaded rear spacer | 163A13699X |
| 37 | M3 Threaded rear spacer | 163A13709X |
| 50 | M3 Threaded rear spacer | 163A13719X |

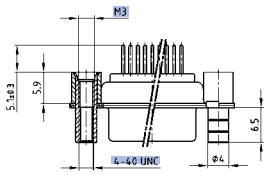



**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Front/Threaded rear spacer | 164A12129X |
| 15 | 4-40 UNC Front/Threaded rear spacer | 164A12139X |
| 25 | 4-40 UNC Front/Threaded rear spacer | 164A12149X |
| 37 | 4-40 UNC Front/Threaded rear spacer | 164A12159X |
| 50 | 4-40 UNC Front/Threaded rear spacer | 164A12169X |
| 09 | M3 Front/Threaded rear spacer | 164A12179X |
| 15 | M3 Front/Threaded rear spacer | 164A12189X |
| 25 | M3 Front/Threaded rear spacer | 164A12199X |
| 37 | M3 Front/Threaded rear spacer | 164A12209X |
| 50 | M3 Front/Threaded rear spacer | 164A12219X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Front/Threaded rear spacer | 163A13729X |
| 15 | 4-40 UNC Front/Threaded rear spacer | 163A13739X |
| 25 | 4-40 UNC Front/Threaded rear spacer | 163A13749X |
| 37 | 4-40 UNC Front/Threaded rear spacer | 163A13759X |
| 50 | 4-40 UNC Front/Threaded rear spacer | 163A13769X |
| 09 | M3 Front/Threaded rear spacer | 163A13779X |
| 15 | M3 Front/Threaded rear spacer | 163A13789X |
| 25 | M3 Front/Threaded rear spacer | 163A13799X |
| 37 | M3 Front/Threaded rear spacer | 163A13809X |
| 50 | M3 Front/Threaded rear spacer | 163A13819X |

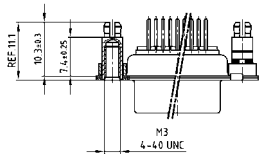



**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Front /M3 Threaded rear spacer | 164A12919X |
| 15 | 4-40 UNC Front /M3 Threaded rear spacer | 164A12929X |
| 25 | 4-40 UNC Front /M3 Threaded rear spacer | 164A12939X |
| 37 | 4-40 UNC Front /M3 Threaded rear spacer | 164A12949X |
| 50 | 4-40 UNC Front /M3 Threaded rear spacer | 164A12959X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Front /M3 Threaded rear spacer | 163A14439X |
| 15 | 4-40 UNC Front /M3 Threaded rear spacer | 163A14449X |
| 25 | 4-40 UNC Front /M3 Threaded rear spacer | 163A14459X |
| 37 | 4-40 UNC Front /M3 Threaded rear spacer | 163A14469X |
| 50 | 4-40 UNC Front /M3 Threaded rear spacer | 163A14479X |

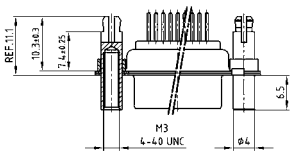



**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer PCB clip | 164A16569X |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 164A16579X |
| 25 | 4-40 UNC Threaded rear spacer PCB clip | 164A16589X |
| 37 | 4-40 UNC Threaded rear spacer PCB clip | 164A16599X |
| 50 | 4-40 UNC Threaded rear spacer PCB clip | 164A16609X |
| 09 | M3 Threaded rear spacer PCB clip | 164A16619X |
| 15 | M3 Threaded rear spacer PCB clip | 164A16629X |
| 25 | M3 Threaded rear spacer PCB clip | 164A16639X |
| 37 | M3 Threaded rear spacer PCB clip | 164A16649X |
| 50 | M3 Threaded rear spacer PCB clip | 164A16659X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer PCB clip | 163A16159X |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 163A16169X |
| 25 | 4-40 UNC Threaded rear spacer PCB clip | 163A16179X |
| 37 | 4-40 UNC Threaded rear spacer PCB clip | 163A16189X |
| 50 | 4-40 UNC Threaded rear spacer PCB clip | 163A16199X |
| 09 | M3 Threaded rear spacer PCB clip | 163A16209X |
| 15 | M3 Threaded rear spacer PCB clip | 163A16219X |
| 25 | M3 Threaded rear spacer PCB clip | 163A16229X |
| 37 | M3 Threaded rear spacer PCB clip | 163A16239X |
| 50 | M3 Threaded rear spacer PCB clip | 163A16249X |




**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Front/Threaded rear spacer PCB clip | 164A16669X |
| 15 | 4-40 UNC Front/Threaded rear spacer PCB clip | 164A16679X |
| 25 | 4-40 UNC Front/Threaded rear spacer PCB clip | 164A16689X |
| 37 | 4-40 UNC Front/Threaded rear spacer PCB clip | 164A16699X |
| 50 | 4-40 UNC Front/Threaded rear spacer PCB clip | 164A16709X |
| 09 | M3 Front/Threaded rear spacer PCB clip | 164A16719X |
| 15 | M3 Front/Threaded rear spacer PCB clip | 164A16729X |
| 25 | M3 Front/Threaded rear spacer PCB clip | 164A16739X |
| 37 | M3 Front/Threaded rear spacer PCB clip | 164A16749X |
| 50 | M3 Front/Threaded rear spacer PCB clip | 164A16759X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Front/Threaded rear spacer PCB clip | 163A16259X |
| 15 | 4-40 UNC Front/Threaded rear spacer PCB clip | 163A16269X |
| 25 | 4-40 UNC Front/Threaded rear spacer PCB clip | 163A16279X |
| 37 | 4-40 UNC Front/Threaded rear spacer PCB clip | 163A16289X |
| 50 | 4-40 UNC Front/Threaded rear spacer PCB clip | 163A16299X |
| 09 | M3 Front/Threaded rear spacer PCB clip | 163A16309X |
| 15 | M3 Front/Threaded rear spacer PCB clip | 163A16319X |
| 25 | M3 Front/Threaded rear spacer PCB clip | 163A16329X |
| 37 | M3 Front/Threaded rear spacer PCB clip | 163A16339X |
| 50 | M3 Front/Threaded rear spacer PCB clip | 163A16349X |

PCB clip for .126"/3.2 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness.

PCB-Layout: Kat1kFUA

PCB-Layout: Kat1kFUA

# D-SUB Standard

## Solder pin – Straight – Stamped contacts

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

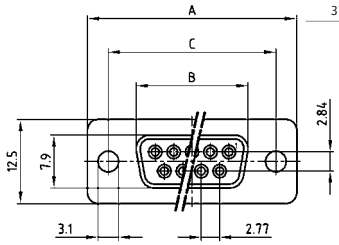
### Description

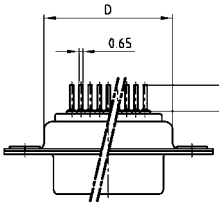
- Mounting styles:
  - with through-hole, Ø .118"/3 mm
  - with 4-40 UNC threaded insert
  - with 4-40 UNC threaded rear spacer
  - with 4-40 UNC threaded rear spacer with PCB clip
  - with 4-40 UNC front and threaded rear spacer with PCB clip
- Quality class 3 (other quality classes on request)
- Shell: Steel tin plated

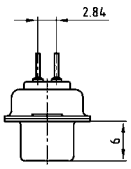
### Socket connector

9-37 pos.

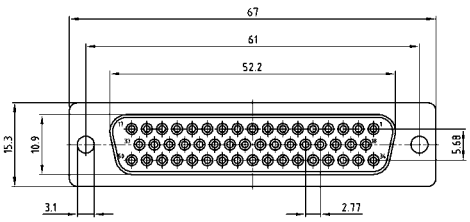
| No. of pos. | A | B | C | D |
|---|---|---|---|---|
| 09 | 30.80 | 16.30 | 25.00 | 19.20 |
| 15 | 39.20 | 24.60 | 33.30 | 27.70 |
| 25 | 53.10 | 38.30 | 47.04 | 41.10 |
| 37 | 69.40 | 54.80 | 63.50 | 57.30 |

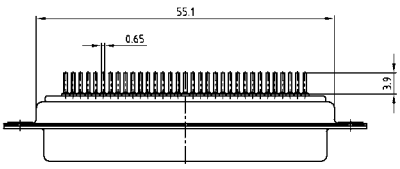


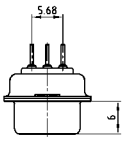




50 pos.



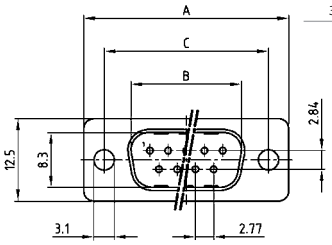



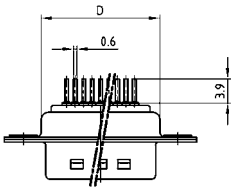



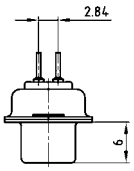

### Plug connector

9-37 pos.

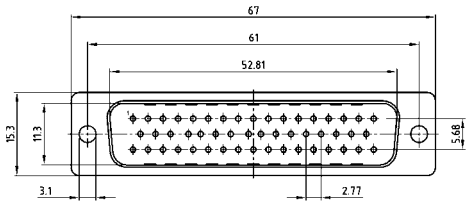
| No. of pos. | A | B | C | D |
|---|---|---|---|---|
| 09 | 30.80 | 16.92 | 25.00 | 19.20 |
| 15 | 39.20 | 25.25 | 33.30 | 27.70 |
| 25 | 53.10 | 38.96 | 47.04 | 41.10 |
| 37 | 69.40 | 55.42 | 63.50 | 57.30 |

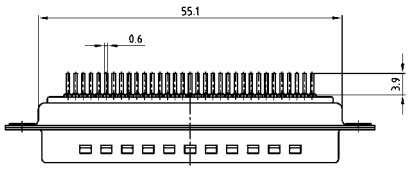


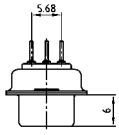




50 pos.



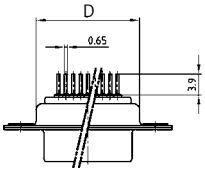



# D-SUB Standard – Mounting styles

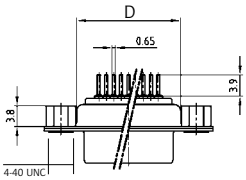
## Solder pin – Straight – Stamped contacts

### Order data



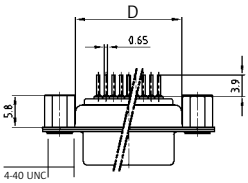

| Socket connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 09 | Through-hole | DLS1XS4AD01X |
| 15 | Through-hole | DLS2XS4AD01X |
| 25 | Through-hole | DLS3XS4AD01X |
| 37 | Through-hole | DLS4XS4AD01X |
| 50 | Through-hole | DLS5XS4AD01X |

| Plug connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 09 | Through-hole | DLS1XP4AD01X |
| 15 | Through-hole | DLS2XP4AD01X |
| 25 | Through-hole | DLS3XP4AD01X |
| 37 | Through-hole | DLS4XP4AD01X |
| 50 | Through-hole | DLS5XP4AD01X |



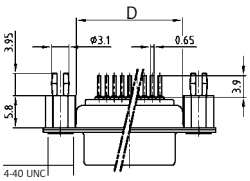

| Socket connector | | |
|---|---|---|
| No. of pos. | Mounting style 4-40 UNC | Part Number |
| 09 | Threaded insert | DLS1XS4AG06X |
| 15 | Threaded insert | DLS2XS4AG06X |
| 25 | Threaded insert | DLS3XS4AG06X |
| 37 | Threaded insert | DLS4XS4AG06X |
| 50 | Threaded insert | DLS5XS4AG06X |

| Plug connector | | |
|---|---|---|
| No. of pos. | Mounting style 4-40 UNC | Part Number |
| 09 | Threaded insert | DLS1XP4AG06X |
| 15 | Threaded insert | DLS2XP4AG06X |
| 25 | Threaded insert | DLS3XP4AG06X |
| 37 | Threaded insert | DLS4XP4AG06X |
| 50 | Threaded insert | DLS5XP4AG06X |



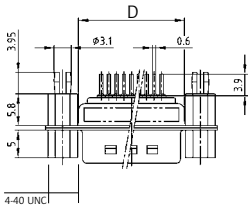

| Socket connector | | |
|---|---|---|
| No. of pos. | Mounting style 4-40 UNC | Part Number |
| 09 | Threaded rear spacer | DLS1XS4AA37X |
| 15 | Threaded rear spacer | DLS2XS4AA37X |
| 25 | Threaded rear spacer | DLS3XS4AA37X |
| 37 | Threaded rear spacer | DLS4XS4AA37X |
| 50 | Threaded rear spacer | DLS5XS4AA37X |

| Plug connector | | |
|---|---|---|
| No. of pos. | Mounting style 4-40 UNC | Part Number |
| 09 | Threaded rear spacer | DLS1XP4AA37X |
| 15 | Threaded rear spacer | DLS2XP4AA37X |
| 25 | Threaded rear spacer | DLS3XP4AA37X |
| 37 | Threaded rear spacer | DLS4XP4AA37X |
| 50 | Threaded rear spacer | DLS5XP4AA37X |




| Socket connector | | |
|---|---|---|
| No. of pos. | Mounting style 4-40 UNC | Part Number |
| 09 | Threaded rear spacer PCB clip | DLS1XS4AA35X |
| 15 | Threaded rear spacer PCB clip | DLS2XS4AA35X |
| 25 | Threaded rear spacer PCB clip | DLS3XS4AA35X |
| 37 | Threaded rear spacer PCB clip | DLS4XS4AA35X |
| 50 | Threaded rear spacer PCB clip | DLS5XS4AA35X |

| Plug connector | | |
|---|---|---|
| No. of pos. | Mounting style 4-40 UNC | Part Number |
| 09 | Threaded rear spacer PCB clip | DLS1XP4AA35X |
| 15 | Threaded rear spacer PCB clip | DLS2XP4AA35X |
| 25 | Threaded rear spacer PCB clip | DLS3XP4AA35X |
| 37 | Threaded rear spacer PCB clip | DLS4XP4AA35X |
| 50 | Threaded rear spacer PCB clip | DLS5XP4AA35X |



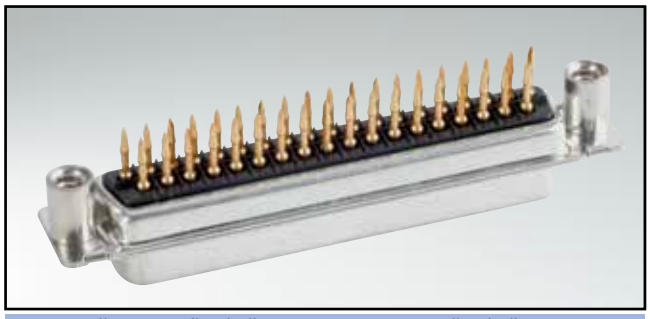

| Socket connector | | |
|---|---|---|
| No. of pos. | Mounting style 4-40 UNC | Part Number |
| 09 | Front/Threaded rear spacer PCB clip | DLS1XS4AA39X |
| 15 | Front/Threaded rear spacer PCB clip | DLS2XS4AA39X |
| 25 | Front/Threaded rear spacer PCB clip | DLS3XS4AA39X |
| 37 | Front/Threaded rear spacer PCB clip | DLS4XS4AA39X |
| 50 | Front/Threaded rear spacer PCB clip | DLS5XS4AA39X |

| Plug connector | | |
|---|---|---|
| No. of pos. | Mounting style 4-40 UNC | Part Number |
| 09 | Front/Threaded rear spacer PCB clip | DLS1XP4AA39X |
| 15 | Front/Threaded rear spacer PCB clip | DLS2XP4AA39X |
| 25 | Front/Threaded rear spacer PCB clip | DLS3XP4AA39X |
| 37 | Front/Threaded rear spacer PCB clip | DLS4XP4AA39X |
| 50 | Front/Threaded rear spacer PCB clip | DLS5XP4AA39X |

PCB clip for .126"/3.2 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness.

# D-SUB Standard

## Press-fit contact – Straight – Precision machined contacts

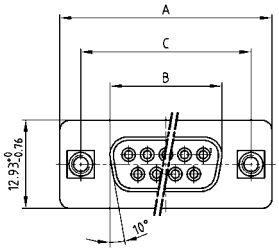


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

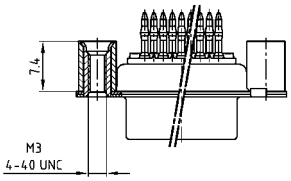
- Mounting style:
  with M3 or 4-40 UNC threaded rear spacer
- For .040" / 1.0 mm $^{+.003"/0.09\ mm}_{-.002"/0.06\ mm}$ finished through-hole diameter
  Refer to product drawing for details
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)
- Order press-fit tool separately

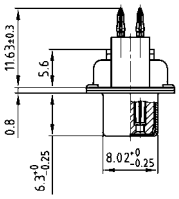
### Socket connector



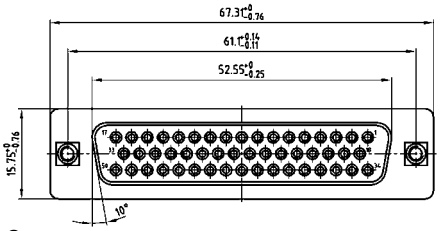

| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 +0.12 |
| 15 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |

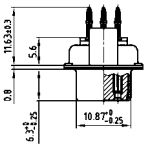
9-37 pos.



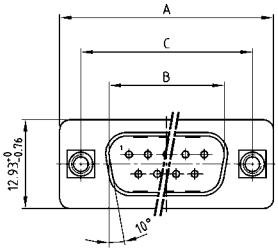




50 pos.



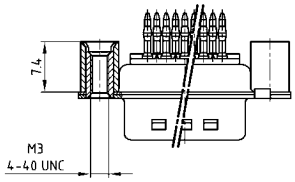



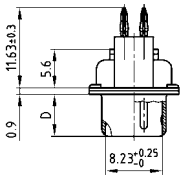

### Plug connector



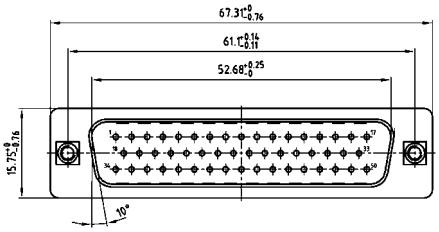

| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 +0.12 | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

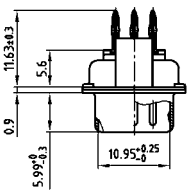
9-37 pos.




50 pos.




### Order data

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer | DSS1XSFAA49X |
| 15 | 4-40 UNC Threaded rear spacer | DSS2XSFAA49X |
| 25 | 4-40 UNC Threaded rear spacer | DSS3XSFAA49X |
| 37 | 4-40 UNC Threaded rear spacer | DSS4XSFAA49X |
| 50 | 4-40 UNC Threaded rear spacer | DSS5XSFAA49X |
| 09 | M3 Threaded rear spacer | DSS1XSFAA50X |
| 15 | M3 Threaded rear spacer | DSS2XSFAA50X |
| 25 | M3 Threaded rear spacer | DSS3XSFAA50X |
| 37 | M3 Threaded rear spacer | DSS4XSFAA50X |
| 50 | M3 Threaded rear spacer | DSS5XSFAA50X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer | DSS1XPFAA49X |
| 15 | 4-40 UNC Threaded rear spacer | DSS2XPFAA49X |
| 25 | 4-40 UNC Threaded rear spacer | DSS3XPFAA49X |
| 37 | 4-40 UNC Threaded rear spacer | DSS4XPFAA49X |
| 50 | 4-40 UNC Threaded rear spacer | DSS5XPFAA49X |
| 09 | M3 Threaded rear spacer | DSS1XPFAA50X |
| 15 | M3 Threaded rear spacer | DSS2XPFAA50X |
| 25 | M3 Threaded rear spacer | DSS3XPFAA50X |
| 37 | M3 Threaded rear spacer | DSS4XPFAA50X |
| 50 | M3 Threaded rear spacer | DSS5XPFAA50X |

# D-SUB Standard

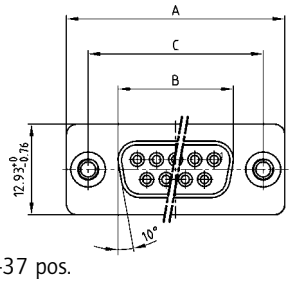
## Press-fit contact – Straight – Precision machined contacts – Rear press-fit spacer

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

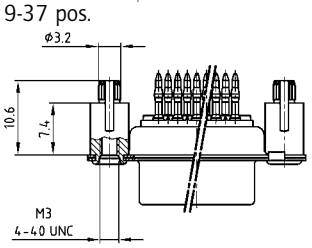
- Mounting style:
  with M3 or 4-40 UNC rear press-fit spacer
- For .040" / 1.0 mm $^{+.003"/0.09\ mm}_{-.002"/0.06\ mm}$ finished through-hole diameter
  Refer to product drawing for details
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)
- Order press-fit tool separately

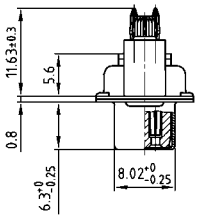
### Socket connector



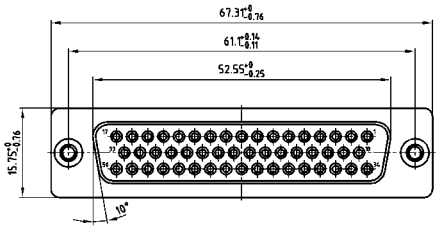

| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 +0.12 |
| 15 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |

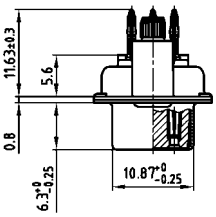
9-37 pos.



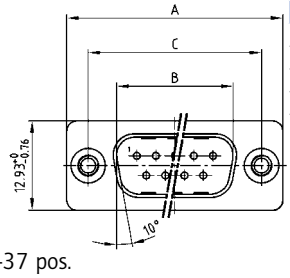




50 pos.



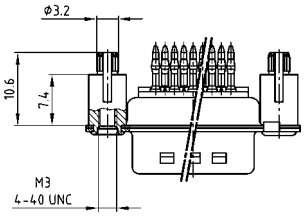



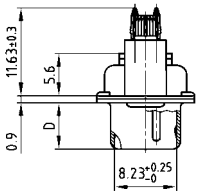

### Plug connector



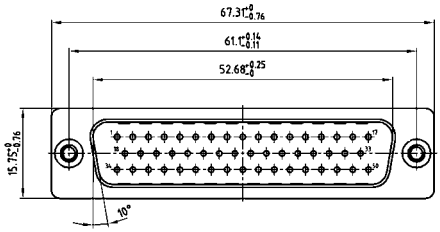

| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 +0.12 | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

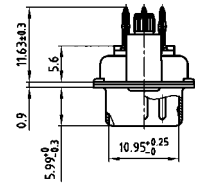
9-37 pos.




50 pos.




### Order data

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Rear press-fit spacer | DSS1XSFAA54X |
| 15 | 4-40 UNC Rear press-fit spacer | DSS2XSFAA54X |
| 25 | 4-40 UNC Rear press-fit spacer | DSS3XSFAA54X |
| 37 | 4-40 UNC Rear press-fit spacer | DSS4XSFAA54X |
| 50 | 4-40 UNC Rear press-fit spacer | DSS5XSFAA54X |
| 09 | M3 Rear press-fit spacer | DSS1XSFAA53X |
| 15 | M3 Rear press-fit spacer | DSS2XSFAA53X |
| 25 | M3 Rear press-fit spacer | DSS3XSFAA53X |
| 37 | M3 Rear press-fit spacer | DSS4XSFAA53X |
| 50 | M3 Rear press-fit spacer | DSS5XSFAA53X |

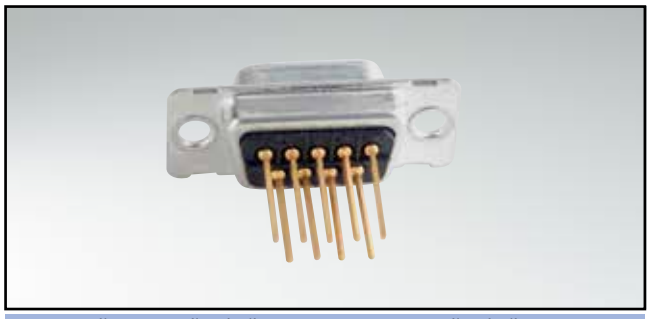
**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Rear press-fit spacer | DSS1XPFAA54X |
| 15 | 4-40 UNC Rear press-fit spacer | DSS2XPFAA54X |
| 25 | 4-40 UNC Rear press-fit spacer | DSS3XPFAA54X |
| 37 | 4-40 UNC Rear press-fit spacer | DSS4XPFAA54X |
| 50 | 4-40 UNC Rear press-fit spacer | DSS5XPFAA54X |
| 09 | M3 Rear press-fit spacer | DSS1XPFAA53X |
| 15 | M3 Rear press-fit spacer | DSS2XPFAA53X |
| 25 | M3 Rear press-fit spacer | DSS3XPFAA53X |
| 37 | M3 Rear press-fit spacer | DSS4XPFAA53X |
| 50 | M3 Rear press-fit spacer | DSS5XPFAA53X |

Rear press-fit spacer for .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness.

# D-SUB Standard

## Wire wrap – Precision machined contacts

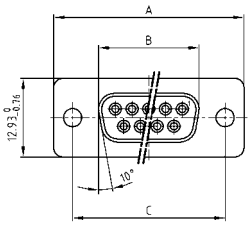


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

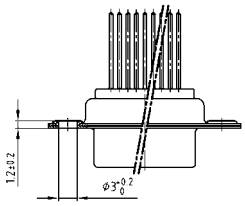
- Mounting styles:
  - with through-hole, Ø .118"/3 mm
  - with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

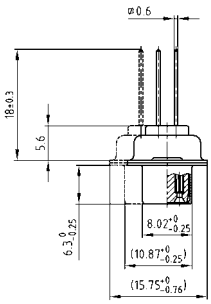
### Socket connector




| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 +0.12 |
| 15 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |
| 50 | 67.31 | 52.55 | 61.10 +0.14 -0.11 |

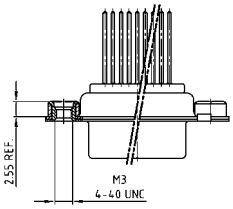
Mounting style: Through-hole



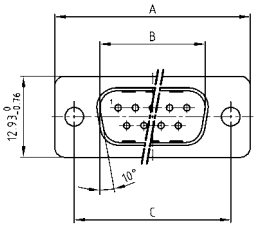


50 pos. = Dim. in (_ _)

Mounting style: Threaded insert

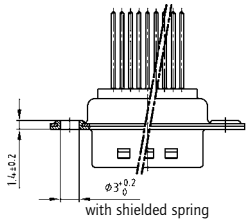


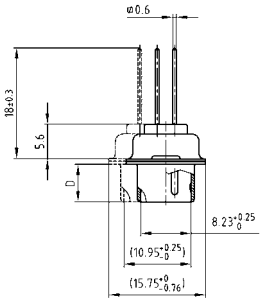

### Plug connector




| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 +0.12 | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 50 | 67.31 | 52.68 | 61.10 +0.14 -0.11 | 5.99 |

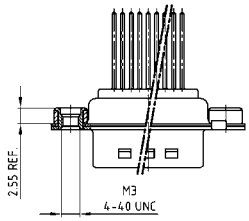
Mounting style: Through-hole



50 pos. = Dim. in (_ _)

Mounting style: Threaded insert




### Order data

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 164A10119X |
| 15 | Through-hole | 164A10129X |
| 25 | Through-hole | 164A10139X |
| 37 | Through-hole | 164A10149X |
| 50 | Through-hole | 164A10159X |
| 09 | 4-40 UNC Threaded insert | 164A10419X |
| 15 | 4-40 UNC Threaded insert | 164A10429X |
| 25 | 4-40 UNC Threaded insert | 164A10439X |
| 37 | 4-40 UNC Threaded insert | 164A10449X |
| 50 | 4-40 UNC Threaded insert | 164A10459X |
| 09 | M3 Threaded insert | 164A10469X |
| 15 | M3 Threaded insert | 164A10479X |
| 25 | M3 Threaded insert | 164A10489X |
| 37 | M3 Threaded insert | 164A10499X |
| 50 | M3 Threaded insert | 164A10509X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 163A11169X |
| 15 | Through-hole | 163A11179X |
| 25 | Through-hole | 163A11189X |
| 37 | Through-hole | 163A11199X |
| 50 | Through-hole | 163A11209X |
| 09 | 4-40 UNC Threaded insert | 163A11469X |
| 15 | 4-40 UNC Threaded insert | 163A11479X |
| 25 | 4-40 UNC Threaded insert | 163A11489X |
| 37 | 4-40 UNC Threaded insert | 163A11499X |
| 50 | 4-40 UNC Threaded insert | 163A11509X |
| 09 | M3 Threaded insert | 163A11519X |
| 15 | M3 Threaded insert | 163A11529X |
| 25 | M3 Threaded insert | 163A11539X |
| 37 | M3 Threaded insert | 163A11549X |
| 50 | M3 Threaded insert | 163A11559X |

# D-SUB Standard

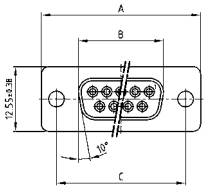
## IDC for flat cable – Stamped contacts – For wire size AWG 26...28

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

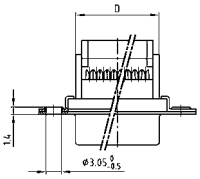
- For wire size **AWG 26...28** flat cable
- Mounting style:
  with through-hole, Ø .118"/3 mm
  with 4-40 UNC threaded insert
- Connector includes strain relief
- Quality class 3 (other quality classes on request)
- Shell: Steel tin plated

### Socket connector

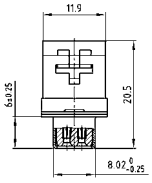



| No. of pos. | A ±0.25 | B ±0.25 | C ±0.13 | D ±0.25 |
|---|---|---|---|---|
| 09 | 30.80 | 16.46 | 25.00 | 16.10 |
| 15 | 39.10 | 24.79 | 33.30 | 24.00 |
| 25 | 53.09 | 38.50 | 47.04 | 38.14 |
| 37 | 69.40 | 54.96 | 63.50 | 54.60 |

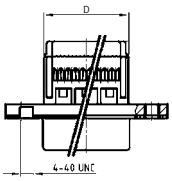
Mounting style: Through-hole




Upper part grouted with strain relief

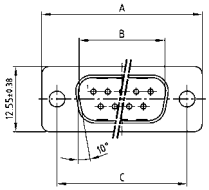



Mounting style: Threaded insert



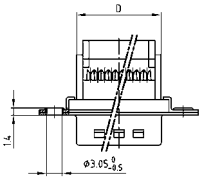

Strain relief

### Plug connector

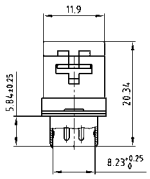



| No. of pos. | A ±0.25 | B ±0.25 | C ±0.13 | D ±0.25 |
|---|---|---|---|---|
| 09 | 30.80 | 16.79 | 25.00 | 16.10 |
| 15 | 39.10 | 25.12 | 33.30 | 24.00 |
| 25 | 53.09 | 83.84 | 47.04 | 38.14 |
| 37 | 69.40 | 55.30 | 63.50 | 54.60 |

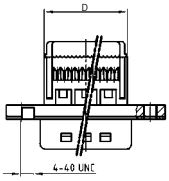
Mounting style: Through-hole




Upper part grouted with strain relief




Mounting style: Threaded insert




Strain relief

### Order data

**Socket connector**

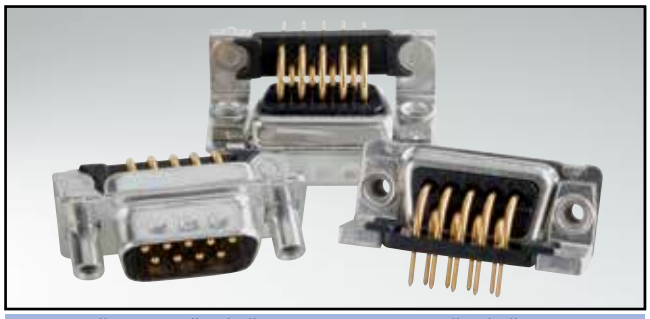
| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 302A10089X |
| 15 | Through-hole | 302A10099X |
| 25 | Through-hole | 302A10109X |
| 37 | Through-hole | 302A10119X |
| 09 | Threaded insert | DLS1XSSAG04X |
| 15 | Threaded insert | DLS2XSSAG04X |
| 25 | Threaded insert | DLS3XSSAG04X |
| 37 | Threaded insert | DLS4XSSAG04X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 301A10089X |
| 15 | Through-hole | 301A10099X |
| 25 | Through-hole | 301A10109X |
| 37 | Through-hole | 301A10119X |
| 09 | Threaded insert | DLS1XPSAG04X |
| 15 | Threaded insert | DLS2XPSAG04X |
| 25 | Threaded insert | DLS3XPSAG04X |
| 37 | Threaded insert | DLS4XPSAG04X |

# D-SUB Standard

## Solder pin – Angled – .318"/7.19 mm – Precision machined contacts – Metal bracket

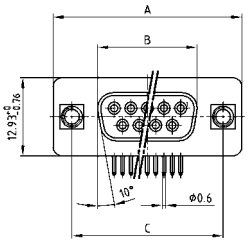


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

- Mounting styles:
  - with mounting bracket and 4-40 UNC or M3 threaded insert
  - with mounting bracket and 4-40 UNC or M3 front spacer
  - with mounting bracket, PCB clip and 4-40 UNC or M3 threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC or M3 front spacer
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

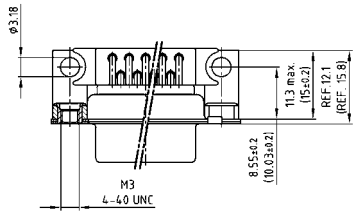
### Socket connector

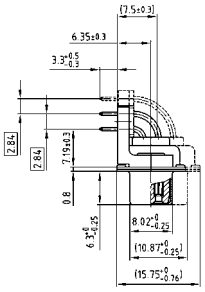



| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 +0.12 |
| 15 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |
| 50 | 67.31 | 52.55 | 61.10 +0.14 -0.11 |

PCB-Layout: Kat1kGEA

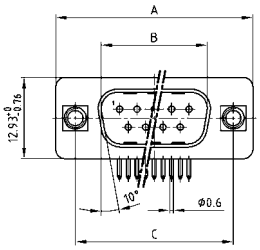
Mounting style: Threaded insert




50 pos. = Dim. in (_ _)

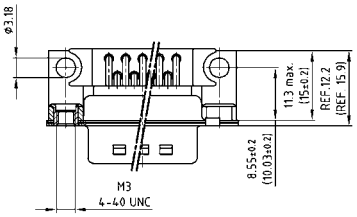
### Plug connector

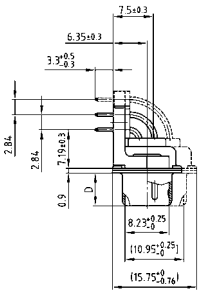



| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 +0.12 | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 50 | 67.31 | 52.68 | 61.10 +0.14 -0.11 | 5.99 |

PCB-Layout: Kat1kGFA

Mounting style: Threaded insert




50 pos. = Dim. in (_ _)

### Order data

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded insert | 164A11519X |
| 15 | 4-40 UNC Threaded insert | 164A11529X |
| 25 | 4-40 UNC Threaded insert | 164A11539X |
| 37 | 4-40 UNC Threaded insert | 164A11549X |
| 50 | 4-40 UNC Threaded insert | 164A18969X |
| 09 | M3 Threaded insert | 164A13439X |
| 15 | M3 Threaded insert | 164A13449X |
| 25 | M3 Threaded insert | 164A13459X |
| 37 | M3 Threaded insert | 164A13469X |
| 50 | M3 Threaded insert | 164A18979X |

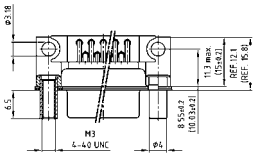
**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded insert | 163A13069X |
| 15 | 4-40 UNC Threaded insert | 163A13079X |
| 25 | 4-40 UNC Threaded insert | 163A13089X |
| 37 | 4-40 UNC Threaded insert | 163A13099X |
| 50 | 4-40 UNC Threaded insert | 163A18549X |
| 09 | M3 Threaded insert | 163A14959X |
| 15 | M3 Threaded insert | 163A14969X |
| 25 | M3 Threaded insert | 163A14979X |
| 37 | M3 Threaded insert | 163A14989X |
| 50 | M3 Threaded insert | 163A18559X |

# D-SUB Standard – Mounting styles

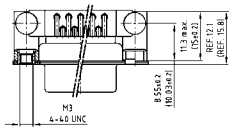
## Solder pin – Angled – .318"/7.19 mm – Precision machined contacts – Metal bracket

### Order data



| Socket connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 09 | 4-40 UNC Front spacer | 164A16929X |
| 15 | 4-40 UNC Front spacer | 164A16939X |
| 25 | 4-40 UNC Front spacer | 164A16949X |
| 37 | 4-40 UNC Front spacer | 164A16959X |
| 50 | 4-40 UNC Front spacer | 164A19019X |
| 09 | M3 Front spacer | 164A16969X |
| 15 | M3 Front spacer | 164A16979X |
| 25 | M3 Front spacer | 164A16989X |
| 37 | M3 Front spacer | 164A16999X |
| 50 | M3 Front spacer | 164A19029X |

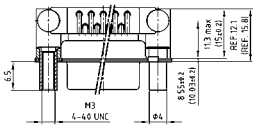
| Plug connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 09 | 4-40 UNC Front spacer | 163A16519X |
| 15 | 4-40 UNC Front spacer | 163A16529X |
| 25 | 4-40 UNC Front spacer | 163A16539X |
| 37 | 4-40 UNC Front spacer | 163A16549X |
| 50 | 4-40 UNC Front spacer | 163A18589X |
| 09 | M3 Front spacer | 163A16559X |
| 15 | M3 Front spacer | 163A16569X |
| 25 | M3 Front spacer | 163A16579X |
| 37 | M3 Front spacer | 163A16589X |
| 50 | M3 Front spacer | 163A18599X |



| Socket connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 09 | PCB clip/4-40 UNC Threaded insert | 164A17939X |
| 15 | PCB clip/4-40 UNC Threaded insert | 164A17949X |
| 25 | PCB clip/4-40 UNC Threaded insert | 164A17959X |
| 37 | PCB clip/4-40 UNC Threaded insert | 164A17969X |
| 50 | PCB clip/4-40 UNC Threaded insert | 164A18989X |
| 09 | PCB clip/M3 Threaded insert | 164A17979X |
| 15 | PCB clip/M3 Threaded insert | 164A17989X |
| 25 | PCB clip/M3 Threaded insert | 164A17999X |
| 37 | PCB clip/M3 Threaded insert | 164A18009X |
| 50 | PCB clip/M3 Threaded insert | 164A18999X |

| Plug connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 09 | PCB clip/4-40 UNC Threaded insert | 163A17529X |
| 15 | PCB clip/4-40 UNC Threaded insert | 163A17539X |
| 25 | PCB clip/4-40 UNC Threaded insert | 163A17549X |
| 37 | PCB clip/4-40 UNC Threaded insert | 163A17559X |
| 50 | PCB clip/4-40 UNC Threaded insert | 163A18569X |
| 09 | PCB clip/M3 Threaded insert | 163A17569X |
| 15 | PCB clip/M3 Threaded insert | 163A17579X |
| 25 | PCB clip/M3 Threaded insert | 163A17589X |
| 37 | PCB clip/M3 Threaded insert | 163A17599X |
| 50 | PCB clip/M3 Threaded insert | 163A18579X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness



| Socket connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 09 | PCB clip/4-40 UNC Front spacer | 164A19039X |
| 15 | PCB clip/4-40 UNC Front spacer | 164A19049X |
| 25 | PCB clip/4-40 UNC Front spacer | 164A19059X |
| 37 | PCB clip/4-40 UNC Front spacer | 164A19069X |
| 50 | PCB clip/4-40 UNC Front spacer | 164A19079X |
| 09 | PCB clip/M3 Front spacer | 164A19089X |
| 15 | PCB clip/M3 Front spacer | 164A19099X |
| 25 | PCB clip/M3 Front spacer | 164A19109X |
| 37 | PCB clip/M3 Front spacer | 164A19119X |
| 50 | PCB clip/M3 Front spacer | 164A19129X |

| Plug connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 09 | PCB clip/4-40 UNC Front spacer | 163A18609X |
| 15 | PCB clip/4-40 UNC Front spacer | 163A18619X |
| 25 | PCB clip/4-40 UNC Front spacer | 163A18629X |
| 37 | PCB clip/4-40 UNC Front spacer | 163A18639X |
| 50 | PCB clip/4-40 UNC Front spacer | 163A18649X |
| 09 | PCB clip/M3 Front spacer | 163A18659X |
| 15 | PCB clip/M3 Front spacer | 163A18669X |
| 25 | PCB clip/M3 Front spacer | 163A18679X |
| 37 | PCB clip/M3 Front spacer | 163A18689X |
| 50 | PCB clip/M3 Front spacer | 163A18699X |

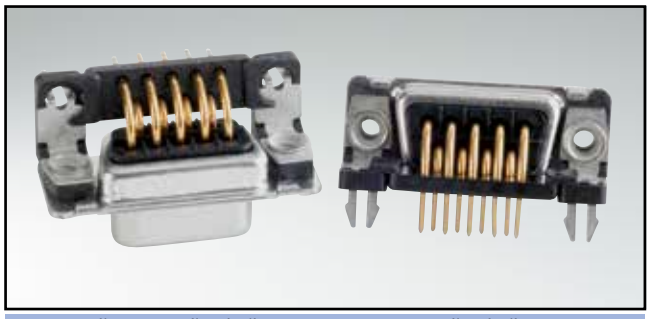
PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

PCB-Layout: Kat1kGEA

PCB-Layout: Kat1kGFA

# D-SUB Standard

## Solder pin – Angled – .318"/7.19 mm – Precision machined contacts – Plastic bracket

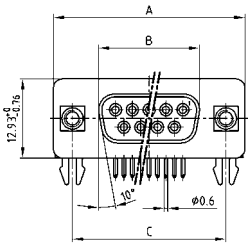


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

- Mounting styles:
  - with mounting bracket, PCB clip and 4-40 UNC or M3 threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC or M3 front spacer
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

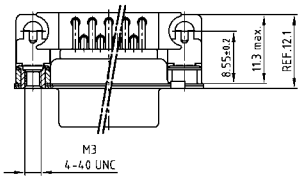
### Socket connector

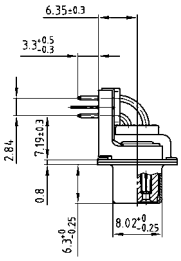



| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 +0.12 |
| 15 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |

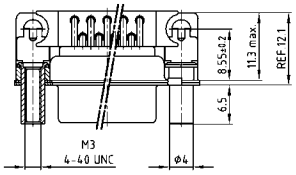
PCB-Layout: Kat1kGEA

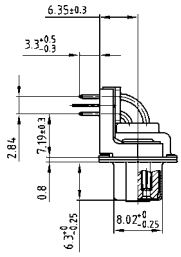
Mounting style: PCB clip, threaded insert



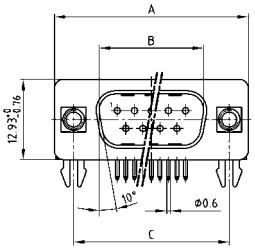




Mounting style: PCB clip, front spacer



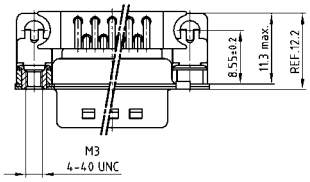

### Plug connector

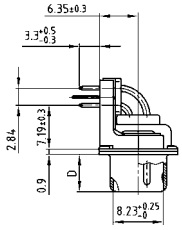



| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 +0.12 | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

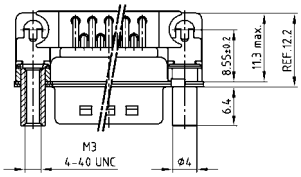
PCB-Layout: Kat1kGFA

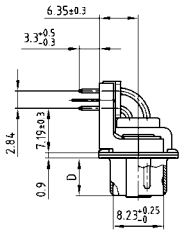
Mounting style: PCB clip, threaded insert




Mounting style: PCB clip, front spacer




### Order data

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip/4-40 UNC Threaded insert | 164A18809X |
| 15 | PCB clip/4-40 UNC Threaded insert | 164A18819X |
| 25 | PCB clip/4-40 UNC Threaded insert | 164A18829X |
| 37 | PCB clip/4-40 UNC Threaded insert | 164A18839X |
| 09 | PCB clip/M3 Threaded insert | 164A18849X |
| 15 | PCB clip/M3 Threaded insert | 164A18859X |
| 25 | PCB clip/M3 Threaded insert | 164A18869X |
| 37 | PCB clip/M3 Threaded insert | 164A18879X |
| 09 | PCB clip/4-40 UNC Front spacer | 164A18889X |
| 15 | PCB clip/4-40 UNC Front spacer | 164A18899X |
| 25 | PCB clip/4-40 UNC Front spacer | 164A18909X |
| 37 | PCB clip/4-40 UNC Front spacer | 164A18919X |
| 09 | PCB clip/M3 Front spacer | 164A18929X |
| 15 | PCB clip/M3 Front spacer | 164A18939X |
| 25 | PCB clip/M3 Front spacer | 164A18949X |
| 37 | PCB clip/M3 Front spacer | 164A18959X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip/4-40 UNC Threaded insert | 163A18389X |
| 15 | PCB clip/4-40 UNC Threaded insert | 163A18399X |
| 25 | PCB clip/4-40 UNC Threaded insert | 163A18409X |
| 37 | PCB clip/4-40 UNC Threaded insert | 163A18419X |
| 09 | PCB clip/M3 Threaded insert | 163A18429X |
| 15 | PCB clip/M3 Threaded insert | 163A18439X |
| 25 | PCB clip/M3 Threaded insert | 163A18449X |
| 37 | PCB clip/M3 Threaded insert | 163A18459X |
| 09 | PCB clip/4-40 UNC Front spacer | 163A18469X |
| 15 | PCB clip/4-40 UNC Front spacer | 163A18479X |
| 25 | PCB clip/4-40 UNC Front spacer | 163A18489X |
| 37 | PCB clip/4-40 UNC Front spacer | 163A18499X |
| 09 | PCB clip/M3 Front spacer | 163A18509X |
| 15 | PCB clip/M3 Front spacer | 163A18519X |
| 25 | PCB clip/M3 Front spacer | 163A18529X |
| 37 | PCB clip/M3 Front spacer | 163A18539X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# D-SUB Standard

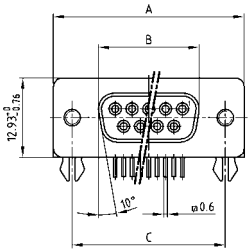
## Solder pin – Angled – .318"/7.19 mm – Stamped contacts – Plastic bracket

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

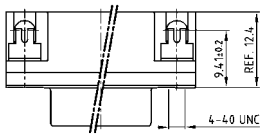
- Mounting styles:
  - with mounting bracket, PCB clip and 4-40 UNC threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC hex bolt
- Quality class 3 (other quality classes on request)
- Shell: Steel tin plated

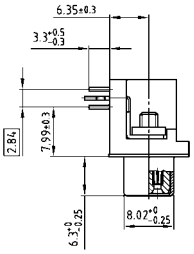
### Socket connector



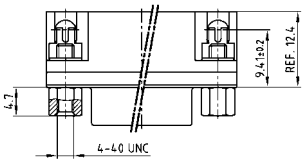

| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 +0.12 |
| 15 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |

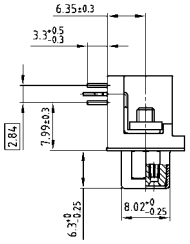
Mounting style: PCB clip, threaded insert



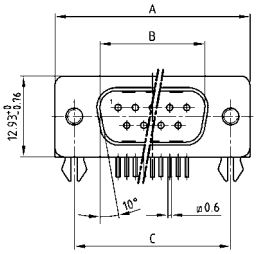




Mounting style: PCB clip, front spacer



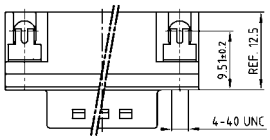



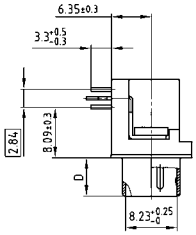

### Plug connector



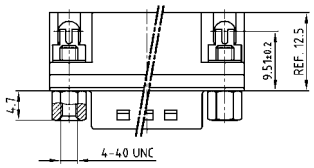

| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 +0.12 | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

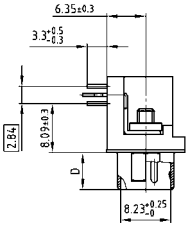
Mounting style: PCB clip, threaded insert




Mounting style: PCB clip, front spacer




### Order data

**Socket connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | PCB clip/Threaded insert | 302A11339X |
| 15 | PCB clip/Threaded insert | 302A11349X |
| 25 | PCB clip/Threaded insert | 302A11359X |
| 37 | PCB clip/Threaded insert | 302A11369X |
| 09 | PCB clip/Hex bolt | 302A11249X |
| 15 | PCB clip/Hex bolt | 302A11259X |
| 25 | PCB clip/Hex bolt | 302A11269X |
| 37 | PCB clip/Hex bolt | 302A11279X |

**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | PCB clip/Threaded insert | 301A11029X |
| 15 | PCB clip/Threaded insert | 301A11039X |
| 25 | PCB clip/Threaded insert | 301A11049X |
| 37 | PCB clip/Threaded insert | 301A11059X |
| 09 | PCB clip/Front spacer | 301A10939X |
| 15 | PCB clip/Front spacer | 301A10949X |
| 25 | PCB clip/Front spacer | 301A10959X |
| 37 | PCB clip/Front spacer | 301A10969X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# D-SUB Standard

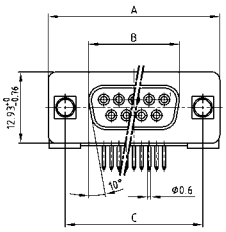
## Solder pin – Angled – .370"/9.4 mm – Precision machined contacts – Plastic bracket

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

- Mounting styles:
  - with mounting bracket and Ø .118"/3 mm through-hole
  - with mounting bracket, grounding strap and 4-40 UNC or M3 threaded insert
  - with mounting bracket, grounding strap and 4-40 UNC or M3 front spacer
  - with mounting bracket, PCB clip and 4-40 UNC or M3 threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC or M3 front spacer
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

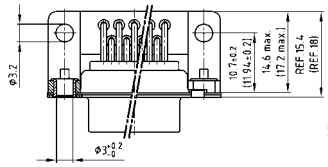
### Socket connector



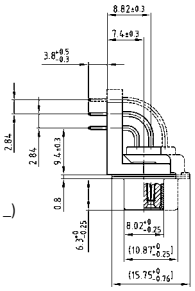
| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 +0.12 |
| 15 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |
| 50 | 67.31 | 52.55 | 61.10 +0.14 -0.11 |

PCB-Layout: Kat1kGGA

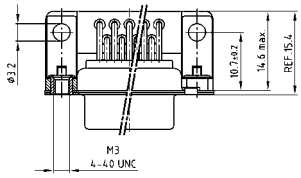
Mounting style: Through-hole

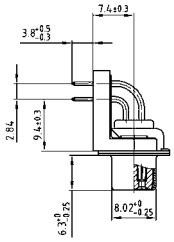


50 pos. = Dim. in (_ _)

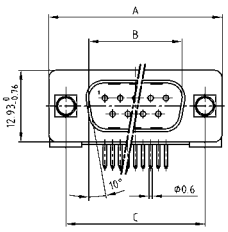


Mounting style: Threaded insert





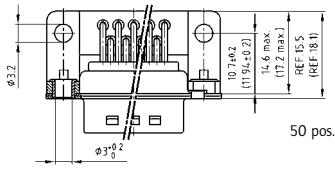
### Plug connector



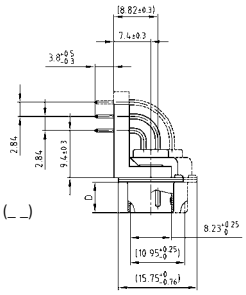
| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 +0.12 | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 50 | 67.31 | 52.68 | 61.10 +0.14 -0.11 | 5.99 |

PCB-Layout: Kat1kGHA

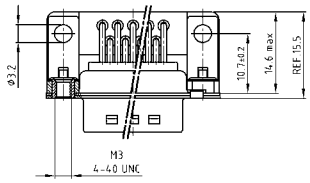
Mounting style: Through-hole

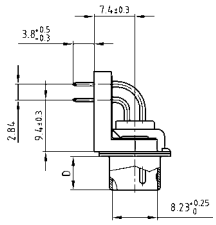


50 pos. = Dim. in (_ _)



Mounting style: Threaded insert





### Order data

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 164A10669X |
| 15 | Through-hole | 164A10679X |
| 25 | Through-hole | 164A10689X |
| 37 | Through-hole | 164A10699X |
| 50 | Through-hole | 164A10709X |
| 09 | Grounding strap/4-40 UNC Threaded insert | 164A12329X |
| 15 | Grounding strap/4-40 UNC Threaded insert | 164A12339X |
| 25 | Grounding strap/4-40 UNC Threaded insert | 164A12349X |
| 37 | Grounding strap/4-40 UNC Threaded insert | 164A12359X |
| 09 | Grounding strap/M3 Threaded insert | 164A12519X |
| 15 | Grounding strap/M3 Threaded insert | 164A12529X |
| 25 | Grounding strap/M3 Threaded insert | 164A12539X |
| 37 | Grounding strap/M3 Threaded insert | 164A12549X |

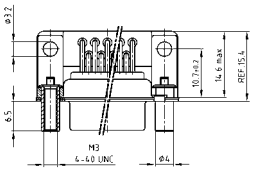
**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 163A11719X |
| 15 | Through-hole | 163A11729X |
| 25 | Through-hole | 163A11739X |
| 37 | Through-hole | 163A11749X |
| 50 | Through-hole | 163A11759X |
| 09 | Grounding strap/4-40 UNC Threaded insert | 163A14119X |
| 15 | Grounding strap/4-40 UNC Threaded insert | 163A14129X |
| 25 | Grounding strap/4-40 UNC Threaded insert | 163A14139X |
| 37 | Grounding strap/4-40 UNC Threaded insert | 163A14149X |
| 09 | Grounding strap/M3 Threaded insert | 163A14169X |
| 15 | Grounding strap/M3 Threaded insert | 163A14179X |
| 25 | Grounding strap/M3 Threaded insert | 163A14189X |
| 37 | Grounding strap/M3 Threaded insert | 163A14199X |

# D-SUB Standard – Mounting styles

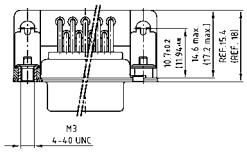
## Solder pin – Angled – .370"/9.4 mm – Precision machined contacts – Plastic bracket

### Order data




| Socket connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 09 | Grounding strap/4-40 UNC Front spacer | 164A12229X |
| 15 | Grounding strap/4-40 UNC Front spacer | 164A12239X |
| 25 | Grounding strap/4-40 UNC Front spacer | 164A12249X |
| 37 | Grounding strap/4-40 UNC Front spacer | 164A12259X |
| 09 | Grounding strap/M3 Front spacer | 164A12279X |
| 15 | Grounding strap/M3 Front spacer | 164A12289X |
| 25 | Grounding strap/M3 Front spacer | 164A12299X |
| 37 | Grounding strap/M3 Front spacer | 164A12309X |

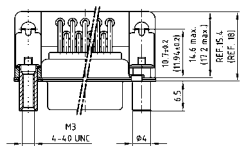
| Plug connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 09 | Grounding strap/4-40 UNC Front spacer | 163A13829X |
| 15 | Grounding strap/4-40 UNC Front spacer | 163A13839X |
| 25 | Grounding strap/4-40 UNC Front spacer | 163A13849X |
| 37 | Grounding strap/4-40 UNC Front spacer | 163A13859X |
| 09 | Grounding strap/M3 Front spacer | 163A13879X |
| 15 | Grounding strap/M3 Front spacer | 163A13889X |
| 25 | Grounding strap/M3 Front spacer | 163A13899X |
| 37 | Grounding strap/M3 Front spacer | 163A13909X |




| Socket connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 09 | PCB clip/4-40 UNC Threaded insert | 164A12969X |
| 15 | PCB clip/4-40 UNC Threaded insert | 164A12979X |
| 25 | PCB clip/4-40 UNC Threaded insert | 164A12989X |
| 37 | PCB clip/4-40 UNC Threaded insert | 164A12999X |
| 50 | PCB clip/4-40 UNC Threaded insert | 164A19139X |
| 09 | PCB clip/M3 Threaded insert | 164A13009X |
| 15 | PCB clip/M3 Threaded insert | 164A13019X |
| 25 | PCB clip/M3 Threaded insert | 164A13029X |
| 37 | PCB clip/M3 Threaded insert | 164A13039X |
| 50 | PCB clip/M3 Threaded insert | 164A19149X |

| Plug connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 09 | PCB clip/4-40 UNC Threaded insert | 163A14489X |
| 15 | PCB clip/4-40 UNC Threaded insert | 163A14499X |
| 25 | PCB clip/4-40 UNC Threaded insert | 163A14509X |
| 37 | PCB clip/4-40 UNC Threaded insert | 163A14519X |
| 50 | PCB clip/4-40 UNC Threaded insert | 163A18709X |
| 09 | PCB clip/M3 Threaded insert | 163A14529X |
| 15 | PCB clip/M3 Threaded insert | 163A14539X |
| 25 | PCB clip/M3 Threaded insert | 163A14549X |
| 37 | PCB clip/M3 Threaded insert | 163A14559X |
| 50 | PCB clip/M3 Threaded insert | 163A18719X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness




| Socket connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 09 | PCB clip/4-40 UNC Front spacer | 164A13089X |
| 15 | PCB clip/4-40 UNC Front spacer | 164A13099X |
| 25 | PCB clip/4-40 UNC Front spacer | 164A13109X |
| 37 | PCB clip/4-40 UNC Front spacer | 164A13119X |
| 50 | PCB clip/4-40 UNC Front spacer | 164A19159X |
| 09 | PCB clip/M3 Front spacer | 164A13129X |
| 15 | PCB clip/M3 Front spacer | 164A13139X |
| 25 | PCB clip/M3 Front spacer | 164A13149X |
| 37 | PCB clip/M3 Front spacer | 164A13159X |
| 50 | PCB clip/M3 Front spacer | 164A19169X |

| Plug connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 09 | PCB clip/4-40 UNC Front spacer | 163A14609X |
| 15 | PCB clip/4-40 UNC Front spacer | 163A14619X |
| 25 | PCB clip/4-40 UNC Front spacer | 163A14629X |
| 37 | PCB clip/4-40 UNC Front spacer | 163A14639X |
| 50 | PCB clip/4-40 UNC Front spacer | 163A18729X |
| 09 | PCB clip/M3 Front spacer | 163A14649X |
| 15 | PCB clip/M3 Front spacer | 163A14659X |
| 25 | PCB clip/M3 Front spacer | 163A14669X |
| 37 | PCB clip/M3 Front spacer | 163A14679X |
| 50 | PCB clip/M3 Front spacer | 163A18739X |

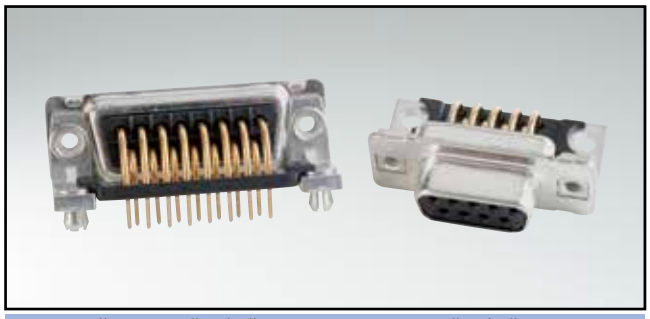
PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

PCB-Layout: Kat1kGGA

PCB-Layout: Kat1kGHA

# D-SUB Standard

## Solder pin – Angled – .370"/9.4 mm – Precision machined contacts – Metal bracket

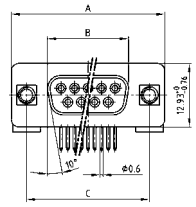


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

- Mounting styles:
  - with mounting bracket and 4-40 UNC or M3 threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

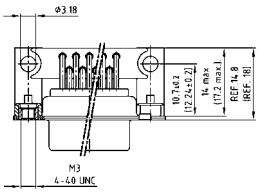
### Socket connector



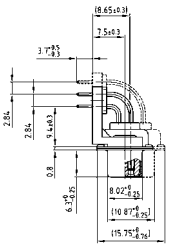
| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 +0.12 |
| 15 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |
| 50 | 67.31 | 52.55 | 61.10 +0.14 -0.11 |

PCB-Layout: KAT1kGGA

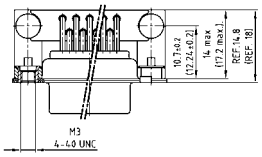
Mounting style: Threaded insert

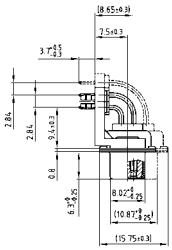


50 pos. = Dim. in (_ _)

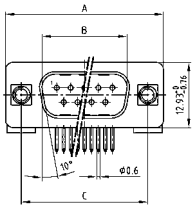


Mounting style: PCB clip, threaded insert





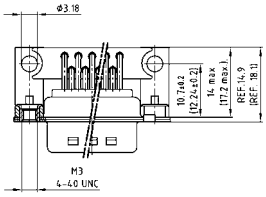
### Plug connector



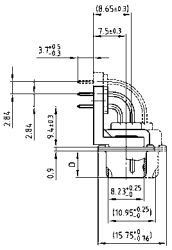
| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 +0.12 | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 50 | 67.31 | 52.68 | 61.10 +0.14 -0.11 | 5.99 |

PCB-Layout: Kat1kGHA

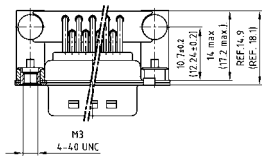
Mounting style: Threaded insert

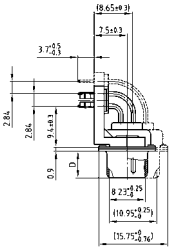


50 pos. = Dim. in (_ _)



Mounting style: PCB clip, threaded insert





### Order data

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded insert | 164A10969X |
| 15 | 4-40 UNC Threaded insert | 164A10979X |
| 25 | 4-40 UNC Threaded insert | 164A10989X |
| 37 | 4-40 UNC Threaded insert | 164A10999X |
| 50 | 4-40 UNC Threaded insert | 164A18739X |
| 09 | M3 Threaded insert | 164A11019X |
| 15 | M3 Threaded insert | 164A11029X |
| 25 | M3 Threaded insert | 164A11039X |
| 37 | M3 Threaded insert | 164A11049X |
| 50 | M3 Threaded insert | 164A18749X |
| 09 | PCB clip/4-40 UNC Threaded insert | 164A16769X |
| 15 | PCB clip/4-40 UNC Threaded insert | 164A16779X |
| 25 | PCB clip/4-40 UNC Threaded insert | 164A16789X |
| 37 | PCB clip/4-40 UNC Threaded insert | 164A16799X |
| 50 | PCB clip/4-40 UNC Threaded insert | 164A18759X |
| 09 | PCB clip/M3 Threaded insert | 164A16809X |
| 15 | PCB clip/M3 Threaded insert | 164A16819X |
| 25 | PCB clip/M3 Threaded insert | 164A16829X |
| 37 | PCB clip/M3 Threaded insert | 164A16839X |
| 50 | PCB clip/M3 Threaded insert | 164A18769X |

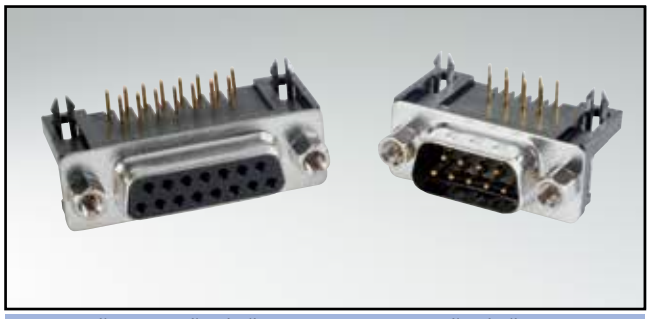
**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded insert | 163A12019X |
| 15 | 4-40 UNC Threaded insert | 163A12029X |
| 25 | 4-40 UNC Threaded insert | 163A12039X |
| 37 | 4-40 UNC Threaded insert | 163A12049X |
| 50 | 4-40 UNC Threaded insert | 163A18319X |
| 09 | M3 Threaded insert | 163A12069X |
| 15 | M3 Threaded insert | 163A12079X |
| 25 | M3 Threaded insert | 163A12089X |
| 37 | M3 Threaded insert | 163A12099X |
| 50 | M3 Threaded insert | 163A18329X |
| 09 | PCB clip/4-40 UNC Threaded insert | 163A16359X |
| 15 | PCB clip/4-40 UNC Threaded insert | 163A16369X |
| 25 | PCB clip/4-40 UNC Threaded insert | 163A16379X |
| 37 | PCB clip/4-40 UNC Threaded insert | 163A16389X |
| 50 | PCB clip/4-40 UNC Threaded insert | 163A18339X |
| 09 | PCB clip/M3 Threaded insert | 163A16399X |
| 15 | PCB clip/M3 Threaded insert | 163A16409X |
| 25 | PCB clip/M3 Threaded insert | 163A16419X |
| 37 | PCB clip/M3 Threaded insert | 163A16429X |
| 50 | PCB clip/M3 Threaded insert | 163A18349X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# D-SUB Standard

## Solder pin – Angled – .370"/9.4 mm – Stamped contacts

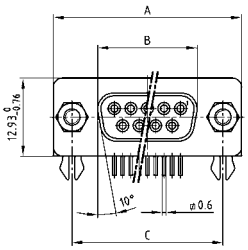


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

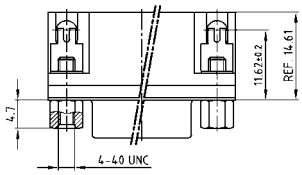
- Mounting style:
  with mounting bracket, PCB clip and 4-40 UNC hex bolt
- Quality class 3 (other quality classes on request)
- Shell: Steel tin plated

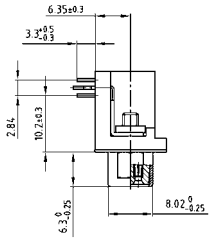
### Socket connector



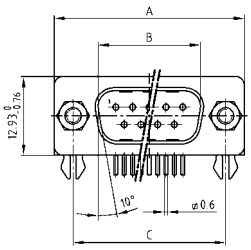

| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 +0.12 |
| 15 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |

Mounting style: PCB clip, front spacer



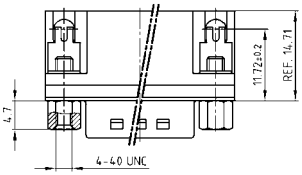



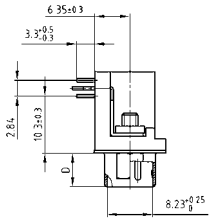

### Plug connector




| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 +0.12 | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

Mounting style: PCB clip, front spacer




### Order data

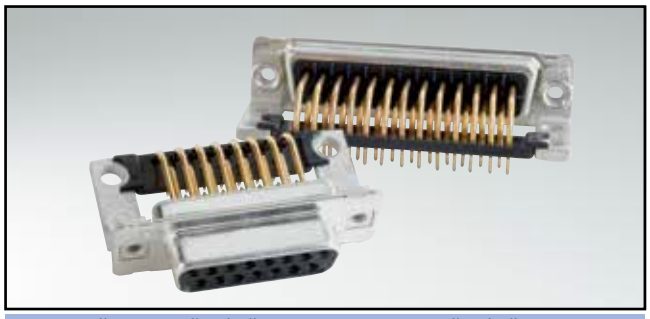
| Socket connector | | |
|---|---|---|
| No. of pos. | Mounting style 4-40 UNC | Part Number |
| 09 | PCB clip/Hex bolt | 302A10779X |
| 15 | PCB clip/Hex bolt | 302A10789X |
| 25 | PCB clip/Hex bolt | 302A10799X |
| 37 | PCB clip/Hex bolt | 302A10809X |

| Plug connector | | |
|---|---|---|
| No. of pos. | Mounting style 4-40 UNC | Part Number |
| 09 | PCB clip/Hex bolt | 301A10679X |
| 15 | PCB clip/Hex bolt | 301A10689X |
| 25 | PCB clip/Hex bolt | 301A10699X |
| 37 | PCB clip/Hex bolt | 301A10709X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# D-SUB Standard

## Solder pin – Angled – .590" / 14.19 mm – Precision machined contacts – Metal bracket

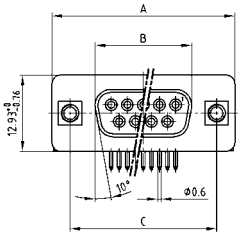


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

- Mounting styles:
  - with mounting bracket and 4-40 UNC threaded insert
  - with mounting bracket and 4-40 UNC front spacer
  - with mounting bracket, PCB clip and 4-40 UNC threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC front spacer
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

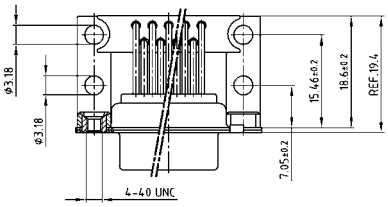
### Socket connector

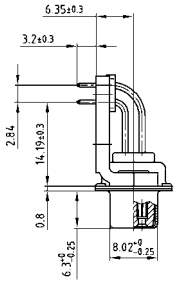



| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 +0.12 |
| 15 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |

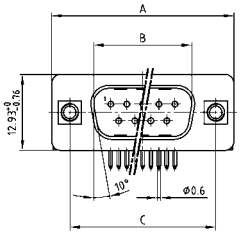
PCB-Layout: Kat1kGIA

Mounting style: Threaded insert



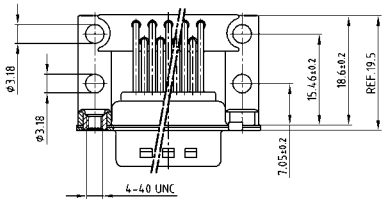

### Plug connector

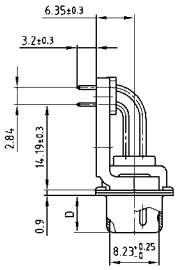



| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 +0.12 | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

PCB-Layout: Kat1kGJA

Mounting style: Threaded insert




### Order data

**Socket connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 164A19599X |
| 15 | Threaded insert | 164A19609X |
| 25 | Threaded insert | 164A19619X |
| 37 | Threaded insert | 164A19629X |

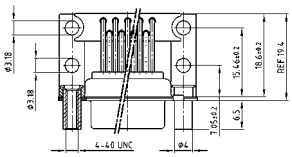
**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 163A19169X |
| 15 | Threaded insert | 163A19179X |
| 25 | Threaded insert | 163A19189X |
| 37 | Threaded insert | 163A19199X |

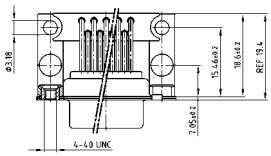
# D-SUB Standard – Mounting styles

## Solder pin – Angled – .590"/14.19 mm – Precision machined contacts – Metal bracket

### Order data

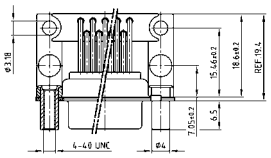



| Socket connector | | | Plug connector | | |
|---|---|---|---|---|---|
| No. of pos. | Mounting style 4-40 UNC | Part Number | No. of pos. | Mounting style 4-40 UNC | Part Number |
| 09 | Front spacer | 164A19679X | 09 | Front spacer | 163A19249X |
| 15 | Front spacer | 164A19689X | 15 | Front spacer | 163A19259X |
| 25 | Front spacer | 164A19699X | 25 | Front spacer | 163A19269X |
| 37 | Front spacer | 164A19709X | 37 | Front spacer | 163A19279X |




| Socket connector | | | Plug connector | | |
|---|---|---|---|---|---|
| No. of pos. | Mounting style 4-40 UNC | Part Number | No. of pos. | Mounting style 4-40 UNC | Part Number |
| 09 | PCB clip/Threaded insert | 164A19639X | 09 | PCB clip/Threaded insert | 163A19209X |
| 15 | PCB clip/Threaded insert | 164A19649X | 15 | PCB clip/Threaded insert | 163A19219X |
| 25 | PCB clip/Threaded insert | 164A19659X | 25 | PCB clip/Threaded insert | 163A19229X |
| 37 | PCB clip/Threaded insert | 164A19669X | 37 | PCB clip/Threaded insert | 163A19239X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness




| Socket connector | | | Plug connector | | |
|---|---|---|---|---|---|
| No. of pos. | Mounting style 4-40 UNC | Part Number | No. of pos. | Mounting style 4-40 UNC | Part Number |
| 09 | PCB clip/Front spacer | 164A19719X | 09 | PCB clip/Front spacer | 163A19289X |
| 15 | PCB clip/Front spacer | 164A19729X | 15 | PCB clip/Front spacer | 163A19299X |
| 25 | PCB clip/Front spacer | 164A19739X | 25 | PCB clip/Front spacer | 163A19309X |
| 37 | PCB clip/Front spacer | 164A19749X | 37 | PCB clip/Front spacer | 163A19319X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

PCB-Layout: Kat1kGIA

PCB-Layout: Kat1kGJA

# D-SUB Standard

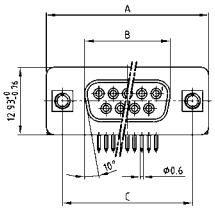
## Solder pin – Angled – .590" / 14.19 mm – Precision machined contacts – Plastic bracket

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

- Mounting styles:
  - with mounting bracket and 4-40 UNC threaded insert
  - with mounting bracket and 4-40 UNC front spacer
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

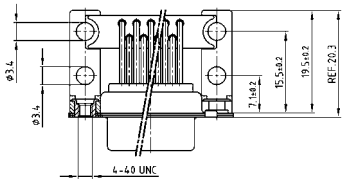
### Socket connector

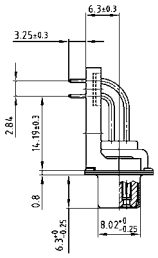


| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 +0.12 |
| 15 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |

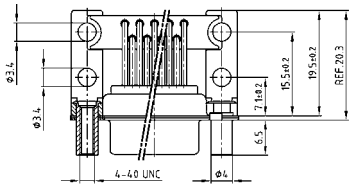
PCB-Layout: Kat1kGKA

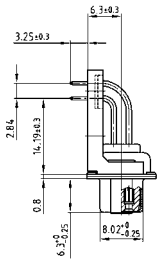
Mounting style: Threaded insert



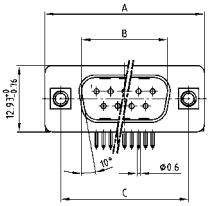


Mounting style: Front spacer





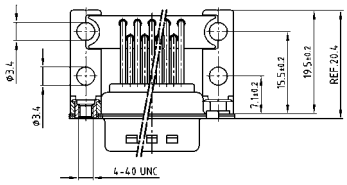
### Plug connector

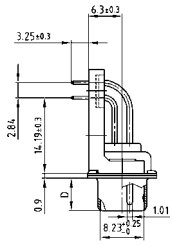


| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 +0.12 | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

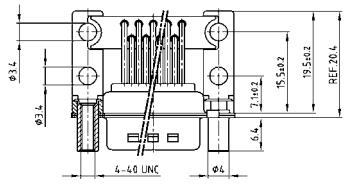
PCB-Layout: Kat1kGLA

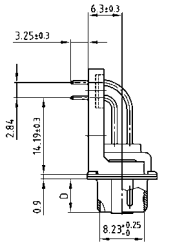
Mounting style: Threaded insert





Mounting style: Front spacer





### Order data

**Socket connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 164A19519X |
| 15 | Threaded insert | 164A19529X |
| 25 | Threaded insert | 164A19539X |
| 37 | Threaded insert | 164A19549X |
| 09 | Front spacer | 164A19559X |
| 15 | Front spacer | 164A19569X |
| 25 | Front spacer | 164A19579X |
| 37 | Front spacer | 164A19589X |

**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 163A19089X |
| 15 | Threaded insert | 163A19099X |
| 25 | Threaded insert | 163A19109X |
| 37 | Threaded insert | 163A19119X |
| 09 | Front spacer | 163A19129X |
| 15 | Front spacer | 163A19139X |
| 25 | Front spacer | 163A19149X |
| 37 | Front spacer | 163A19159X |

# D-SUB Standard

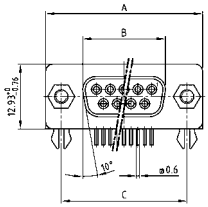
## Solder pin – Angled – .590"/14.19 mm – Stamped contacts – Plastic bracket

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

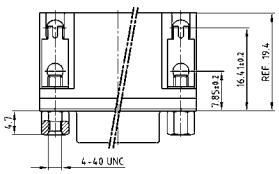
- Mounting style:
  with mounting bracket, PCB clip and 4-40 UNC hex bolt
- Quality class 3 (other quality classes on request)
- Shell: Steel tin plated

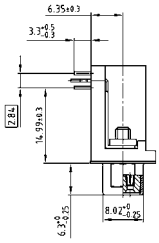
### Socket connector



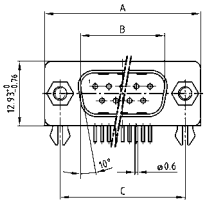
| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 +0.12 |
| 15 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |

Mounting style: PCB clip, front spacer



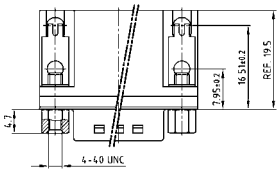


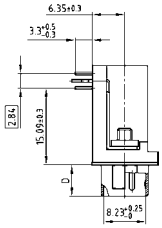
### Plug connector



| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 +0.12 | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

Mounting style: PCB clip, front spacer





### Order data

| Socket connector | | |
|---|---|---|
| No. of pos. | Mounting style 4-40 UNC | Part Number |
| 09 | PCB clip/Hex bolt | 302A11289X |
| 15 | PCB clip/Hex bolt | 302A11299X |
| 25 | PCB clip/Hex bolt | 302A11309X |
| 37 | PCB clip/Hex bolt | 302A11319X |

| Plug connector | | |
|---|---|---|
| No. of pos. | Mounting style 4-40 UNC | Part Number |
| 09 | PCB clip/Hex bolt | 301A10979X |
| 15 | PCB clip/Hex bolt | 301A10989X |
| 25 | PCB clip/Hex bolt | 301A10999X |
| 37 | PCB clip/Hex bolt | 301A11009X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# D-SUB Standard – Dual port

## Solder pin – Angled – Precision machined contacts – .625" / 15.88 mm Connector spacing

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

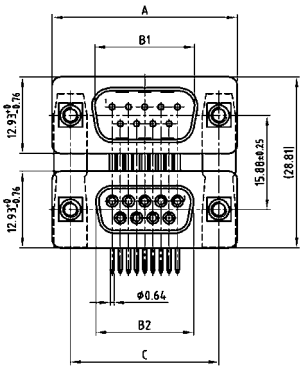
### Description

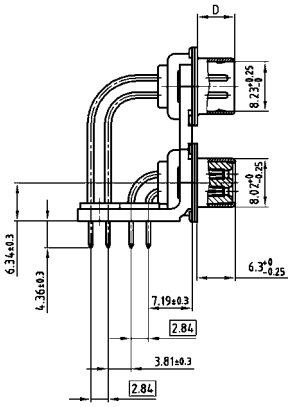
- Variations: pin – pin; socket – socket; pin – socket
- Mounting styles:
  - with mounting bracket and 4-40 UNC or M3 threaded insert
  - with mounting bracket and 4-40 UNC or M3 front spacer
  - with mounting bracket, PCB clip and 4-40 UNC or M3 threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC or M3 front spacer
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

### Product drawing

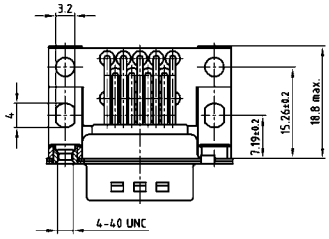
| No. of pos. | A -0.76 | B1 +0.25 | B2 -0.25 | C | D -0.30 |
|---|---|---|---|---|---|
| 2X 09 | 31.19 | 16.79 | 16.46 | 25.00 ±0.12 | 6.12 |
| 2X 15 | 39.52 | 25.12 | 24.79 | 33.30 +0.15 -0.10 | 6.12 |
| 2X 25 | 53.42 | 38.84 | 38.50 | 47.04 ±0.13 | 5.99 |
| 2X 37 | 69.70 | 55.30 | 54.96 | 63.50 ±0.13 | 5.99 |

**Graphical representation of only one variant!**

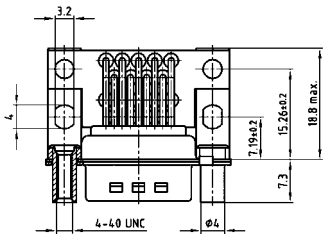


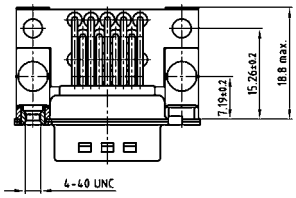

Mounting style: Threaded insert



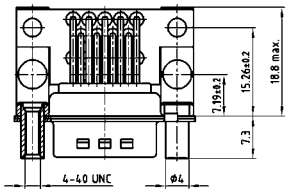

Mounting style: Front spacer




Mounting style: PCB clip, threaded insert




Mounting style: PCB clip, front spacer

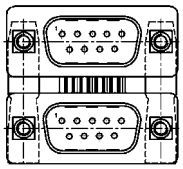


# D-SUB Standard – Dual port variations

## Solder pin – Angled – Precision machined contacts – .625"/15.88 mm Connector spacing

### Order data

PCB-Layout: Kat1iU5A

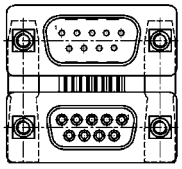


Variation:
plug upper –
plug bottom

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 /09 | Threaded insert | 163A15199X |
| 15 /15 | Threaded insert | 163A15209X |
| 25 /25 | Threaded insert | 163A15219X |
| 37 /37 | Threaded insert | 163A15229X |
| 09 /09 | Front spacer | 163A15359X |
| 15 /15 | Front spacer | 163A15369X |
| 25 /25 | Front spacer | 163A15379X |
| 37 /37 | Front spacer | 163A15389X |
| 09 /09 | PCB clip / Threaded insert | 163A19969X |
| 15 /15 | PCB clip / Threaded insert | 163A19979X |
| 25 /25 | PCB clip / Threaded insert | 163A19989X |
| 37 /37 | PCB clip / Threaded insert | 163A19999X |
| 09 /09 | PCB clip / Front spacer | 163A19329X |
| 15 /15 | PCB clip / Front spacer | 163A19339X |
| 25 /25 | PCB clip / Front spacer | 163A19349X |
| 37 /37 | PCB clip / Front spacer | 163A19359X |

| No. of pos. | Mounting style M3 | Part Number |
|---|---|---|
| 09 /09 | Threaded insert | 163A15279X |
| 15 /15 | Threaded insert | 163A15289X |
| 25 /25 | Threaded insert | 163A15299X |
| 37 /37 | Threaded insert | 163A15309X |
| 09 /09 | Front spacer | 163A15439X |
| 15 /15 | Front spacer | 163A15449X |
| 25 /25 | Front spacer | 163A15459X |
| 37 /37 | Front spacer | 163A15469X |
| 09 /09 | PCB clip / Threaded insert | 163A20049X |
| 15 /15 | PCB clip / Threaded insert | 163A20059X |
| 25 /25 | PCB clip / Threaded insert | 163A20069X |
| 37 /37 | PCB clip / Threaded insert | 163A20079X |
| 09 /09 | PCB clip / Front spacer | 163A19409X |
| 15 /15 | PCB clip / Front spacer | 163A19419X |
| 25 /25 | PCB clip / Front spacer | 163A19429X |
| 37 /37 | PCB clip / Front spacer | 163A19439X |

PCB-Layout: Kat1iU6A

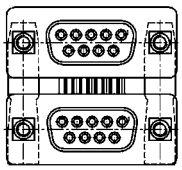


Variation:
plug upper –
socket bottom

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 /09 | Threaded insert | 163A15239X |
| 15 /15 | Threaded insert | 163A15249X |
| 25 /25 | Threaded insert | 163A15259X |
| 37 /37 | Threaded insert | 163A15269X |
| 09 /09 | Front spacer | 163A15399X |
| 15 /15 | Front spacer | 163A15409X |
| 25 /25 | Front spacer | 163A15419X |
| 37 /37 | Front spacer | 163A15429X |
| 09 /09 | PCB clip / Threaded insert | 163A20009X |
| 15 /15 | PCB clip / Threaded insert | 163A20019X |
| 25 /25 | PCB clip / Threaded insert | 163A20029X |
| 37 /37 | PCB clip / Threaded insert | 163A20039X |
| 09 /09 | PCB clip / Front spacer | 163A19369X |
| 15 /15 | PCB clip / Front spacer | 163A19379X |
| 25 /25 | PCB clip / Front spacer | 163A19389X |
| 37 /37 | PCB clip / Front spacer | 163A19399X |

| No. of pos. | Mounting style M3 | Part Number |
|---|---|---|
| 09 /09 | Threaded insert | 163A15319X |
| 15 /15 | Threaded insert | 163A15329X |
| 25 /25 | Threaded insert | 163A15339X |
| 37 /37 | Threaded insert | 163A15349X |
| 09 /09 | Front spacer | 163A15479X |
| 15 /15 | Front spacer | 163A15489X |
| 25 /25 | Front spacer | 163A15499X |
| 37 /37 | Front spacer | 163A15509X |
| 09 /09 | PCB clip / Threaded insert | 163A20089X |
| 15 /15 | PCB clip / Threaded insert | 163A20099X |
| 25 /25 | PCB clip / Threaded insert | 163A20109X |
| 37 /37 | PCB clip / Threaded insert | 163A20119X |
| 09 /09 | PCB clip / Front spacer | 163A19449X |
| 15 /15 | PCB clip / Front spacer | 163A19459X |
| 25 /25 | PCB clip / Front spacer | 163A19469X |
| 37 /37 | PCB clip / Front spacer | 163A19479X |

PCB-Layout: Kat1iU6A

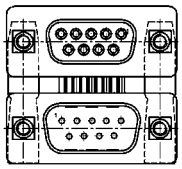


Variation:
socket upper –
socket bottom

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 /09 | Threaded insert | 164A15609X |
| 15 /15 | Threaded insert | 164A15619X |
| 25 /25 | Threaded insert | 164A15629X |
| 37 /37 | Threaded insert | 164A15639X |
| 09 /09 | Front spacer | 164A15769X |
| 15 /15 | Front spacer | 164A15779X |
| 25 /25 | Front spacer | 164A15789X |
| 37 /37 | Front spacer | 164A15799X |
| 09 /09 | PCB clip / Threaded insert | 164A20409X |
| 15 /15 | PCB clip / Threaded insert | 164A20419X |
| 25 /25 | PCB clip / Threaded insert | 164A20429X |
| 37 /37 | PCB clip / Threaded insert | 164A20439X |
| 09 /09 | PCB clip / Front spacer | 164A19759X |
| 15 /15 | PCB clip / Front spacer | 164A19769X |
| 25 /25 | PCB clip / Front spacer | 164A19779X |
| 37 /37 | PCB clip / Front spacer | 164A19789X |

| No. of pos. | Mounting style M3 | Part Number |
|---|---|---|
| 09 /09 | Threaded insert | 164A15689X |
| 15 /15 | Threaded insert | 164A15699X |
| 25 /25 | Threaded insert | 164A15709X |
| 37 /37 | Threaded insert | 164A15719X |
| 09 /09 | Front spacer | 164A15849X |
| 15 /15 | Front spacer | 164A15859X |
| 25 /25 | Front spacer | 164A15869X |
| 37 /37 | Front spacer | 164A15879X |
| 09 /09 | PCB clip / Threaded insert | 164A20489X |
| 15 /15 | PCB clip / Threaded insert | 164A20499X |
| 25 /25 | PCB clip / Threaded insert | 164A20509X |
| 37 /37 | PCB clip / Threaded insert | 164A20519X |
| 09 /09 | PCB clip / Front spacer | 164A19839X |
| 15 /15 | PCB clip / Front spacer | 164A19849X |
| 25 /25 | PCB clip / Front spacer | 164A19859X |
| 37 /37 | PCB clip / Front spacer | 164A19869X |

PCB-Layout: Kat1iU5A



Variation:
socket upper –
plug bottom

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 /09 | Threaded insert | 164A15649X |
| 15 /15 | Threaded insert | 164A15659X |
| 25 /25 | Threaded insert | 164A15669X |
| 37 /37 | Threaded insert | 164A15679X |
| 09 /09 | Front spacer | 164A15809X |
| 15 /15 | Front spacer | 164A15819X |
| 25 /25 | Front spacer | 164A15829X |
| 37 /37 | Front spacer | 164A15839X |
| 09 /09 | PCB clip / Threaded insert | 164A20449X |
| 15 /15 | PCB clip / Threaded insert | 164A20459X |
| 25 /25 | PCB clip / Threaded insert | 164A20469X |
| 37 /37 | PCB clip / Threaded insert | 164A20479X |
| 09 /09 | PCB clip / Front spacer | 164A19799X |
| 15 /15 | PCB clip / Front spacer | 164A19809X |
| 25 /25 | PCB clip / Front spacer | 164A19819X |
| 37 /37 | PCB clip / Front spacer | 164A19829X |

| No. of pos. | Mounting style M3 | Part Number |
|---|---|---|
| 09 /09 | Threaded insert | 164A15729X |
| 15 /15 | Threaded insert | 164A15739X |
| 25 /25 | Threaded insert | 164A15749X |
| 37 /37 | Threaded insert | 164A15759X |
| 09 /09 | Front spacer | 164A15889X |
| 15 /15 | Front spacer | 164A15899X |
| 25 /25 | Front spacer | 164A15909X |
| 37 /37 | Front spacer | 164A15919X |
| 09 /09 | PCB clip / Threaded insert | 164A20529X |
| 15 /15 | PCB clip / Threaded insert | 164A20539X |
| 25 /25 | PCB clip / Threaded insert | 164A20549X |
| 37 /37 | PCB clip / Threaded insert | 164A20559X |
| 09 /09 | PCB clip / Front spacer | 164A19879X |
| 15 /15 | PCB clip / Front spacer | 164A19889X |
| 25 /25 | PCB clip / Front spacer | 164A19899X |
| 37 /37 | PCB clip / Front spacer | 164A19909X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# D-SUB Standard – Dual port

## Solder pin – Angled – Precision machined contacts – .750" / 19.05 mm Connector spacing

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

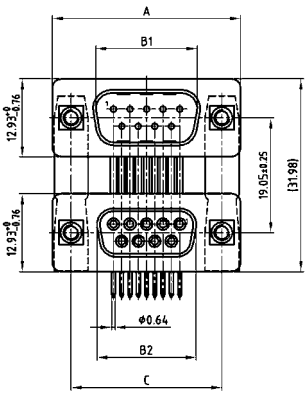
### Description

- Variations: pin – pin; socket – socket; pin – socket
- Mounting styles:
  - with mounting bracket and 4-40 UNC or M3 threaded insert
  - with mounting bracket and 4-40 UNC or M3 front spacer
  - with mounting bracket, PCB clip and 4-40 UNC or M3 threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC or M3 front spacer
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

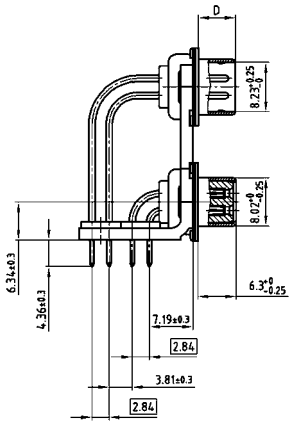
### Product drawing

| No. of pos. | A -0.76 | B1 +0.25 | B2 -0.25 | C | D -0.30 |
|---|---|---|---|---|---|
| 2X 09 | 31.19 | 16.79 | 16.46 | 25.00 ±0.12 | 6.12 |
| 2X 15 | 39.52 | 25.12 | 24.79 | 33.30 +0.15 -0.10 | 6.12 |
| 2X 25 | 53.42 | 38.84 | 38.50 | 47.04 ±0.13 | 5.99 |
| 2X 37 | 69.70 | 55.30 | 54.96 | 63.50 ±0.13 | 5.99 |

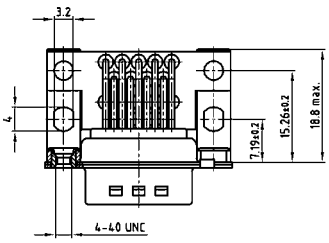
**Graphical representation of only one variant!**



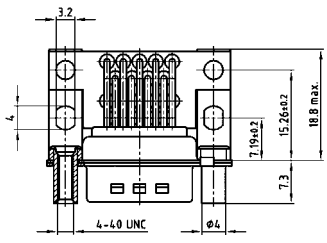

Mounting style: Threaded insert



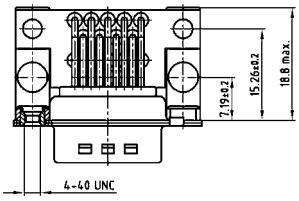

Mounting style: Front spacer

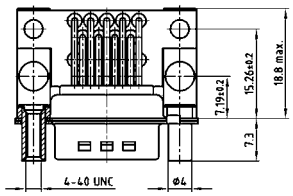



Mounting style: PCB clip, threaded insert




Mounting style: PCB clip, front spacer



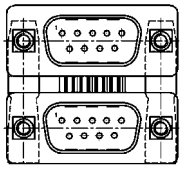



# D-SUB Standard – Dual port variations

## Solder pin – Angled – Precision machined contacts – .750" / 19.05 mm Connector spacing

### Order data

PCB-Layout: Kat1iU5A

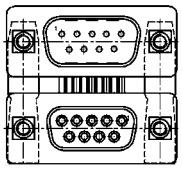


Variation:
plug upper –
plug bottom

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 / 09 | Threaded insert | 163A15519X |
| 15 / 15 | Threaded insert | 163A15529X |
| 25 / 25 | Threaded insert | 163A15539X |
| 37 / 37 | Threaded insert | 163A15549X |
| 09 / 09 | Front spacer | 163A15679X |
| 15 / 15 | Front spacer | 163A15689X |
| 25 / 25 | Front spacer | 163A15699X |
| 37 / 37 | Front spacer | 163A15709X |
| 09 / 09 | PCB clip / Threaded insert | 163A19489X |
| 15 / 15 | PCB clip / Threaded insert | 163A19499X |
| 25 / 25 | PCB clip / Threaded insert | 163A19509X |
| 37 / 37 | PCB clip / Threaded insert | 163A19519X |
| 09 / 09 | PCB clip / Front spacer | 163A19649X |
| 15 / 15 | PCB clip / Front spacer | 163A19659X |
| 25 / 25 | PCB clip / Front spacer | 163A19669X |
| 37 / 37 | PCB clip / Front spacer | 163A19679X |

| No. of pos. | Mounting style M3 | Part Number |
|---|---|---|
| 09 / 09 | Threaded insert | 163A15599X |
| 15 / 15 | Threaded insert | 163A15609X |
| 25 / 25 | Threaded insert | 163A15619X |
| 37 / 37 | Threaded insert | 163A15629X |
| 09 / 09 | Front spacer | 163A15759X |
| 15 / 15 | Front spacer | 163A15769X |
| 25 / 25 | Front spacer | 163A15779X |
| 37 / 37 | Front spacer | 163A15789X |
| 09 / 09 | PCB clip / Threaded insert | 163A19569X |
| 15 / 15 | PCB clip / Threaded insert | 163A19579X |
| 25 / 25 | PCB clip / Threaded insert | 163A19589X |
| 37 / 37 | PCB clip / Threaded insert | 163A19599X |
| 09 / 09 | PCB clip / Front spacer | 163A19729X |
| 15 / 15 | PCB clip / Front spacer | 163A19739X |
| 25 / 25 | PCB clip / Front spacer | 163A19749X |
| 37 / 37 | PCB clip / Front spacer | 163A19759X |

PCB-Layout: Kat1iU6A

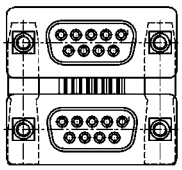


Variation:
plug upper –
socket bottom

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 / 09 | Threaded insert | 163A15559X |
| 15 / 15 | Threaded insert | 163A15569X |
| 25 / 25 | Threaded insert | 163A15579X |
| 37 / 37 | Threaded insert | 163A15589X |
| 09 / 09 | Front spacer | 163A15719X |
| 15 / 15 | Front spacer | 163A15729X |
| 25 / 25 | Front spacer | 163A15739X |
| 37 / 37 | Front spacer | 163A15749X |
| 09 / 09 | PCB clip / Threaded insert | 163A19529X |
| 15 / 15 | PCB clip / Threaded insert | 163A19539X |
| 25 / 25 | PCB clip / Threaded insert | 163A19549X |
| 37 / 37 | PCB clip / Threaded insert | 163A19559X |
| 09 / 09 | PCB clip / Front spacer | 163A19689X |
| 15 / 15 | PCB clip / Front spacer | 163A19699X |
| 25 / 25 | PCB clip / Front spacer | 163A19709X |
| 37 / 37 | PCB clip / Front spacer | 163A19719X |

| No. of pos. | Mounting style M3 | Part Number |
|---|---|---|
| 09 / 09 | Threaded insert | 163A15639X |
| 15 / 15 | Threaded insert | 163A15649X |
| 25 / 25 | Threaded insert | 163A15659X |
| 37 / 37 | Threaded insert | 163A15669X |
| 09 / 09 | Front spacer | 163A15799X |
| 15 / 15 | Front spacer | 163A15809X |
| 25 / 25 | Front spacer | 163A15819X |
| 37 / 37 | Front spacer | 163A15829X |
| 09 / 09 | PCB clip / Threaded insert | 163A19609X |
| 15 / 15 | PCB clip / Threaded insert | 163A19619X |
| 25 / 25 | PCB clip / Threaded insert | 163A19629X |
| 37 / 37 | PCB clip / Threaded insert | 163A19639X |
| 09 / 09 | PCB clip / Front spacer | 163A19769X |
| 15 / 15 | PCB clip / Front spacer | 163A19779X |
| 25 / 25 | PCB clip / Front spacer | 163A19789X |
| 37 / 37 | PCB clip / Front spacer | 163A19799X |

PCB-Layout: Kat1iU6A

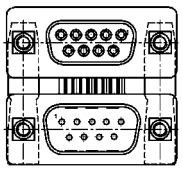


Variation:
socket upper –
socket bottom

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 / 09 | Threaded insert | 164A15929X |
| 15 / 15 | Threaded insert | 164A15939X |
| 25 / 25 | Threaded insert | 164A15949X |
| 37 / 37 | Threaded insert | 164A15959X |
| 09 / 09 | Front spacer | 164A16089X |
| 15 / 15 | Front spacer | 164A16099X |
| 25 / 25 | Front spacer | 164A16109X |
| 37 / 37 | Front spacer | 164A16119X |
| 09 / 09 | PCB clip / Threaded insert | 164A19919X |
| 15 / 15 | PCB clip / Threaded insert | 164A19929X |
| 25 / 25 | PCB clip / Threaded insert | 164A19939X |
| 37 / 37 | PCB clip / Threaded insert | 164A19949X |
| 09 / 09 | PCB clip / Front spacer | 164A20079X |
| 15 / 15 | PCB clip / Front spacer | 164A20089X |
| 25 / 25 | PCB clip / Front spacer | 164A20099X |
| 37 / 37 | PCB clip / Front spacer | 164A20109X |

| No. of pos. | Mounting style M3 | Part Number |
|---|---|---|
| 09 / 09 | Threaded insert | 164A16009X |
| 15 / 15 | Threaded insert | 164A16019X |
| 25 / 25 | Threaded insert | 164A16029X |
| 37 / 37 | Threaded insert | 164A16039X |
| 09 / 09 | Front spacer | 164A16169X |
| 15 / 15 | Front spacer | 164A16179X |
| 25 / 25 | Front spacer | 164A16189X |
| 37 / 37 | Front spacer | 164A16199X |
| 09 / 09 | PCB clip / Threaded insert | 164A19999X |
| 15 / 15 | PCB clip / Threaded insert | 164A20009X |
| 25 / 25 | PCB clip / Threaded insert | 164A20019X |
| 37 / 37 | PCB clip / Threaded insert | 164A20029X |
| 09 / 09 | PCB clip / Front spacer | 164A20159X |
| 15 / 15 | PCB clip / Front spacer | 164A20169X |
| 25 / 25 | PCB clip / Front spacer | 164A20179X |
| 37 / 37 | PCB clip / Front spacer | 164A20189X |

PCB-Layout: Kat1iU5A



Variation:
socket upper –
plug bottom

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 / 09 | Threaded insert | 164A15969X |
| 15 / 15 | Threaded insert | 164A15979X |
| 25 / 25 | Threaded insert | 164A15989X |
| 37 / 37 | Threaded insert | 164A15999X |
| 09 / 09 | Front spacer | 164A16129X |
| 15 / 15 | Front spacer | 164A16139X |
| 25 / 25 | Front spacer | 164A16149X |
| 37 / 37 | Front spacer | 164A16159X |
| 09 / 09 | PCB clip / Threaded insert | 164A19959X |
| 15 / 15 | PCB clip / Threaded insert | 164A19969X |
| 25 / 25 | PCB clip / Threaded insert | 164A19979X |
| 37 / 37 | PCB clip / Threaded insert | 164A19989X |
| 09 / 09 | PCB clip / Front spacer | 164A20119X |
| 15 / 15 | PCB clip / Front spacer | 164A20129X |
| 25 / 25 | PCB clip / Front spacer | 164A20139X |
| 37 / 37 | PCB clip / Front spacer | 164A20149X |

| No. of pos. | Mounting style M3 | Part Number |
|---|---|---|
| 09 / 09 | Threaded insert | 164A16049X |
| 15 / 15 | Threaded insert | 164A16059X |
| 25 / 25 | Threaded insert | 164A16069X |
| 37 / 37 | Threaded insert | 164A16079X |
| 09 / 09 | Front spacer | 164A16209X |
| 15 / 15 | Front spacer | 164A16219X |
| 25 / 25 | Front spacer | 164A16229X |
| 37 / 37 | Front spacer | 164A16239X |
| 09 / 09 | PCB clip / Threaded insert | 164A20039X |
| 15 / 15 | PCB clip / Threaded insert | 164A20049X |
| 25 / 25 | PCB clip / Threaded insert | 164A20059X |
| 37 / 37 | PCB clip / Threaded insert | 164A20069X |
| 09 / 09 | PCB clip / Front spacer | 164A20199X |
| 15 / 15 | PCB clip / Front spacer | 164A20209X |
| 25 / 25 | PCB clip / Front spacer | 164A20219X |
| 37 / 37 | PCB clip / Front spacer | 164A20229X |

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness

# D-SUB Standard – Dual port

## Solder pin – Angled – Stamped contacts – .625"/15.88 mm and .750"/19.05 mm Connector spacing

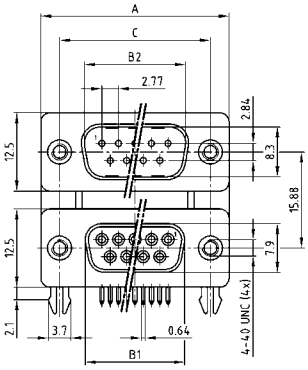
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

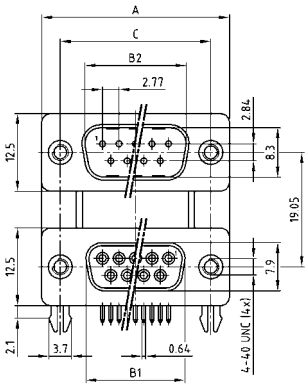
- Variations: pin – pin; socket – socket; pin – socket
- Mounting style:
  with mounting bracket, PCB clip and
  4-40 UNC threaded insert
- Quality class 3 (other quality classes on request)
- Shell: Steel tin plated

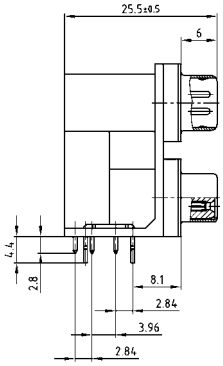
### Product drawing

Connector spacing 15.88 mm

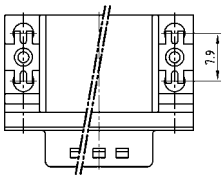



Connector spacing 19.05 mm




Mounting style: PCB clip, threaded insert



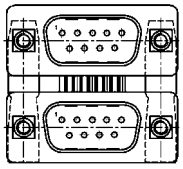

| No. of pos. | A | B1 | B2 | C |
|---|---|---|---|---|
| 2X 09 | 30.80 | 16.30 | 16.92 | 25.00 |
| 2X 15 | 39.20 | 24.60 | 25.25 | 33.30 |
| 2X 25 | 53.10 | 38.30 | 38.96 | 47.04 |
| 2X 37 | 69.40 | 54.80 | 55.42 | 63.50 |

**Graphical representation of only one variant!**

# D-SUB Standard – Dual port variations

## Solder pin – Angled – Stamped contacts – .625"/15.88 mm and .750"/19.05 mm Connector spacing

### Order data



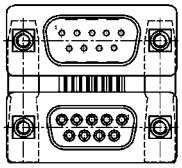
Variation:
plug upper –
plug bottom

Connector spacing .625"/15.88 mm

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 / 09 | PCB clip/Threaded insert | DLS1PP5AN21X |
| 15 / 15 | PCB clip/Threaded insert | DLS2PP5AN21X |
| 25 / 25 | PCB clip/Threaded insert | DLS3PP5AN21X |
| 37 / 37 | PCB clip/Threaded insert | DLS4PP5AN21X |

Connector spacing .750"/19.05 mm

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 / 09 | PCB clip/Threaded insert | DLS1PP5AN23X |
| 15 / 15 | PCB clip/Threaded insert | DLS2PP5AN23X |
| 25 / 25 | PCB clip/Threaded insert | DLS3PP5AN23X |
| 37 / 37 | PCB clip/Threaded insert | DLS4PP5AN23X |



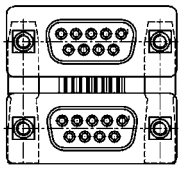
Variation:
plug upper –
socket bottom

Connector spacing .625"/15.88 mm

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 / 09 | PCB clip/Threaded insert | DLS1PS5AN21X |
| 15 / 15 | PCB clip/Threaded insert | DLS2PS5AN21X |
| 25 / 25 | PCB clip/Threaded insert | DLS3PS5AN21X |
| 37 / 37 | PCB clip/Threaded insert | DLS4PS5AN21X |

Connector spacing .750"/19.05 mm

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 / 09 | PCB clip/Threaded insert | DLS1PS5AN23X |
| 15 / 15 | PCB clip/Threaded insert | DLS2PS5AN23X |
| 25 / 25 | PCB clip/Threaded insert | DLS3PS5AN23X |
| 37 / 37 | PCB clip/Threaded insert | DLS4PS5AN23X |



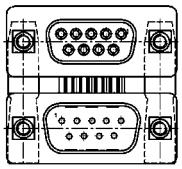
Variation:
socket upper –
socket bottom

Connector spacing .625"/15.88 mm

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 / 09 | PCB clip/Threaded insert | DLS1SS5AN21X |
| 15 / 15 | PCB clip/Threaded insert | DLS2SS5AN21X |
| 25 / 25 | PCB clip/Threaded insert | DLS3SS5AN21X |
| 37 / 37 | PCB clip/Threaded insert | DLS4SS5AN21X |

Connector spacing .750"/19.05 mm

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 / 09 | PCB clip/Threaded insert | DLS1SS5AN23X |
| 15 / 15 | PCB clip/Threaded insert | DLS2SS5AN23X |
| 25 / 25 | PCB clip/Threaded insert | DLS3SS5AN23X |
| 37 / 37 | PCB clip/Threaded insert | DLS4SS5AN23X |



Variation:
socket upper –
plug bottom

Connector spacing .625"/15.88 mm

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 / 09 | PCB clip/Threaded insert | DLS1SP5AN21X |
| 15 / 15 | PCB clip/Threaded insert | DLS2SP5AN21X |
| 25 / 25 | PCB clip/Threaded insert | DLS3SP5AN21X |
| 37 / 37 | PCB clip/Threaded insert | DLS4SP5AN21X |

Connector spacing .750"/19.05 mm

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 / 09 | PCB clip/Threaded insert | DLS1SP5AN23X |
| 15 / 15 | PCB clip/Threaded insert | DLS2SP5AN23X |
| 25 / 25 | PCB clip/Threaded insert | DLS3SP5AN23X |
| 37 / 37 | PCB clip/Threaded insert | DLS4SP5AN23X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# D-SUB Standard

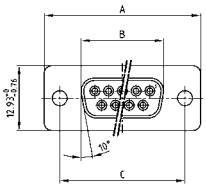
## Crimp body (without contacts) – For wire size AWG 24...20 and AWG 28...24

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

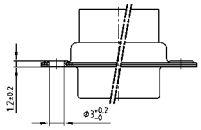
- For machined and stamped contacts, **AWG 24...20** and **AWG 28...24**
- Mounting styles:
  - with through-hole, Ø .118"/3 mm
  - with 4-40 UNC or M3 threaded insert
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

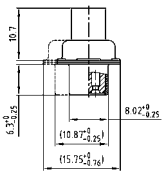
### Socket connector




| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 +0.12 |
| 15 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |
| 50 | 67.31 | 52.55 | 61.10 +0.14 -0.11 |

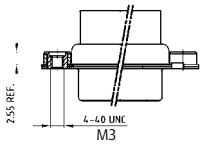
Mounting style: Through-hole



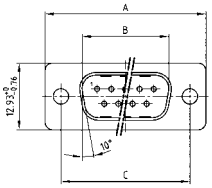



50 pos. = Dim. in (_ _)

Mounting style: Threaded insert

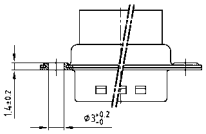


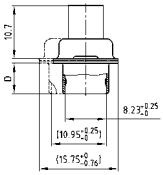

### Plug connector




| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 +0.12 | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 50 | 67.31 | 52.68 | 61.10 +0.14 -0.11 | 5.99 |

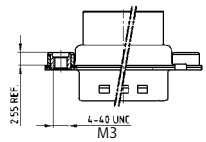
Mounting style: Through-hole






50 pos. = Dim. in (_ _)

Mounting style: Threaded insert




### Order data

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 164X11769X |
| 15 | Through-hole | 164X11779X |
| 25 | Through-hole | 164X11789X |
| 37 | Through-hole | 164X11799X |
| 50 | Through-hole | 164X11809X |
| 09 | 4-40 UNC Threaded insert | DSS1XSXXG04X |
| 15 | 4-40 UNC Threaded insert | DSS2XSXXG04X |
| 25 | 4-40 UNC Threaded insert | DSS3XSXXG04X |
| 37 | 4-40 UNC Threaded insert | DSS4XSXXG04X |
| 50 | 4-40 UNC Threaded insert | DSS5XSXXG04X |
| 09 | M3 Threaded insert | DSS1XSXXG03X |
| 15 | M3 Threaded insert | DSS2XSXXG03X |
| 25 | M3 Threaded insert | DSS3XSXXG03X |
| 37 | M3 Threaded insert | DSS4XSXXG03X |
| 50 | M3 Threaded insert | DSS5XSXXG03X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 163X10019X |
| 15 | Through-hole | 163X10029X |
| 25 | Through-hole | 163X10039X |
| 37 | Through-hole | 163X10049X |
| 50 | Through-hole | 163X10059X |
| 09 | 4-40 UNC Threaded insert | DSS1XPXXG04X |
| 15 | 4-40 UNC Threaded insert | DSS2XPXXG04X |
| 25 | 4-40 UNC Threaded insert | DSS3XPXXG04X |
| 37 | 4-40 UNC Threaded insert | DSS4XPXXG04X |
| 50 | 4-40 UNC Threaded insert | DSS5XPXXG04X |
| 09 | M3 Threaded insert | DSS1XPXXG03X |
| 15 | M3 Threaded insert | DSS2XPXXG03X |
| 25 | M3 Threaded insert | DSS3XPXXG03X |
| 37 | M3 Threaded insert | DSS4XPXXG03X |
| 50 | M3 Threaded insert | DSS5XPXXG03X |

# D-SUB Standard

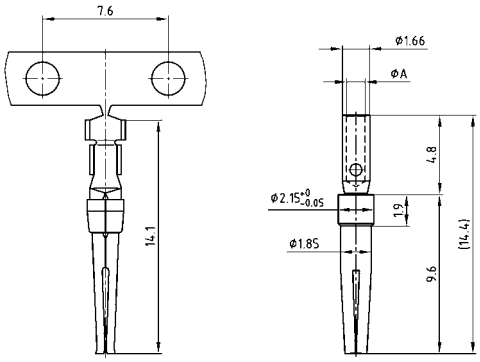
## Crimp Contacts – Machined or stamped – For wire size AWG 24...20 and AWG 28...24

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

- For wire size **AWG 24...20** and **AWG 28...24**
- Stamped contacts with reel length of 500 or 10,000 contacts
- Loose contacts in poly bag (500/100 pieces)
- Quality class 3 (also available in quality class 1)

### Female contactor

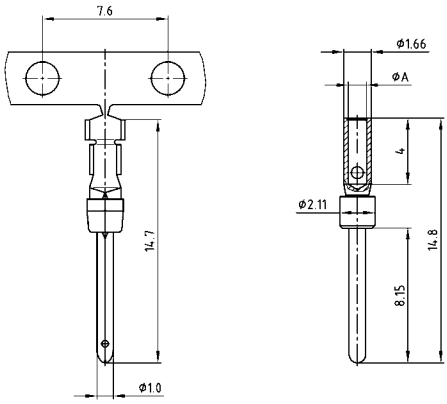



| AWG | A +0.02 |
|---|---|
| 24-20 | Ø 1.12 |
| 28-24 | Ø 0.64 |

stamped Contact

machined Contact

### Male contactor




| AWG | A +0.02 |
|---|---|
| 24-20 | Ø 1.12 |
| 28-24 | Ø 0.64 |

stamped Contact

machined Contact

| Technical Data | |
|---|---|
| Contact material Precision machined contacts | Brass |
| Contact material Stamped contacts | Phosphor bronze |
| Contact plating Precision machined contacts | Gold plated over nickel |
| Contact plating Stamped contacts | Selective gold plated |
| Temperature range | -55°C to +125°C |
| Rated current for AWG 24...20 | 7.5 A |
| Rated current for AWG 28...24 | 5 A |
| Contact resistance | ≤ 10 mΩ |

### Order data

**Female contacts**

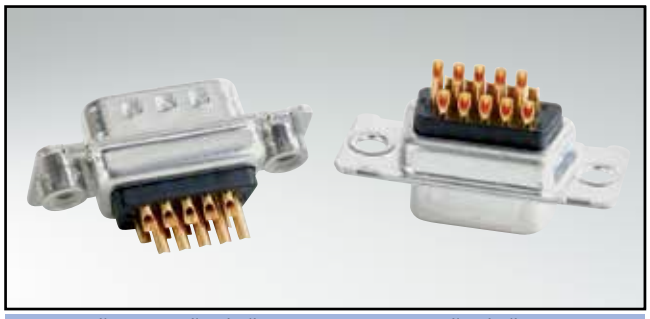
| Contact type / AWG | Part Number |
|---|---|
| Stamped / 24...20 / Big reel wheeled left (10.000) | 162A11819X |
| Stamped / 24...20 / Big reel wheeled right (10.000) | 162A11829X |
| Stamped / 24...20 / Small reel wheeled right (500) | 162A11839X |
| Stamped / 24...20 / Loose contacts (500) | 162A11849X |
| Machined / 24...20 / Loose contacts (500) | 162A18709X |
| Machined / 24...20 / Loose contacts (100) | 16-001653 |
| Stamped / 28...24 / Big reel wheeled left (10.000) | 162A11859X |
| Stamped / 28...24 / Big reel wheeled right (10.000) | 162A11869X |
| Stamped / 28...24 / Small reel wheeled right (500) | 162A11879X |
| Stamped / 28...24 / Loose contacts (500) | 162A11889X |
| Machined / 28...24 / Loose contacts (500) | 162A18719X |
| Machined / 28...24 / Loose contacts (100) | 16-001663 |

**Male contacts**

| Contact type / AWG | Part Number |
|---|---|
| Stamped / 24...20 / Big reel wheeled left (10.000) | 161A13369X |
| Stamped / 24...20 / Big reel wheeled right (10.000) | 161A13379X |
| Stamped / 24...20 / Small reel wheeled right (500) | 161A13389X |
| Stamped / 24...20 / Loose contacts (500) | 161A13399X |
| Machined / 24...20 / Loose contacts (500) | 161A18299X |
| Machined / 24...20 / Loose contacts (100) | 16-001673 |
| Stamped / 28...24 / Big reel wheeled left (10.000) | 161A13409X |
| Stamped / 28...24 / Big reel wheeled right (10.000) | 161A13419X |
| Stamped / 28...24 / Small reel wheeled right (500) | 161A13429X |
| Stamped / 28...24 / Loose contacts (500) | 161A13439X |
| Machined / 28...24 / Loose contacts (500) | 161A18309X |
| Machined / 28...24 / Loose contacts (100) | 16-001683 |

# D-SUB High Density

## Solder cup – Precision machined contacts – For wire size AWG 22

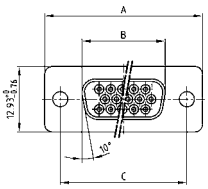


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

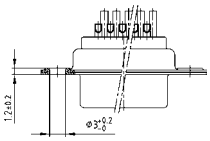
- Suitable for wire size **AWG 22**
- Mounting styles:
  - with through-hole, Ø .118"/3 mm
  - with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

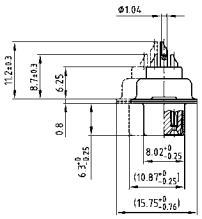
### Socket connector



| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 15 | 31.19 | 16.46 | 25.00 +0.12 |
| 26 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 44 | 53.42 | 38.50 | 47.04 ±0.13 |
| 62 | 69.70 | 54.96 | 63.50 ±0.13 |
| 78 | 67.31 | 52.55 | 61.10 +0.14 -0.11 |

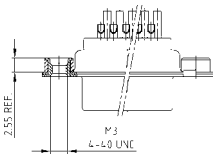
Mounting style: Through-hole



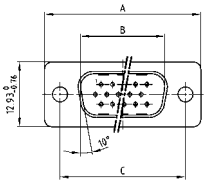


78 pos. = Dim. in (_ _)

Mounting style: Threaded insert

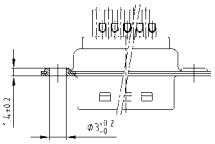


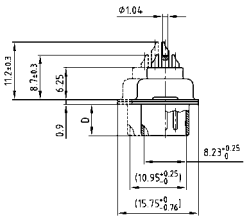
### Plug connector



| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 15 | 31.19 | 16.79 | 25.00 +0.12 | 6.12 |
| 26 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 44 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 62 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 78 | 67.31 | 52.68 | 61.10 +0.14 -0.11 | 5.99 |

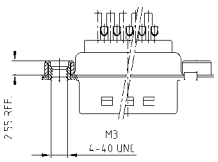
Mounting style: Through-hole





78 pos. = Dim. in (_ _)

Mounting style: Threaded insert



### Order data

| Socket connector | | |
|---|---|---|
| **No. of pos.** | **Mounting style** | **Part Number** |
| 15 | Through-hole | 164A17009X |
| 26 | Through-hole | 164A17019X |
| 44 | Through-hole | 164A17029X |
| 62 | Through-hole | 164A17039X |
| 78 | Through-hole | 164A17049X |
| 15 | 4-40 UNC Threaded insert | 164A17059X |
| 26 | 4-40 UNC Threaded insert | 164A17069X |
| 44 | 4-40 UNC Threaded insert | 164A17079X |
| 62 | 4-40 UNC Threaded insert | 164A17089X |
| 78 | 4-40 UNC Threaded insert | 164A17099X |
| 15 | M3 Threaded insert | 164A17109X |
| 26 | M3 Threaded insert | 164A17119X |
| 42 | M3 Threaded insert | 164A17129X |
| 62 | M3 Threaded insert | 164A17139X |
| 78 | M3 Threaded insert | 164A17149X |

| Plug connector | | |
|---|---|---|
| **No. of pos.** | **Mounting style** | **Part Number** |
| 15 | Through-hole | 163A16599X |
| 26 | Through-hole | 163A16609X |
| 44 | Through-hole | 163A16619X |
| 62 | Through-hole | 163A16629X |
| 78 | Through-hole | 163A16639X |
| 15 | 4-40 UNC Threaded insert | 163A16649X |
| 26 | 4-40 UNC Threaded insert | 163A16659X |
| 44 | 4-40 UNC Threaded insert | 163A16669X |
| 62 | 4-40 UNC Threaded insert | 163A16679X |
| 78 | 4-40 UNC Threaded insert | 163A16689X |
| 15 | M3 Threaded insert | 163A16699X |
| 26 | M3 Threaded insert | 163A16709X |
| 44 | M3 Threaded insert | 163A16719X |
| 62 | M3 Threaded insert | 163A16729X |
| 78 | M3 Threaded insert | 163A16739X |

# D-SUB High Density

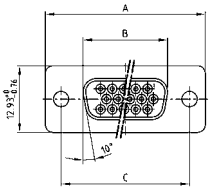
## Solder cup – Stamped contacts – For wire size AWG 22

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

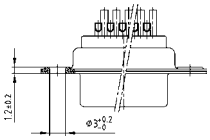
- Suitable for wire size **AWG 22**
- Mounting style:
  with through-hole Ø .118" / 3 mm
- Quality class 3 (other quality classes on request)
- Shell: Steel tin plated

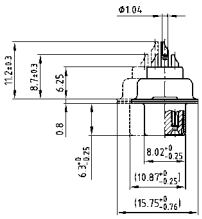
### Socket connector




| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 15 | 31.19 | 16.46 | 25.00 +0.12 |
| 26 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 44 | 53.42 | 38.50 | 47.04 ±0.13 |
| 62 | 69.70 | 54.96 | 63.50 ±0.13 |
| 78 | 67.31 | 52.55 | 61.10 +0.14 -0.11 |

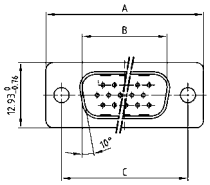
Mounting style: Through-hole





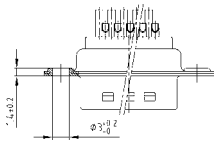
78 pos. = Dim. in (_ _)

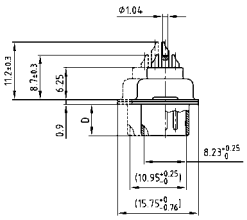
### Plug connector




| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 15 | 31.19 | 16.79 | 25.00 +0.12 | 6.12 |
| 26 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 44 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 62 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 78 | 67.31 | 52.68 | 61.10 +0.14 -0.11 | 5.99 |

Mounting style: Through-hole





78 pos. = Dim. in (_ _)

### Order data

| Socket connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 15 | Through-hole | 302A10129X |
| 26 | Through-hole | 302A10139X |
| 44 | Through-hole | 302A10149X |
| 62 | Through-hole | 302A10159X |
| 78 | Through-hole | 302A11329X |

| Plug connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 15 | Through-hole | 301A10129X |
| 26 | Through-hole | 301A10139X |
| 44 | Through-hole | 301A10149X |
| 62 | Through-hole | 301A10159X |
| 78 | Through-hole | 301A11019X |

# D-SUB High Density

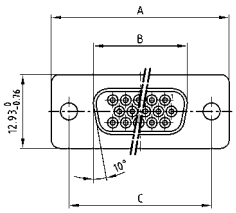
## Solder pin – Straight – Precision machined contacts

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

- Mounting styles:
  - with through-hole, Ø .118"/3 mm
  - with 4-40 UNC or M3 threaded insert
  - with 4-40 UNC front/M3 threaded rear spacer
  - with M3 front/4-40 UNC or M3 threaded rear spacer with PCB clip
  - with 4-40 UNC or M3 front and threaded rear spacer with PCB clip
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

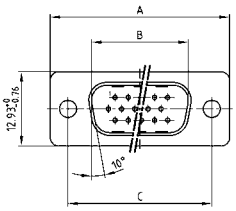
### Socket connector




| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 15 | 31.19 | 16.46 | 25.00 +0.12 |
| 26 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 44 | 53.42 | 38.50 | 47.04 ±0.13 |
| 62 | 69.70 | 54.96 | 63.50 ±0.13 |
| 78 | 67.31 | 52.55 | 61.10 +0.14 -0.11 |

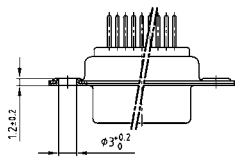
PCB-Layout: Kat1iT9A

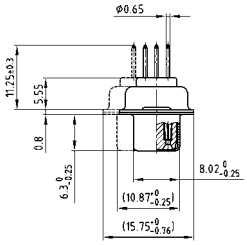
### Plug connector



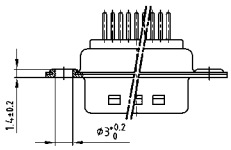

| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 15 | 31.19 | 16.79 | 25.00 +0.12 | 6.12 |
| 26 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 44 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 62 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 78 | 67.31 | 52.68 | 61.10 +0.14 -0.11 | 5.99 |

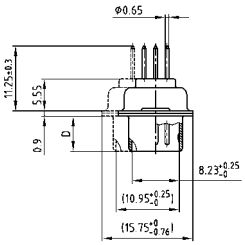
PCB-Layout: Kat1iU0A





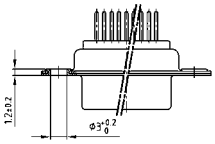
78 pos. = Dim. in (_ _)





78 pos. = Dim. in (_ _)

### Order data

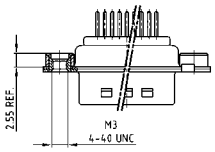


**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | Through-hole | 164A17159X |
| 26 | Through-hole | 164A17169X |
| 44 | Through-hole | 164A17179X |
| 62 | Through-hole | 164A17189X |
| 78 | Through-hole | 164A17199X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | Through-hole | 163A16749X |
| 26 | Through-hole | 163A16759X |
| 44 | Through-hole | 163A16769X |
| 62 | Through-hole | 163A16779X |
| 78 | Through-hole | 163A16789X |



**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | 4-40 UNC Threaded insert | 164A17209X |
| 26 | 4-40 UNC Threaded insert | 164A17219X |
| 44 | 4-40 UNC Threaded insert | 164A17229X |
| 62 | 4-40 UNC Threaded insert | 164A17239X |
| 78 | 4-40 UNC Threaded insert | 164A17249X |
| 15 | M3 Threaded insert | 164A17259X |
| 26 | M3 Threaded insert | 164A17269X |
| 44 | M3 Threaded insert | 164A17279X |
| 62 | M3 Threaded insert | 164A17289X |
| 78 | M3 Threaded insert | 164A17299X |

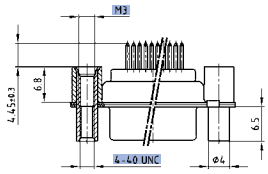
**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | 4-40 UNC Threaded insert | 163A16799X |
| 26 | 4-40 UNC Threaded insert | 163A16809X |
| 44 | 4-40 UNC Threaded insert | 163A16819X |
| 62 | 4-40 UNC Threaded insert | 163A16829X |
| 78 | 4-40 UNC Threaded insert | 163A16839X |
| 15 | M3 Threaded insert | 163A16849X |
| 26 | M3 Threaded insert | 163A16859X |
| 44 | M3 Threaded insert | 163A16869X |
| 62 | M3 Threaded insert | 163A16879X |
| 78 | M3 Threaded insert | 163A16889X |

# D-SUB High Density – Mounting styles

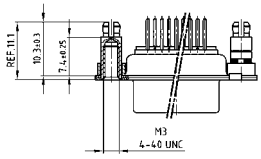
## Solder pin – Straight – Precision machined contacts

### Order data




| Socket connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 15 | 4-40 UNC Front/M3 Threaded rear spacer | 164A17309X |
| 26 | 4-40 UNC Front/M3 Threaded rear spacer | 164A17319X |
| 44 | 4-40 UNC Front/M3 Threaded rear spacer | 164A17329X |
| 62 | 4-40 UNC Front/M3 Threaded rear spacer | 164A17339X |
| 78 | 4-40 UNC Front/M3 Threaded rear spacer | 164A17349X |

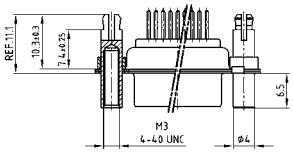
| Plug connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 15 | 4-40 UNC Front/M3 Threaded rear spacer | 163A16899X |
| 26 | 4-40 UNC Front/M3 Threaded rear spacer | 163A16909X |
| 44 | 4-40 UNC Front/M3 Threaded rear spacer | 163A16919X |
| 62 | 4-40 UNC Front/M3 Threaded rear spacer | 163A16929X |
| 78 | 4-40 UNC Front/M3 Threaded rear spacer | 163A16939X |




| Socket connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 164A17359X |
| 26 | 4-40 UNC Threaded rear spacer PCB clip | 164A17369X |
| 44 | 4-40 UNC Threaded rear spacer PCB clip | 164A17379X |
| 62 | 4-40 UNC Threaded rear spacer PCB clip | 164A17389X |
| 78 | 4-40 UNC Threaded rear spacer PCB clip | 164A17399X |
| 15 | M3 Threaded rear spacer PCB clip | 164A17409X |
| 26 | M3 Threaded rear spacer PCB clip | 164A17419X |
| 44 | M3 Threaded rear spacer PCB clip | 164A17429X |
| 62 | M3 Threaded rear spacer PCB clip | 164A17439X |
| 78 | M3 Threaded rear spacer PCB clip | 164A17449X |

| Plug connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 163A16949X |
| 26 | 4-40 UNC Threaded rear spacer PCB clip | 163A16959X |
| 44 | 4-40 UNC Threaded rear spacer PCB clip | 163A16969X |
| 62 | 4-40 UNC Threaded rear spacer PCB clip | 163A16979X |
| 78 | 4-40 UNC Threaded rear spacer PCB clip | 163A16989X |
| 15 | M3 Threaded rear spacer PCB clip | 163A16999X |
| 26 | M3 Threaded rear spacer PCB clip | 163A17009X |
| 44 | M3 Threaded rear spacer PCB clip | 163A17019X |
| 62 | M3 Threaded rear spacer PCB clip | 163A17029X |
| 78 | M3 Threaded rear spacer PCB clip | 163A17039X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness




| Socket connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 15 | 4-40 UNC Front/Threaded rear spacer PCB clip | 164A17459X |
| 26 | 4-40 UNC Front/Threaded rear spacer PCB clip | 164A17469X |
| 44 | 4-40 UNC Front/Threaded rear spacer PCB clip | 164A17479X |
| 62 | 4-40 UNC Front/Threaded rear spacer PCB clip | 164A17489X |
| 78 | 4-40 UNC Front/Threaded rear spacer PCB clip | 164A17499X |
| 15 | M3 Front/Threaded rear spacer PCB clip | 164A17509X |
| 26 | M3 Front/Threaded rear spacer PCB clip | 164A17519X |
| 44 | M3 Front/Threaded rear spacer PCB clip | 164A17529X |
| 62 | M3 Front/Threaded rear spacer PCB clip | 164A17539X |
| 78 | M3 Front/Threaded rear spacer PCB clip | 164A17549X |

| Plug connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 15 | 4-40 UNC Front/Threaded rear spacer PCB clip | 163A17049X |
| 26 | 4-40 UNC Front/Threaded rear spacer PCB clip | 163A17059X |
| 44 | 4-40 UNC Front/Threaded rear spacer PCB clip | 163A17069X |
| 62 | 4-40 UNC Front/Threaded rear spacer PCB clip | 163A17079X |
| 78 | 4-40 UNC Front/Threaded rear spacer PCB clip | 163A17089X |
| 15 | M3 Front/Threaded rear spacer PCB clip | 163A17099X |
| 26 | M3 Front/Threaded rear spacer PCB clip | 163A17109X |
| 44 | M3 Front/Threaded rear spacer PCB clip | 163A17119X |
| 62 | M3 Front/Threaded rear spacer PCB clip | 163A17129X |
| 78 | M3 Front/Threaded rear spacer PCB clip | 163A17139X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

PCB-Layout: Kat1iT9A

PCB-Layout: Kat1iU0A

# D-SUB High Density

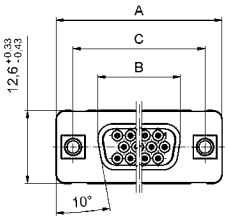
## Press-fit contact – Straight – Precision machined contacts

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

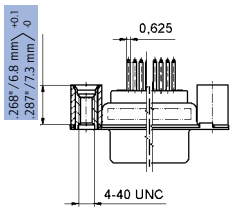
- Mounting styles:
  - with .268" / 6.8 mm threaded rear spacer and 4-40 UNC
  - with .287" / 7.3 mm threaded rear spacer and 4-40 UNC
- For .040" / 1.0 mm $^{+.003"/0.09\ mm}_{-.002"/0.06\ mm}$ finished through-hole diameter Refer to product drawing for details
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

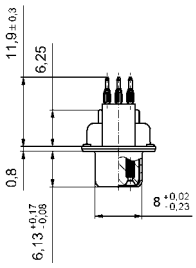
### Socket connector



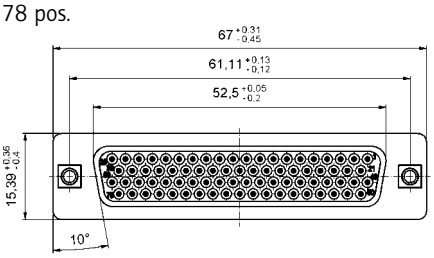

| No. of pos. | A | B | C |
|---|---|---|---|
| 15 | 30.88 $^{+0.31}_{-0.45}$ | 16.41 $^{+0.05}_{-0.20}$ | 24.99 $^{+0.13}_{-0.12}$ |
| 26 | 39.22 $^{+0.30}_{-0.46}$ | 24.74 $^{+0.05}_{-0.20}$ | 33.32 $^{+0.13}_{-0.12}$ |
| 44 | 53.09 $^{+0.33}_{-0.43}$ | 38.51 $^{+0}_{-0.26}$ | 47.04 $^{+0.13}_{-0.12}$ |
| 62 | 69.50 $^{+0.20}_{-0.56}$ | 54.94 $^{+0.05}_{-0.23}$ | 63.50 $^{+0.13}_{-0.12}$ |

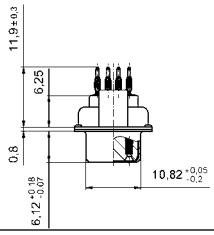
15-62 pos.



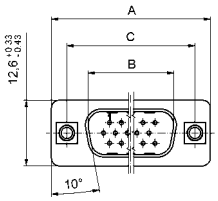




78 pos.



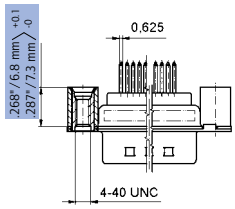



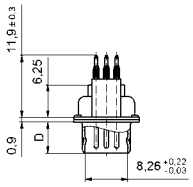

### Plug connector



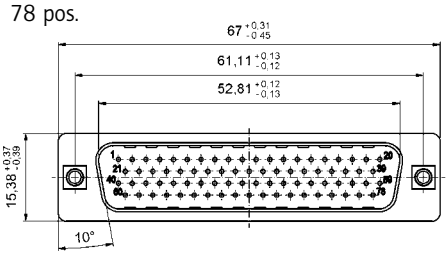

| No. of pos. | A | B | C | D |
|---|---|---|---|---|
| 15 | 30.88 $^{+0.31}_{-0.45}$ | 16.41 $^{+0.05}_{-0.20}$ | 24.99 $^{+0.13}_{-0.12}$ | 6.00 $^{+0.12}_{-0.18}$ |
| 26 | 39.22 $^{+0.30}_{-0.46}$ | 24.74 $^{+0.05}_{-0.20}$ | 33.32 $^{+0.13}_{-0.12}$ | 6.00 $^{+0.12}_{-0.18}$ |
| 44 | 53.09 $^{+0.33}_{-0.43}$ | 38.51 $^{+0}_{-0.26}$ | 47.04 $^{+0.13}_{-0.12}$ | 6.00 $^{-0.30}$ |
| 62 | 69.50 $^{+0.20}_{-0.56}$ | 54.94 $^{+0.05}_{-0.23}$ | 63.50 $^{+0.13}_{-0.12}$ | 6.00 $^{-0.30}$ |

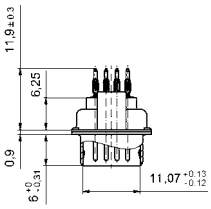
15-62 pos.




78 pos.




### Order data

**Socket connector**

| No. of pos. | Mounting style 4-40 UNC thread | Part Number |
|---|---|---|
| 15 | Threaded rear spacer .268" / 6.8 mm | DSH1XSGAA48X |
| 26 | Threaded rear spacer .268" / 6.8 mm | DSH2XSGAA48X |
| 44 | Threaded rear spacer .268" / 6.8 mm | DSH3XSGAA48X |
| 62 | Threaded rear spacer .268" / 6.8 mm | DSH4XSGAA48X |
| 78 | Threaded rear spacer .268" / 6.8 mm | DSH5XSGAA48X |
| 15 | Threaded rear spacer .287" / 7.3 mm | DSH1XSHAA49X |
| 26 | Threaded rear spacer .287" / 7.3 mm | DSH2XSHAA49X |
| 44 | Threaded rear spacer .287" / 7.3 mm | DSH3XSHAA49X |
| 62 | Threaded rear spacer .287" / 7.3 mm | DSH4XSHAA49X |
| 78 | Threaded rear spacer .287" / 7.3 mm | DSH5XSHAA49X |

**Plug connector**

| No. of pos. | Mounting style 4-40 UNC thread | Part Number |
|---|---|---|
| 15 | Threaded rear spacer .268" / 6.8 mm | DSH1XPGAA48X |
| 26 | Threaded rear spacer .268" / 6.8 mm | DSH2XPGAA48X |
| 44 | Threaded rear spacer .268" / 6.8 mm | DSH3XPGAA48X |
| 62 | Threaded rear spacer .268" / 6.8 mm | DSH4XPGAA48X |
| 78 | Threaded rear spacer .268" / 6.8 mm | DSH5XPGAA48X |
| 15 | Threaded rear spacer .287" / 7.3 mm | DSH1XPHAA49X |
| 26 | Threaded rear spacer .287" / 7.3 mm | DSH2XPHAA49X |
| 44 | Threaded rear spacer .287" / 7.3 mm | DSH3XPHAA49X |
| 62 | Threaded rear spacer .287" / 7.3 mm | DSH4XPHAA49X |
| 78 | Threaded rear spacer .287" / 7.3 mm | DSH5XPHAA49X |

# D-SUB High Density

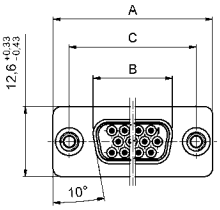
## Press-fit contact – Straight – Precision machined contacts – Rear press-fit spacer

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

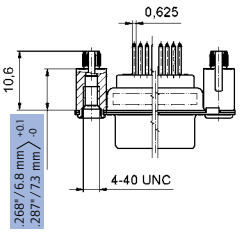
- Mounting styles:
  - with .268"/6.8 mm rear press-fit spacer and 4-40 UNC
  - with .287"/7.3 mm rear press-fit spacer and 4-40 UNC
- For .040"/1.0 mm $^{+.003"/0.09mm}_{-.002"/0.06mm}$ finished through-hole diameter Refer to product drawing for details
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

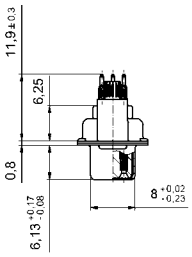
### Socket connector



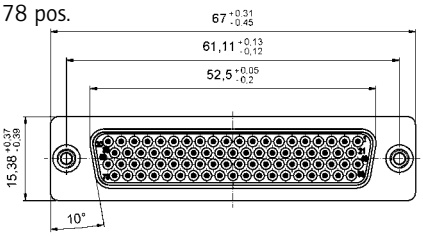

| No. of pos. | A | B | C |
|---|---|---|---|
| 15 | 30.88 +0.31 -0.45 | 16.41 +0.05 -0.20 | 24.99 +0.13 -0.12 |
| 26 | 39.22 +0.30 -0.46 | 24.74 +0.05 -0.20 | 33.32 +0.13 -0.12 |
| 44 | 53.09 +0.33 -0.43 | 38.51 +0 -0.26 | 47.04 +0.13 -0.12 |
| 62 | 69.50 +0.20 -0.56 | 54.94 +0.05 -0.23 | 63.50 +0.13 -0.12 |

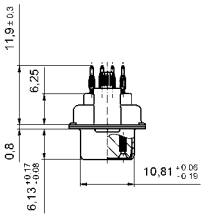
15-62 pos.



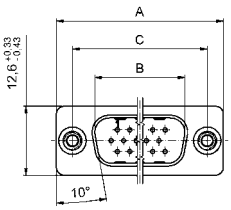




78 pos.



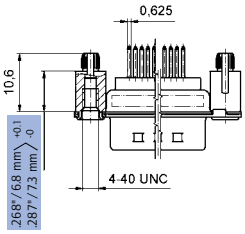



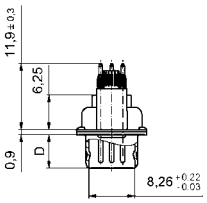

### Plug connector



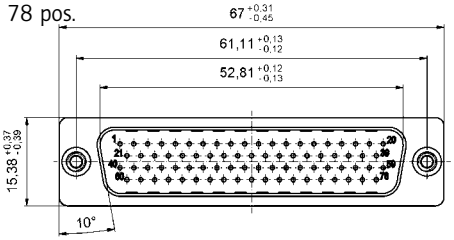

| No. of pos. | A | B | C | D |
|---|---|---|---|---|
| 15 | 30.88 +0.31 -0.45 | 16.41 +0.05 -0.20 | 24.99 +0.13 -0.12 | 6.00 +0.12 -0.18 |
| 26 | 39.22 +0.30 -0.46 | 24.74 +0.05 -0.20 | 33.32 +0.13 -0.12 | 6.00 +0.12 -0.18 |
| 44 | 53.09 +0.33 -0.43 | 38.51 +0 -0.26 | 47.04 +0.13 -0.12 | 6.00 -0.30 |
| 62 | 69.50 +0.20 -0.56 | 54.94 +0.05 -0.23 | 63.50 +0.13 -0.12 | 6.00 -0.30 |

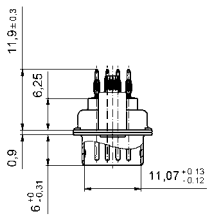
15-62 pos.




78 pos.




### Order data

| Socket connector | | |
|---|---|---|
| **No. of pos.** | **Mounting style 4-40 UNC thread** | **Part Number** |
| 15 | Rear press-fit spacer .268"/6.8 mm | DSH1XSGAA58X |
| 26 | Rear press-fit spacer .268"/6.8 mm | DSH2XSGAA58X |
| 44 | Rear press-fit spacer .268"/6.8 mm | DSH3XSGAA58X |
| 62 | Rear press-fit spacer .268"/6.8 mm | DSH4XSGAA58X |
| 78 | Rear press-fit spacer .268"/6.8 mm | DSH5XSGAA58X |
| 15 | Rear press-fit spacer .287"/7.3 mm | DSH1XSHAA54X |
| 26 | Rear press-fit spacer .287"/7.3 mm | DSH2XSHAA54X |
| 44 | Rear press-fit spacer .287"/7.3 mm | DSH3XSHAA54X |
| 62 | Rear press-fit spacer .287"/7.3 mm | DSH4XSHAA54X |
| 78 | Rear press-fit spacer .287"/7.3 mm | DSH5XSHAA54X |

| Plug connector | | |
|---|---|---|
| **No. of pos.** | **Mounting style 4-40 UNC thread** | **Part Number** |
| 15 | Rear press-fit spacer .268"/6.8 mm | DSH1XPGAA58X |
| 26 | Rear press-fit spacer .268"/6.8 mm | DSH2XPGAA58X |
| 44 | Rear press-fit spacer .268"/6.8 mm | DSH3XPGAA58X |
| 62 | Rear press-fit spacer .268"/6.8 mm | DSH4XPGAA58X |
| 78 | Rear press-fit spacer .268"/6.8 mm | DSH5XPGAA58X |
| 15 | Rear press-fit spacer .287"/7.3 mm | DSH1XPHAA54X |
| 26 | Rear press-fit spacer .287"/7.3 mm | DSH2XPHAA54X |
| 44 | Rear press-fit spacer .287"/7.3 mm | DSH3XPHAA54X |
| 62 | Rear press-fit spacer .287"/7.3 mm | DSH4XPHAA54X |
| 78 | Rear press-fit spacer .287"/7.3 mm | DSH5XPHAA54X |

# D-SUB High Density

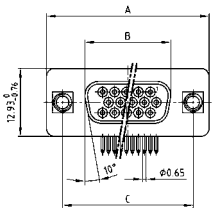
## Solder pin – Angled – .350"/7.98 mm – Precision machined contacts – Plastic bracket

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

- Mounting styles:
  - with mounting and grounding strap, 4-40 UNC or M3 threaded insert
  - with mounting and grounding strap, 4-40 UNC or M3 front spacer
  - with mounting bracket, PCB clip and 4-40 UNC or M3 threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC or M3 front spacer
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

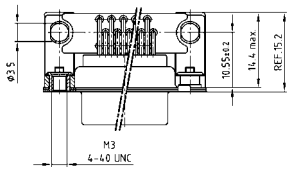
### Socket connector

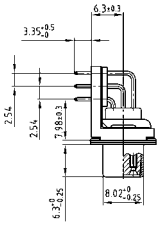


| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 15 | 31.19 | 16.46 | 25.00 +0.12 |
| 26 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 44 | 53.42 | 38.50 | 47.04 ±0.13 |
| 62 | 69.70 | 54.96 | 63.50 ±0.13 |

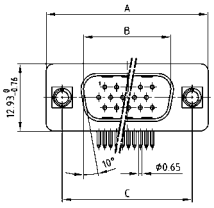
PCB-Layout: Kat1iU1A

Mounting style: Grounding strap, threaded insert





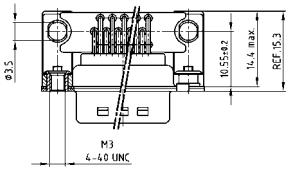
### Plug connector

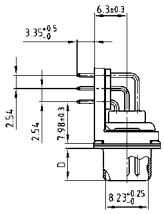


| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 15 | 31.19 | 16.79 | 25.00 +0.12 | 6.12 |
| 26 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 44 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 62 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

PCB-Layout: Kat1iU2A

Mounting style: Grounding strap, threaded insert





### Order data

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | Grounding strap / 4-40 UNC Threaded insert | 164A18019X |
| 26 | Grounding strap / 4-40 UNC Threaded insert | 164A18029X |
| 44 | Grounding strap / 4-40 UNC Threaded insert | 164A18039X |
| 62 | Grounding strap / 4-40 UNC Threaded insert | 164A18049X |
| 15 | Grounding strap / M3 Threaded insert | 164A18059X |
| 26 | Grounding strap / M3 Threaded insert | 164A18069X |
| 44 | Grounding strap / M3 Threaded insert | 164A18079X |
| 62 | Grounding strap / M3 Threaded insert | 164A18089X |

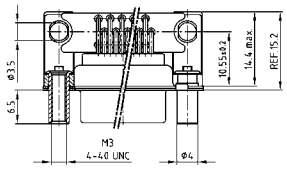
**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | Grounding strap / 4-40 UNC Threaded insert | 163A17609X |
| 26 | Grounding strap / 4-40 UNC Threaded insert | 163A17619X |
| 44 | Grounding strap / 4-40 UNC Threaded insert | 163A17629X |
| 62 | Grounding strap / 4-40 UNC Threaded insert | 163A17639X |
| 15 | Grounding strap / M3 Threaded insert | 163A17649X |
| 26 | Grounding strap / M3 Threaded insert | 163A17659X |
| 44 | Grounding strap / M3 Threaded insert | 163A17669X |
| 62 | Grounding strap / M3 Threaded insert | 163A17679X |

# D-SUB High Density – Mounting styles

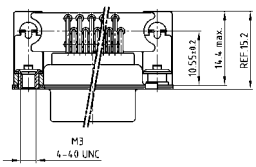
## Solder pin – Angled – .350"/7.98 mm – Precision machined contacts – Plastic bracket

### Order data




| Socket connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 15 | Grounding strap / 4-40 UNC Front spacer | 164A18099X |
| 26 | Grounding strap / 4-40 UNC Front spacer | 164A18109X |
| 44 | Grounding strap / 4-40 UNC Front spacer | 164A18119X |
| 62 | Grounding strap / 4-40 UNC Front spacer | 164A18129X |
| 15 | Grounding strap / M3 Front spacer | 164A18139X |
| 26 | Grounding strap / M3 Front spacer | 164A18149X |
| 44 | Grounding strap / M3 Front spacer | 164A18159X |
| 62 | Grounding strap / M3 Front spacer | 164A18169X |

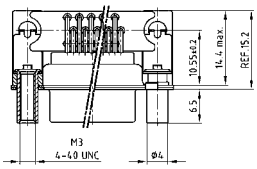
| Plug connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 15 | Grounding strap / 4-40 UNC Front spacer | 163A17689X |
| 26 | Grounding strap / 4-40 UNC Front spacer | 163A17699X |
| 44 | Grounding strap / 4-40 UNC Front spacer | 163A17709X |
| 62 | Grounding strap / 4-40 UNC Front spacer | 163A17719X |
| 15 | Grounding strap / M3 Front spacer | 163A17729X |
| 26 | Grounding strap / M3 Front spacer | 163A17739X |
| 44 | Grounding strap / M3 Front spacer | 163A17749X |
| 62 | Grounding strap / M3 Front spacer | 163A17759X |




| Socket connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 15 | PCB clip / 4-40 UNC Threaded insert | 164A20929X |
| 26 | PCB clip / 4-40 UNC Threaded insert | 164A20939X |
| 44 | PCB clip / 4-40 UNC Threaded insert | 164A20949X |
| 62 | PCB clip / 4-40 UNC Threaded insert | 164A20959X |
| 15 | PCB clip / M3 Threaded insert | 164A20969X |
| 26 | PCB clip / M3 Threaded insert | 164A20979X |
| 44 | PCB clip / M3 Threaded insert | 164A20989X |
| 62 | PCB clip / M3 Threaded insert | 164A20999X |

| Plug connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 15 | PCB clip / 4-40 UNC Threaded insert | 163A20489X |
| 26 | PCB clip / 4-40 UNC Threaded insert | 163A20499X |
| 44 | PCB clip / 4-40 UNC Threaded insert | 163A20509X |
| 62 | PCB clip / 4-40 UNC Threaded insert | 163A20519X |
| 15 | PCB clip / M3 Threaded insert | 163A20529X |
| 26 | PCB clip / M3 Threaded insert | 163A20539X |
| 44 | PCB clip / M3 Threaded insert | 163A20549X |
| 62 | PCB clip / M3 Threaded insert | 163A20559X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness




| Socket connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 15 | PCB clip / 4-40 UNC Front spacer | 164A21009X |
| 26 | PCB clip / 4-40 UNC Front spacer | 164A21019X |
| 44 | PCB clip / 4-40 UNC Front spacer | 164A21029X |
| 62 | PCB clip / 4-40 UNC Front spacer | 164A21039X |
| 15 | PCB clip / M3 Front spacer | 164A21049X |
| 26 | PCB clip / M3 Front spacer | 164A21059X |
| 44 | PCB clip / M3 Front spacer | 164A21069X |
| 62 | PCB clip / M3 Front spacer | 164A21079X |

| Plug connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 15 | PCB clip / 4-40 UNC Front spacer | 163A20569X |
| 26 | PCB clip / 4-40 UNC Front spacer | 163A20579X |
| 44 | PCB clip / 4-40 UNC Front spacer | 163A20589X |
| 62 | PCB clip / 4-40 UNC Front spacer | 163A20599X |
| 15 | PCB clip / M3 Front spacer | 163A20609X |
| 26 | PCB clip / M3 Front spacer | 163A20619 X |
| 44 | PCB clip / M3 Front spacer | 163A20629X |
| 62 | PCB clip / M3 Front spacer | 163A20639X |

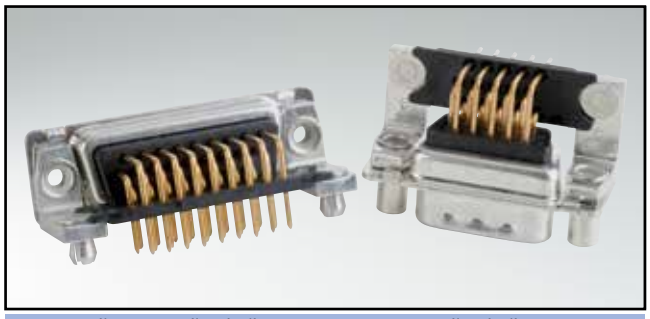
PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

PCB-Layout: Kat1iU1A

PCB-Layout: Kat1iU2A

# D-SUB High Density

## Solder pin – Angled – .350"/7.98 mm – Precision machined contacts – Metal bracket

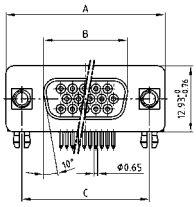


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

- Mounting styles:
  - with mounting bracket, PCB clip and 4-40 UNC or M3 threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC or M3 front spacer
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

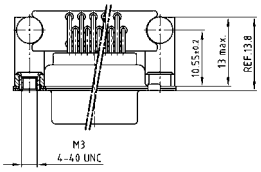
### Socket connector



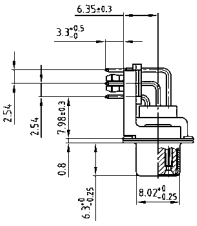
| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 15 | 31.19 | 16.46 | 25.00 +0.12 |
| 26 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 44 | 53.42 | 38.50 | 47.04 ±0.13 |
| 62 | 69.70 | 54.96 | 63.50 ±0.13 |
| 78 | 67.31 | 52.55 | 61.10 +0.14 -0.11 |

PCB-Layout: Kat1iU1A

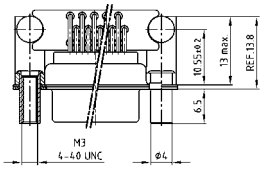
Mounting style: PCB clip, threaded insert



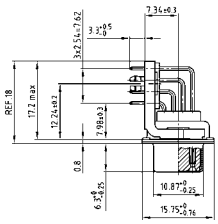
15-62 pos.



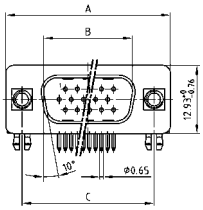
Mounting style: PCB clip, front spacer



78 pos.



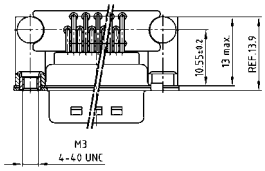
### Plug connector



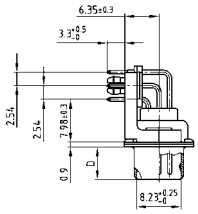
| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 15 | 31.19 | 16.79 | 25.00 +0.12 | 6.12 |
| 26 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 44 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 62 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 78 | 67.31 | 52.68 | 61.10 +0.14 -0.11 | 5.99 |

PCB-Layout: Kat1iU2A

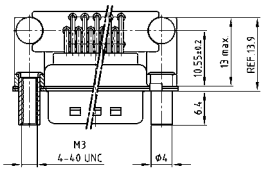
Mounting style: PCB clip, threaded insert



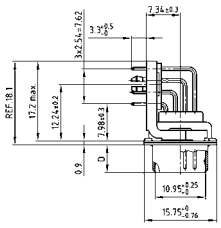
15-62 pos.



Mounting style: PCB clip, front spacer



78 pos.



### Order data

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | PCB clip / 4-40 UNC Threaded insert | 164A18179X |
| 26 | PCB clip / 4-40 UNC Threaded insert | 164A18189X |
| 44 | PCB clip / 4-40 UNC Threaded insert | 164A18199X |
| 62 | PCB clip / 4-40 UNC Threaded insert | 164A18209X |
| 78 | PCB clip / 4-40 UNC Threaded insert | 164A18629X |
| 15 | PCB clip / M3 Threaded insert | 164A18219X |
| 26 | PCB clip / M3 Threaded insert | 164A18229X |
| 44 | PCB clip / M3 Threaded insert | 164A18239X |
| 62 | PCB clip / M3 Threaded insert | 164A18249X |
| 78 | PCB clip / M3 Threaded insert | 164A18639X |
| 15 | PCB clip / 4-40 UNC Front spacer | 164A18259X |
| 26 | PCB clip / 4-40 UNC Front spacer | 164A18269X |
| 44 | PCB clip / 4-40 UNC Front spacer | 164A18279X |
| 62 | PCB clip / 4-40 UNC Front spacer | 164A18289X |
| 78 | PCB clip / 4-40 UNC Front spacer | 164A18649X |
| 15 | PCB clip / M3 Front spacer | 164A18299X |
| 26 | PCB clip / M3 Front spacer | 164A18309X |
| 44 | PCB clip / M3 Front spacer | 164A18319X |
| 62 | PCB clip / M3 Front spacer | 164A18329X |
| 78 | PCB clip / M3 Front spacer | 164A18659X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | PCB clip / 4-40 UNC Threaded insert | 163A17769X |
| 26 | PCB clip / 4-40 UNC Threaded insert | 163A17779X |
| 44 | PCB clip / 4-40 UNC Threaded insert | 163A17789X |
| 62 | PCB clip / 4-40 UNC Threaded insert | 163A17799X |
| 78 | PCB clip / 4-40 UNC Threaded insert | 163A18219X |
| 15 | PCB clip / M3 Threaded insert | 163A17809X |
| 26 | PCB clip / M3 Threaded insert | 163A17819X |
| 44 | PCB clip / M3 Threaded insert | 163A17829X |
| 62 | PCB clip / M3 Threaded insert | 163A17839X |
| 78 | PCB clip / M3 Threaded insert | 163A18229X |
| 15 | PCB clip / 4-40 UNC Front spacer | 163A17849X |
| 26 | PCB clip / 4-40 UNC Front spacer | 163A17859X |
| 44 | PCB clip / 4-40 UNC Front spacer | 163A17869X |
| 62 | PCB clip / 4-40 UNC Front spacer | 163A17879X |
| 78 | PCB clip / 4-40 UNC Front spacer | 163A18239X |
| 15 | PCB clip / M3 Front spacer | 163A17889X |
| 26 | PCB clip / M3 Front spacer | 163A17899X |
| 44 | PCB clip / M3 Front spacer | 163A17909X |
| 62 | PCB clip / M3 Front spacer | 163A17919X |
| 78 | PCB clip / M3 Front spacer | 163A18249X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# D-SUB High Density

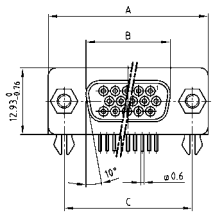
## Solder pin – Angled – .350"/7.98 mm – Stamped contacts – Plastic bracket

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

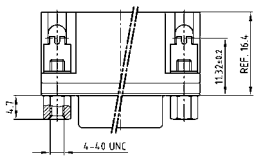
### Description

- Mounting styles:
  - with mounting bracket, PCB clip and 4-40 UNC hex bolt
  - with mounting bracket, PCB clip and 4-40 UNC threaded insert
- Quality class 3 (other quality classes on request)
- Shell: Steel tin plated

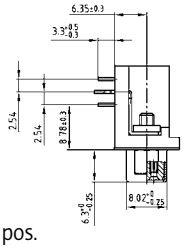
### Socket connector



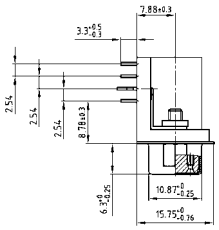
| No. of pos. | A -0.76 | B +0.25 | C |
|---|---|---|---|
| 15 | 31.19 | 16.46 | 25.00 +0.12 |
| 26 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 44 | 53.42 | 38.50 | 47.04 ±0.13 |
| 62 | 69.70 | 54.96 | 63.50 ±0.13 |
| 78 | 67.31 | 52.55 | 61.10 +0.14 -0.11 |



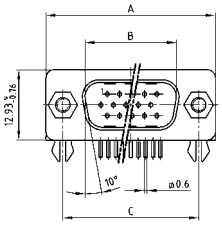
15-62 pos.



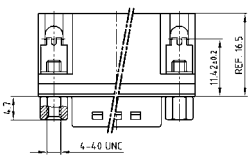
78 pos.



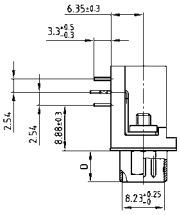
### Plug connector



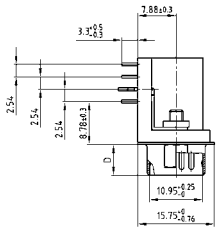
| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 15 | 31.19 | 16.79 | 25.00 +0.12 | 6.12 |
| 26 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 44 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 62 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 78 | 67.31 | 52.68 | 61.10 +0.14 -0.11 | 5.99 |



15-62 pos.



78 pos.



### Order data

**Socket connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 15 | PCB clip / Hex bolt | 302A10869X |
| 26 | PCB clip / Hex bolt | 302A10879X |
| 44 | PCB clip / Hex bolt | 302A10889X |
| 62 | PCB clip / Hex bolt | 302A10899X |
| 78 | PCB clip / Hex bolt | 302A11629X |

**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 15 | PCB clip / Hex bolt | 301A10869X |
| 26 | PCB clip / Hex bolt | 301A10879X |
| 44 | PCB clip / Hex bolt | 301A10889X |
| 62 | PCB clip / Hex bolt | 301A10899X |
| 78 | PCB clip / Hex bolt | 301A11369X |

**Socket connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 15 | PCB clip / Threaded insert | DLH1XS8AK53X |
| 26 | PCB clip / Threaded insert | DLH2XS8AK53X |
| 44 | PCB clip / Threaded insert | DLH3XS8AK53X |
| 62 | PCB clip / Threaded insert | DLH4XS8AK53X |
| 78 | PCB clip / Threaded insert | DLH5XS8AK53X |

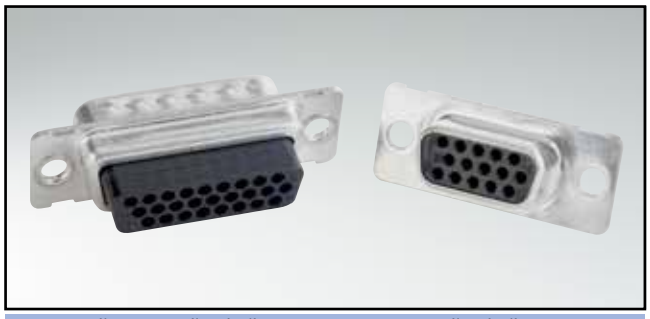
**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 15 | PCB clip / Threaded insert | DLH1XP8AK53X |
| 26 | PCB clip / Threaded insert | DLH2XP8AK53X |
| 44 | PCB clip / Threaded insert | DLH3XP8AK53X |
| 62 | PCB clip / Threaded insert | DLH4XP8AK53X |
| 78 | PCB clip / Threaded insert | DLH5XP8AK53X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# D-SUB High Density

## Crimp body (without contacts) – For wire size AWG 28 - 22

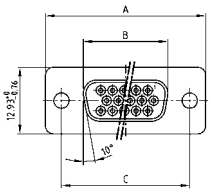


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

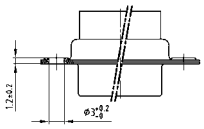
- For wire size **AWG 22** precision machined contacts
- Mounting style:
  with through-hole Ø .118" / 3 mm
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

### Socket connector

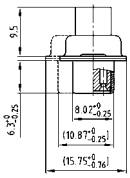



| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 15 | 31.19 | 16.46 | 25.00 +0.12 |
| 26 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 44 | 53.42 | 38.50 | 47.04 ±0.13 |
| 62 | 69.70 | 54.96 | 63.50 ±0.13 |
| 78 | 67.31 | 52.55 | 61.10 +0.14 -0.11 |

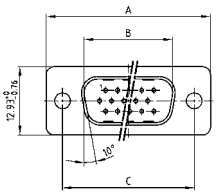
Mounting style: Through-hole



78 pos. = Dim. in (_ _)

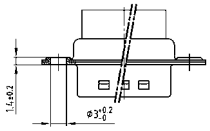


### Plug connector

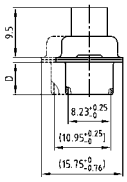



| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 15 | 31.19 | 16.79 | 25.00 +0.12 | 6.12 |
| 26 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 44 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 62 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 78 | 67.31 | 52.68 | 61.10 +0.14 -0.11 | 5.99 |

Mounting style: Through-hole



78 pos. = Dim. in (_ _)



### Order data

| Socket connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 15 | Through-hole | 164X11949X |
| 26 | Through-hole | 164X11959X |
| 44 | Through-hole | 164X11969X |
| 62 | Through-hole | 164X11979X |
| 78 | Through-hole | 164X11989X |

| Plug connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 15 | Through-hole | 163X10169X |
| 26 | Through-hole | 163X10179X |
| 44 | Through-hole | 163X10189X |
| 62 | Through-hole | 163X10199X |
| 78 | Through-hole | 163X10209X |

# D-SUB High Density

## Crimp Contacts – Screw machine design – For wire size AWG 28 - 22

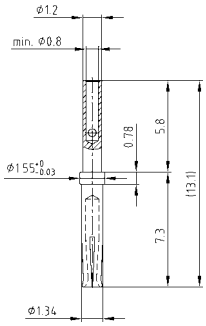
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

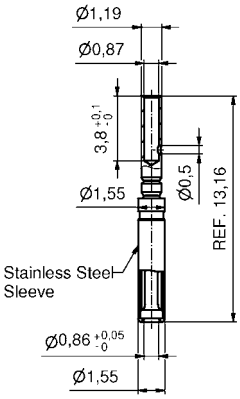
- For wire size **AWG 28-22**
- Loose contacts, in poly bag (500 pieces)
- Quality class 3 (also available in quality class 1)

### Socket connector

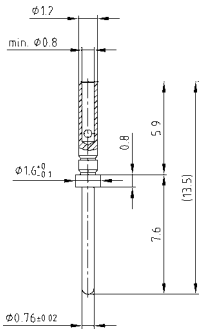
Standard version




Closed entry version




### Plug connector




| Technical Data | |
|---|---|
| Contact material Precision machined contacts | Brass |
| Contact plating | Gold plated over nickel |
| Temperature range | -55°C to +125°C |
| Rated current for AWG 24 | 3 A |
| Contact resistance | ≤ 10 mΩ |

### Order data

**Female contacts**

| Contact type | Part Number |
|---|---|
| AWG 22 / Loose contact | 162A18419X |
| AWG 22 / Loose contact closed entry version | 16-000693 |

**Male contacts**

| Contact type | Part Number |
|---|---|
| AWG 22 / Loose contact | 161A18009X |

# D-SUB High Density

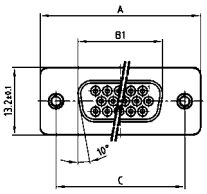
## Interface adapter – Connector Saver

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

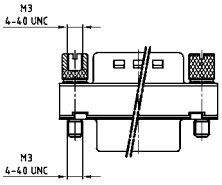
### Description

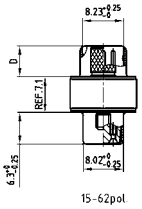
- Variation plug to socket
- Precision machined contacts
- Threaded lock, 4-40 UNC or M3, on the plug side
- Threaded lock on the socket side available on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

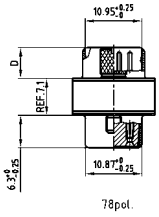
### Product drawing

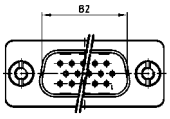



| No. of pos. | A -0.76 | B1 -0.25 | B2 +0.25 | C | D -0.30 |
|---|---|---|---|---|---|
| 15 | 31.19 | 16.46 | 16.79 | 25.00 +0.12 | 6.12 |
| 26 | 39.52 | 24.79 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 44 | 53.42 | 38.50 | 38.84 | 47.04 ±0.13 | 5.99 |
| 62 | 69.70 | 54.96 | 55.30 | 63.50 ±0.13 | 5.99 |
| 78 | 67.31 | 52.55 | 52.68 | 61.10 +0.14 -0.1 | 5.99 |




### Order data

| Plug connector – Socket connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 15 | 4-40 UNC Threaded lock | 164A03399X |
| 26 | 4-40 UNC Threaded lock | 164A03919X |
| 44 | 4-40 UNC Threaded lock | 164A03929X |
| 62 | 4-40 UNC Threaded lock | 164A03939X |
| 78 | 4-40 UNC Threaded lock | DAH5XAAAR04X |

| Plug connector – Socket connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 15 | M3 Threaded lock | 164A03949X |
| 26 | M3 Threaded lock | 164A03959X |
| 44 | M3 Threaded lock | 164A03969X |
| 62 | M3 Threaded lock | 164A03979X |
| 78 | M3 Threaded lock | DAH5XAAAR03X |

# D-SUB Standard

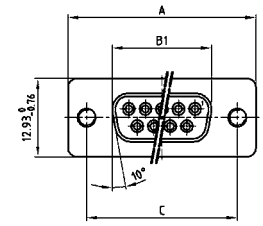
## Interface adapter – Connector Saver

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

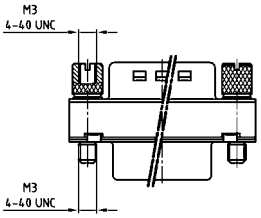
### Description

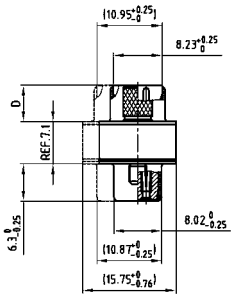
- Variation plug to socket
- Precision machined contacts
- Threaded lock, 4-40 UNC or M3, on the plug side
- Threaded lock on the socket side available on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

### Product drawing

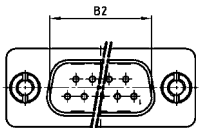



| No. of pos. | A -0.76 | B1 -0.25 | B2 +0.25 | C | D -0.30 |
|---|---|---|---|---|---|
| 09 | 31.19 | 16.46 | 16.79 | 25.00 +0.12 | 6.12 |
| 15 | 39.52 | 24.79 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 25 | 53.42 | 38.50 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 54.96 | 55.30 | 63.50 ±0.13 | 5.99 |
| 50 | 67.31 | 52.55 | 52.68 | 61.10 +0.14 -0.1 | 5.99 |




50 pos. = Dim. in (_ _)




### Order data

| Plug connector – Socket connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 09 | 4-40 UNC Threaded lock | 163A50009X |
| 15 | 4-40 UNC Threaded lock | 163A50019X |
| 25 | 4-40 UNC Threaded lock | 163A50029X |
| 37 | 4-40 UNC Threaded lock | 163A50039X |
| 50 | 4-40 UNC Threaded lock | 163A50049X |

| Plug connector – Socket connector | | |
|---|---|---|
| No. of pos. | Mounting style | Part Number |
| 09 | M3 Threaded lock | 163A50059X |
| 15 | M3 Threaded lock | 163A50069X |
| 25 | M3 Threaded lock | 163A50079X |
| 37 | M3 Threaded lock | 163A50089X |
| 50 | M3 Threaded lock | 163A50099X |

# D-SUB Standard

## Interface adapter – Gender Changer – Configuration of contacts 1:1

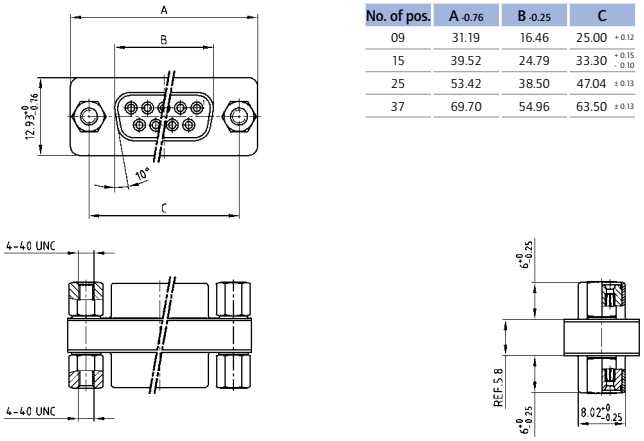
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

- Variation plug to plug and socket to socket
- Stamped contacts
- 4-40 UNC threaded lock
- Quality class 3 (other quality classes on request)
- Shell: Steel tin plated

### Socket connector

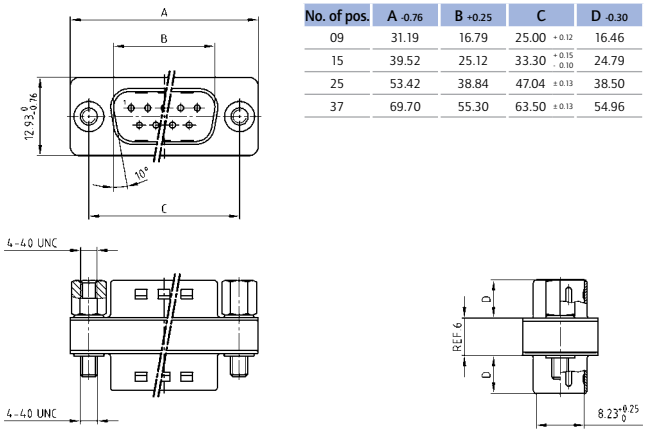
Variation socket to socket




| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 +0.12 |
| 15 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |

### Plug connector

Variation plug to plug




| No. of pos. | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 +0.12 | 16.46 |
| 15 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 24.79 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 38.50 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 54.96 |

### Order data

**Socket connector – socket connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded lock | 320X12519X |
| 15 | Threaded lock | 320X12539X |
| 25 | Threaded lock | 320X10559X |
| 37 | Threaded lock | 320X12559X |

**Plug connector – Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded lock | 320X12509X |
| 15 | Threaded lock | 320X12529X |
| 25 | Threaded lock | 320X10549X |
| 37 | Threaded lock | 320X12549X |

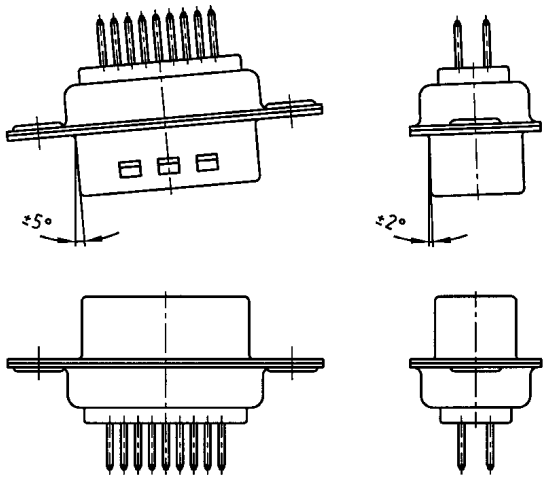
# Technical Data

| Materials | D-Subminiature, Standard<br>9, 15, 25, 37 and 50 position | D-Subminiature, High Density<br>15, 26, 44, 62 and 78 position |
|---|---|---|
| Insulator | Polyester GF UL94 V-0 | |
| Contacts | CU alloy | |
| Contact plating | Gold plated over nickel | |
| Shell | Steel tin plated (on request: brass tin plated / stainless steel) | |
| **Mechanical and electrical characteristics** | | |
| Test voltage U eff / NN | 1000 V | |
| Working voltage | 125 V ≈ | 60 V ≈ |
| | Depending on isolation coordination (refer to DIN VDE 0110 / IEC 664-1) | |
| Current rating | 7,5 A (UL) / 5 A (CSA,VDE) | 3 A (UL,VDE) / 2,5 A (CSA) |
| Contact resistance | Max. 10 mΩ prior to stressing, Δ R max. 10 mΩ after stressing per DIN 41652, Part 2 | |
| Insulation resistance | ≥5 GΩ | |
| Clearance and creepage distance | Contact – contact ≥ 0.04"/1.0 mm<br>Contact – earth ≥ .047"/1.2 mm | ≥ .024"/0,6 mm |
| Operating temperature | - 55 °C to + 125 °C | |
| Mating and unmating forces | 9 pos. ≤ 30 N<br>15 pos. ≤ 50 N<br>25 pos. ≤ 83 N<br>37 pos. ≤ 123 N<br>50 pos. ≤ 167 N | 15 pos. ≤ 50 N<br>26 pos. ≤ 84 N<br>44 pos. ≤ 120 N<br>62 pos. ≤ 170 N<br>78 pos. ≤ 200 N |
| Quality class | A = Quality class 3 = 50 mating cycles<br>B = Quality class 2 = 200 mating cycles<br>C = Quality class 1 = 500 mating cycles | |

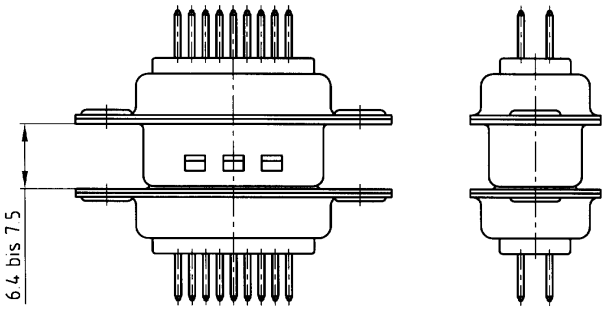
Technical specifications are subject to change without notice.

# Mating conditions

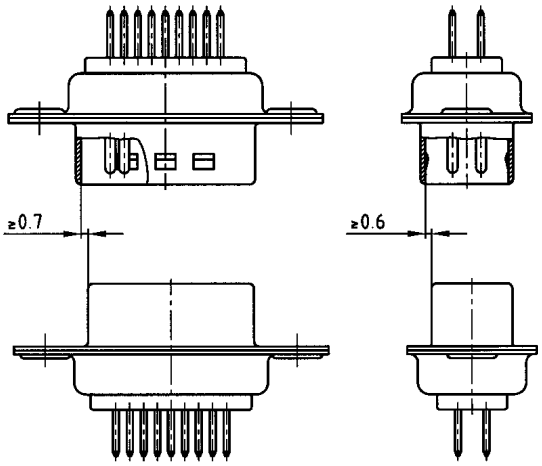
### Float mount tolerance guide




### Rigid mount vertical to tolerance guide

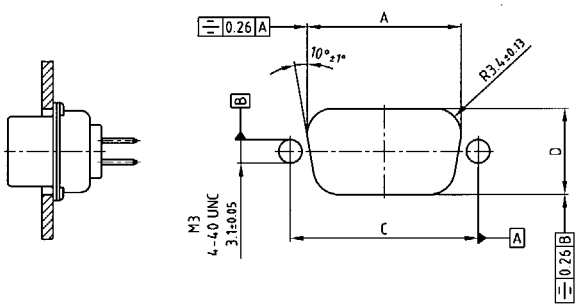



### Rigid mount tolerance guide

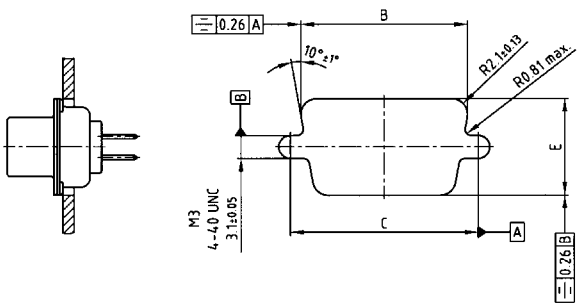



## Panel cut-out

### Rear panel mounting




### Front panel mounting

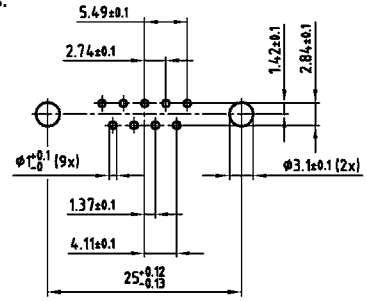



| Shell size | | A ± 0,13 | B ± 0,13 | C ± 0,13 | D ± 0,13 | E ± 0,13 |
|---|---|---|---|---|---|---|
| 9 | 15 | 20.50 | 22.20 | 25.00 | 11.40 | 13.00 |
| 15 | 26 | 28.80 | 30.50 | 33.30 | 11.40 | 13.00 |
| 25 | 44 | 42.50 | 44.30 | 47.04 | 11.40 | 13.00 |
| 37 | 62 | 59.10 | 60.70 | 63.50 | 11.40 | 13.00 |
| 50 | 78 | 56.30 | 61.10 | 61.10 | 11.40 | 15.80 |

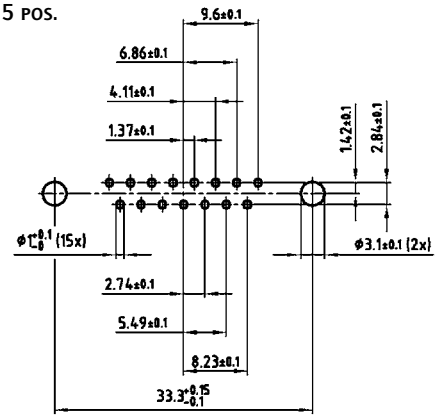
# PCB layout D-SUB Standard

## Solder pin, straight – Plug and Socket connector

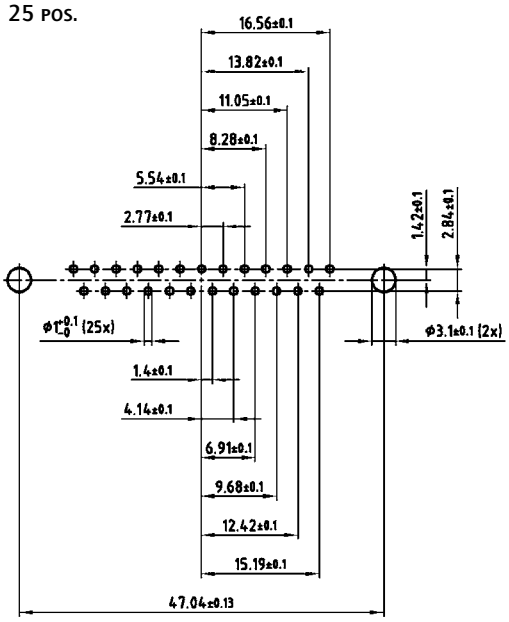
9 pos.



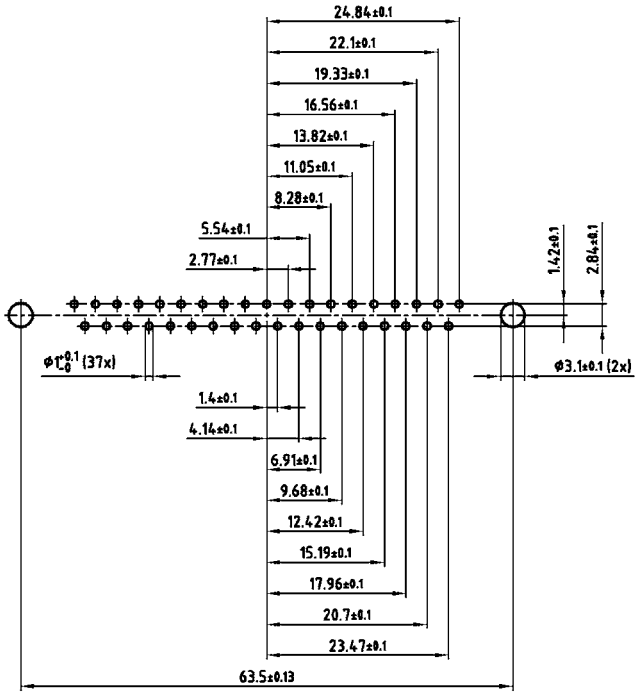

15 pos.



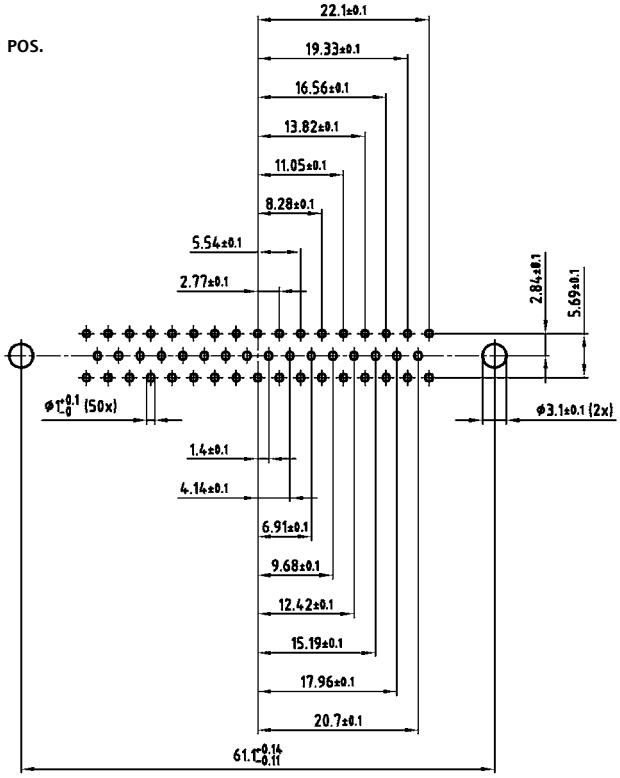

25 pos.




37 pos.




50 pos.

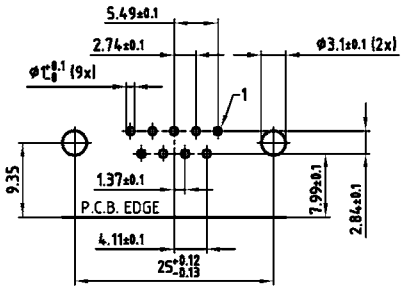



PCB layout Kat1kFUA (View: component side)

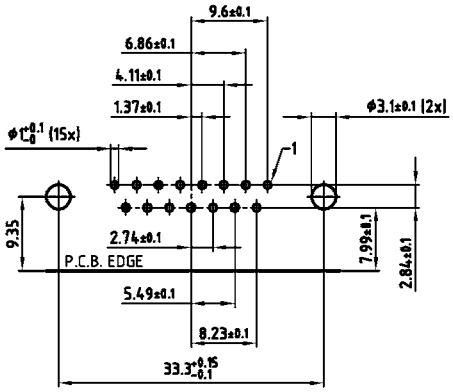
# PCB layout D-SUB Standard

## Solder pin, angled – .318" / 7.19 mm – Socket connector

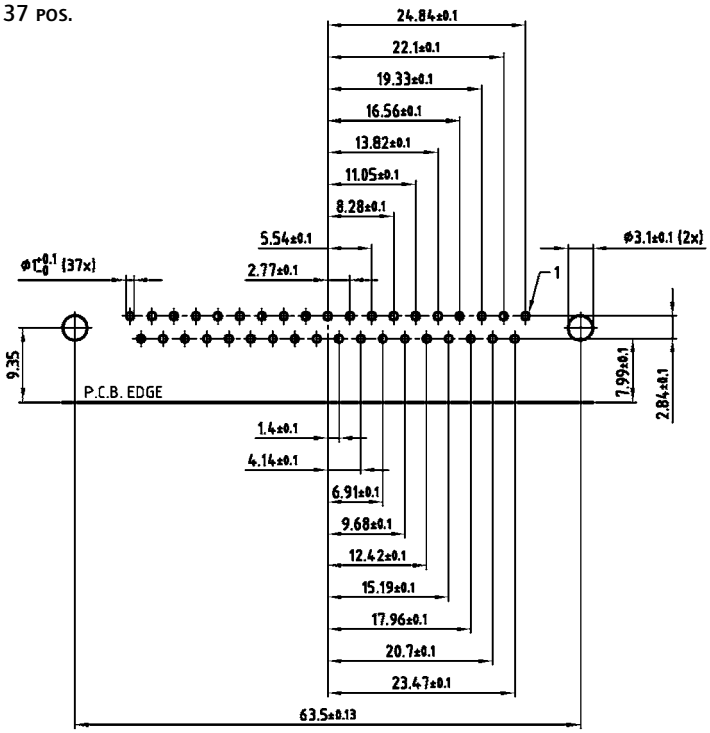
9 pos.



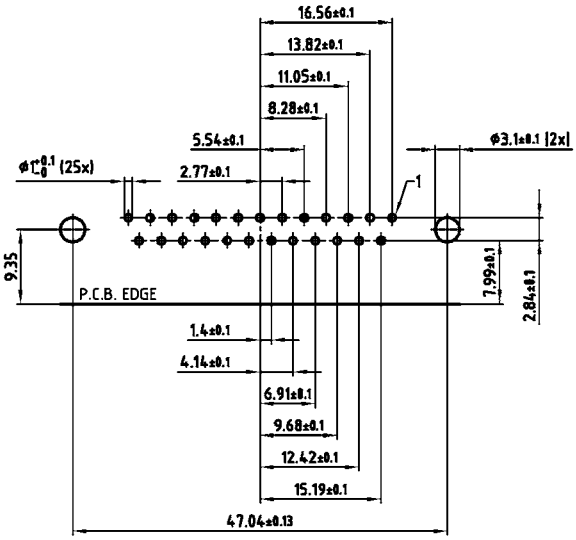

15 pos.



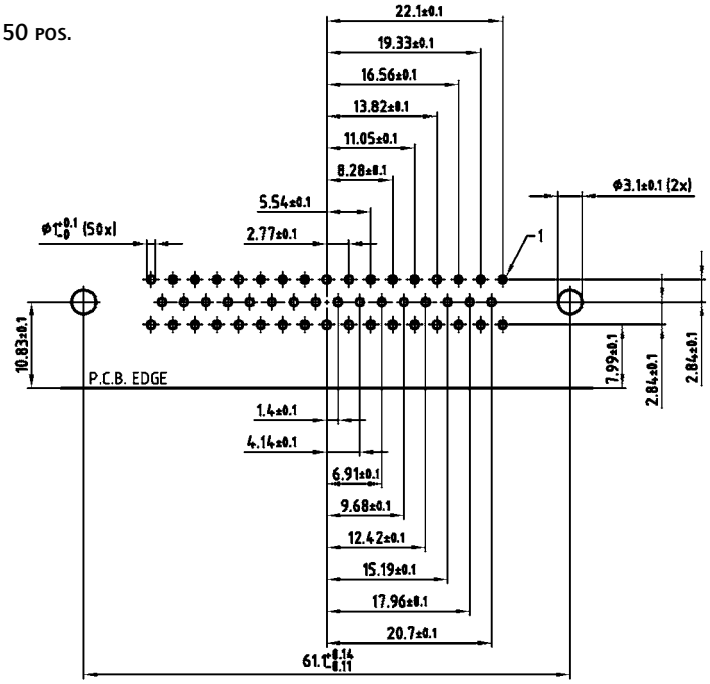

37 pos.




25 pos.




50 pos.

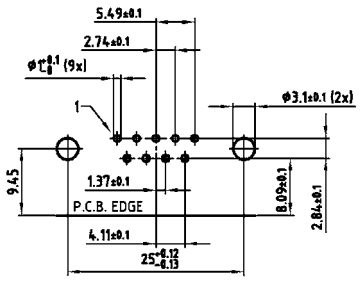



PCB layout Kat1kGEA (View: component side)

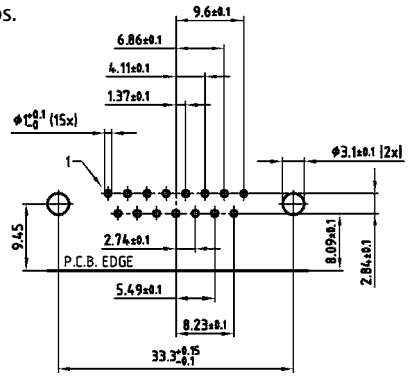
# PCB layout D-SUB Standard

## Solder pin, angled – .318" / 7.19 mm – Plug connector

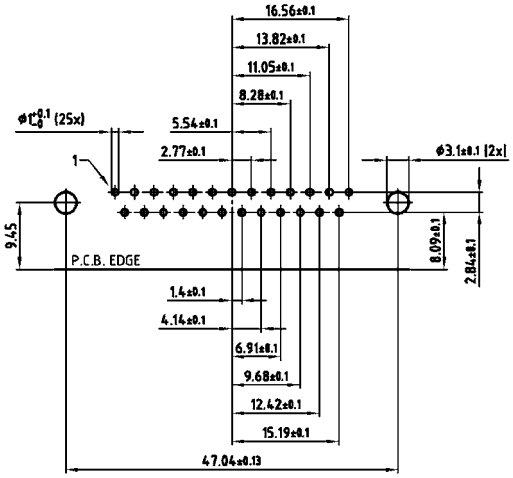
9 pos.



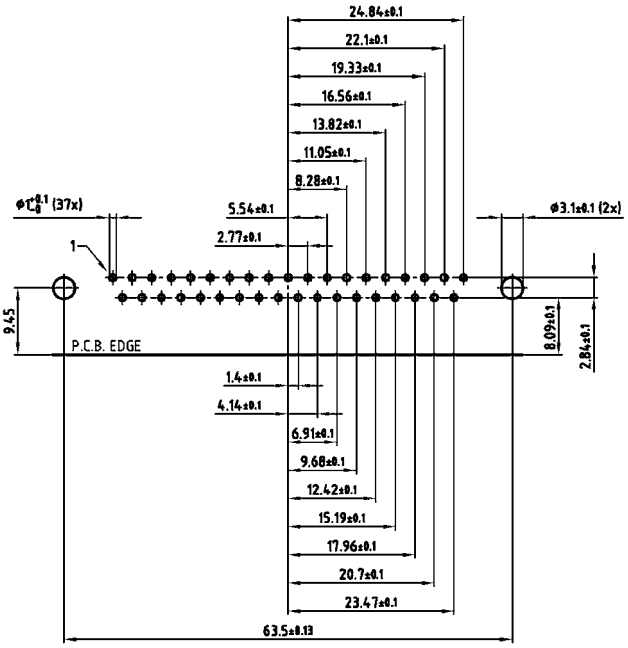

15 pos.



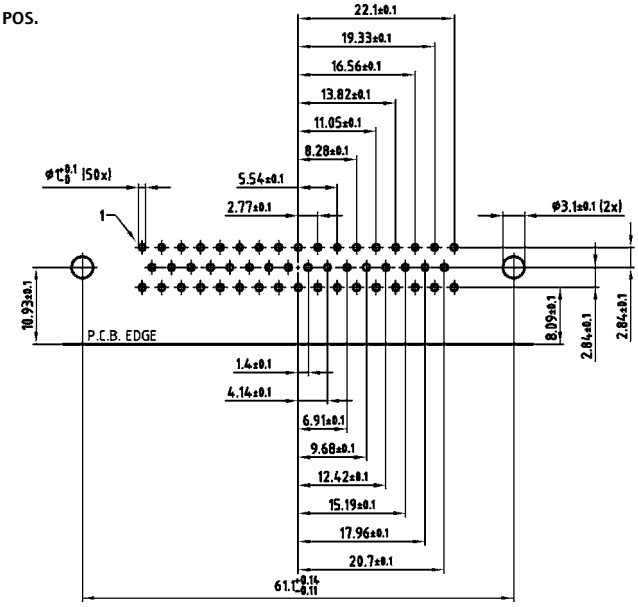

25 pos.




37 pos.




50 pos.

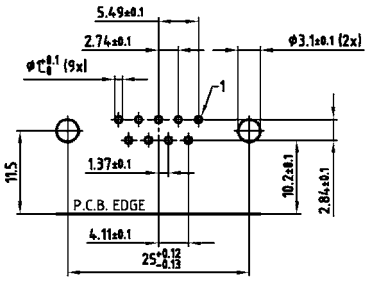



PCB layout Kat1kGFA (View: component side)

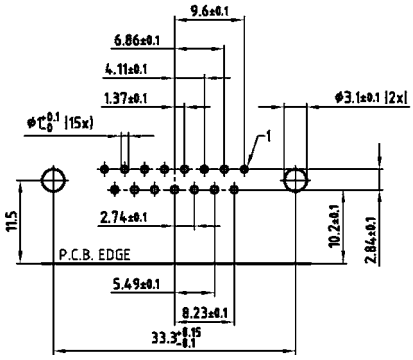
# PCB layout D-SUB Standard

## Solder pin, angled – .370"/9.4 mm – Socket connector

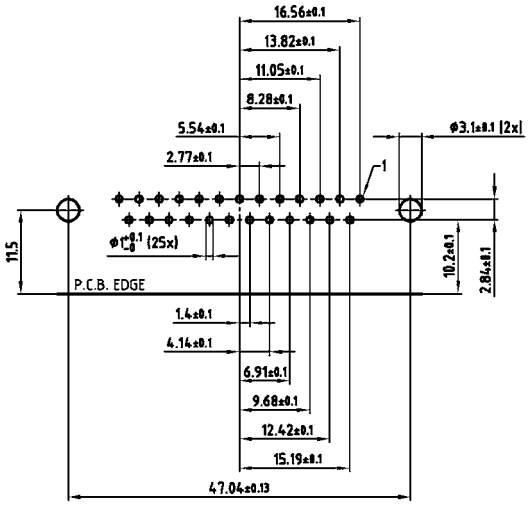
9 pos.



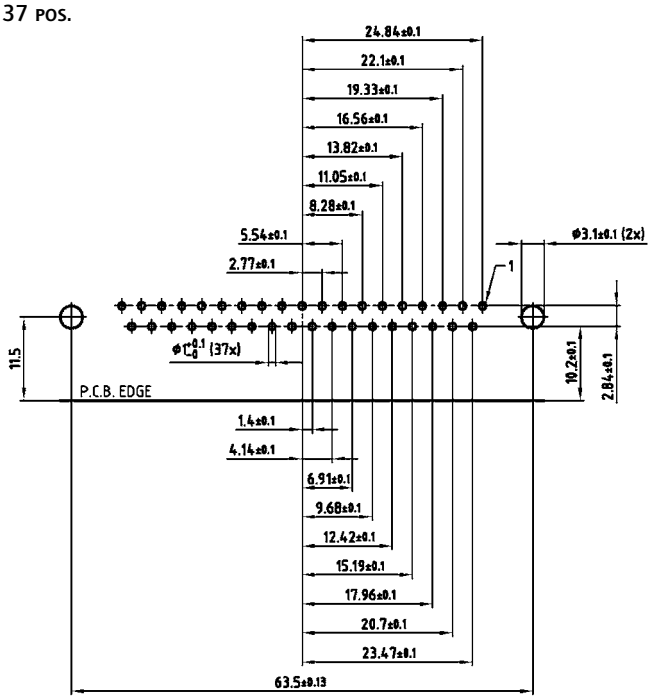

15 pos.



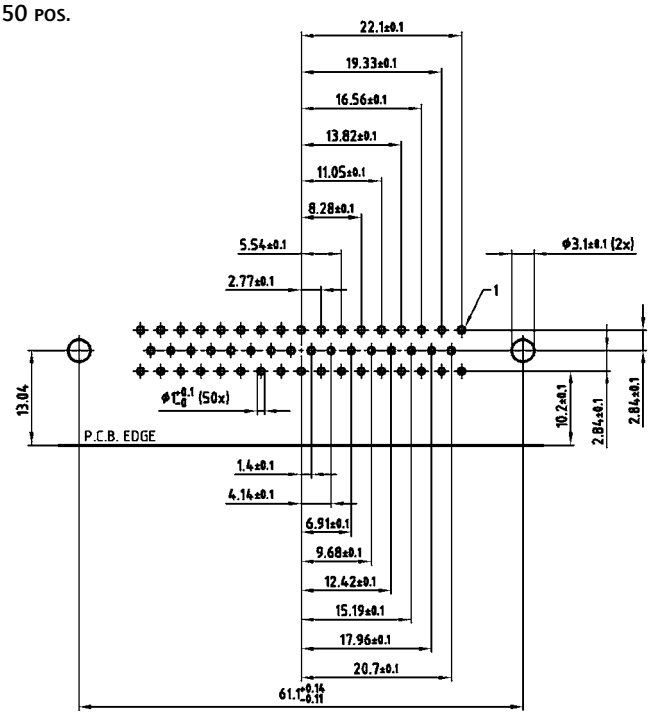

25 pos.




37 pos.




50 pos.

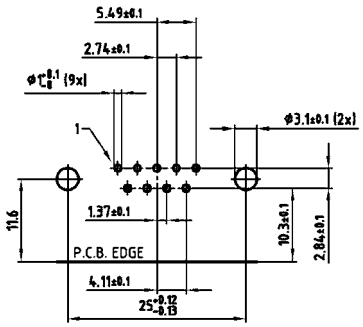



PCB layout Kat1kGGA (View: component side)

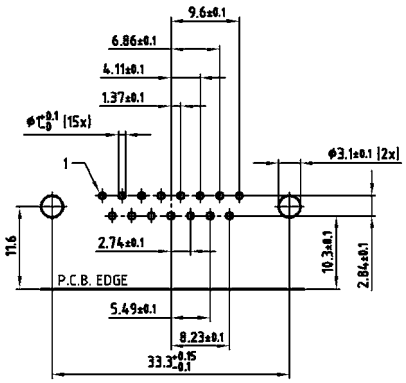
# PCB layout D-SUB Standard

## Solder pin, angled – .370"/9.4 mm – Plug connector

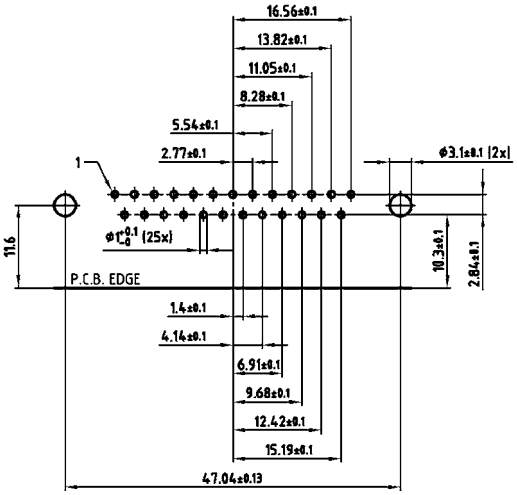
9 pos.



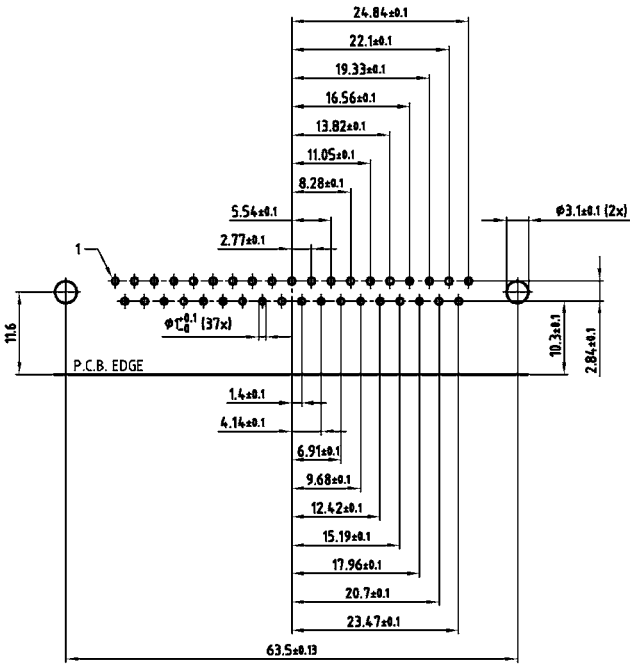

15 pos.



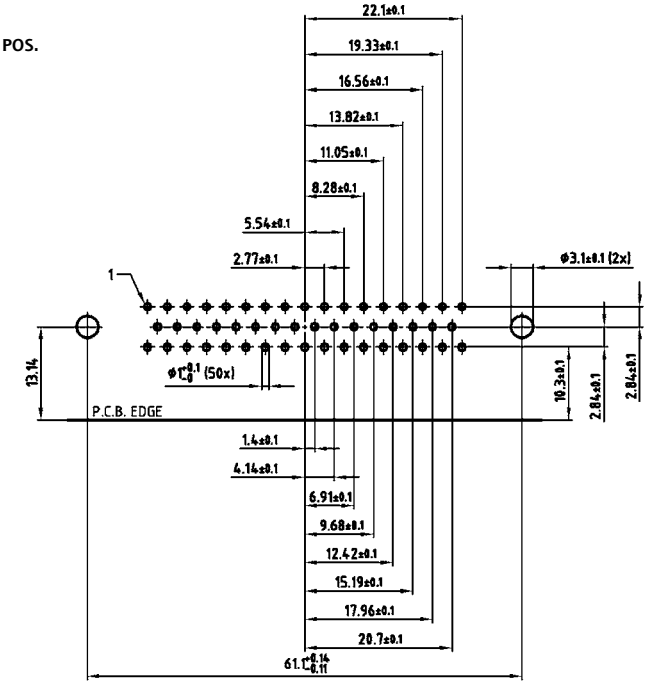

25 pos.




37 pos.




50 pos.

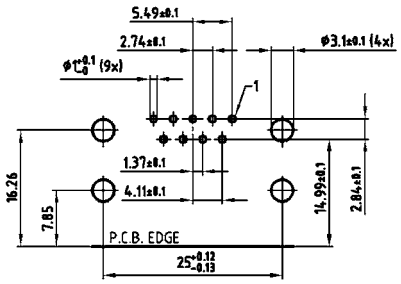



PCB layout Kat1kGHA (View: component side)

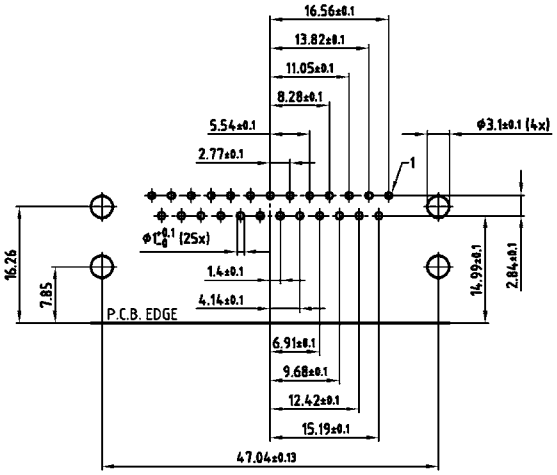
# PCB layout D-SUB Standard

## Solder pin, angled – .590" / 14.19 mm – Metal bracket – Socket connector

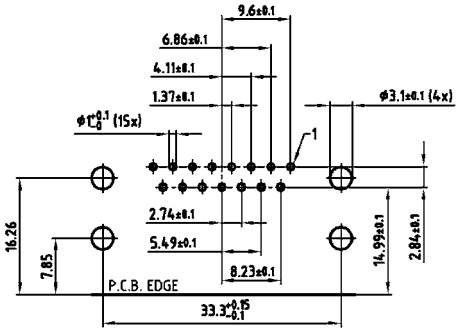
9 pos.



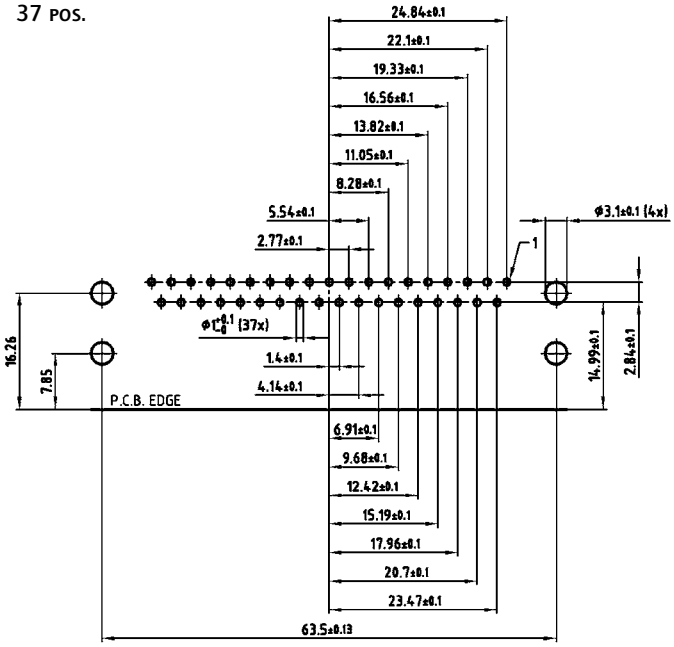

25 pos.




15 pos.




37 pos.

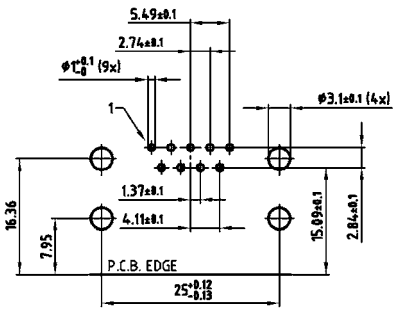



PCB layout Kat1kGIA (View: component side)

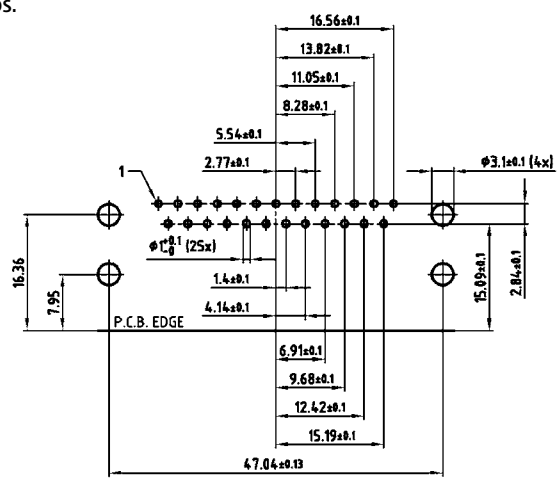
# PCB layout – D-SUB Standard

## Solder pin, angled – .590" / 14.19 mm – Metal bracket – Plug connector

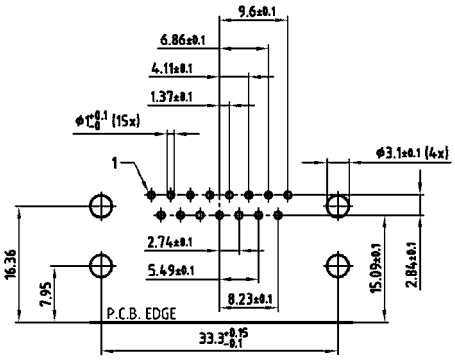
9 pos.



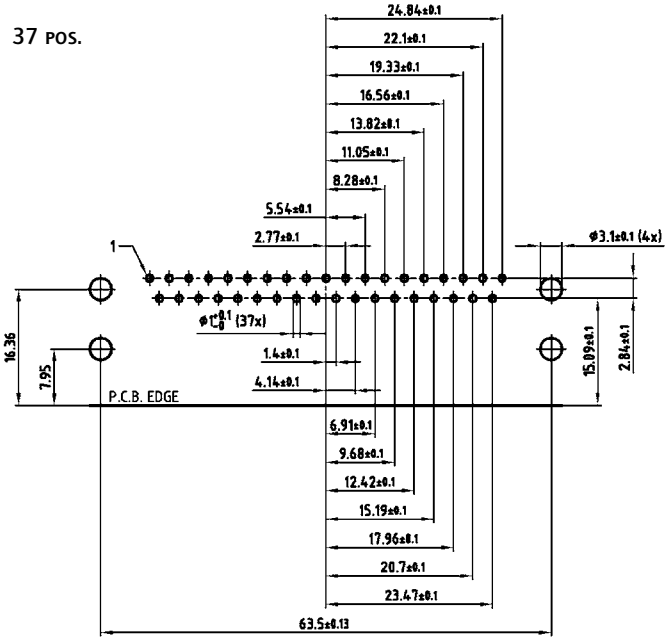

25 pos.




15 pos.




37 pos.

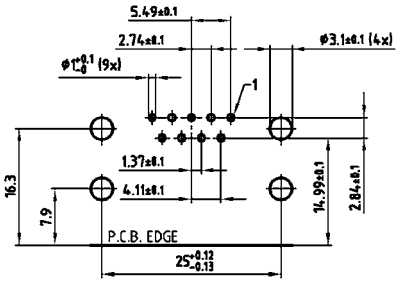



PCB layout Kat1kGJA (View: component side)

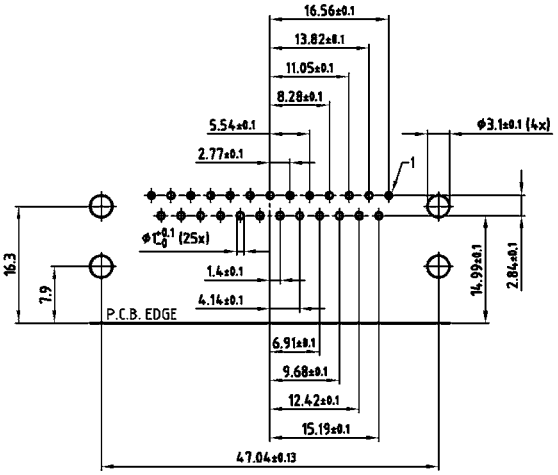
# PCB layout D-SUB Standard

## Solder pin, angled – .590" / 14.19 mm – Plastic bracket – Socket connector

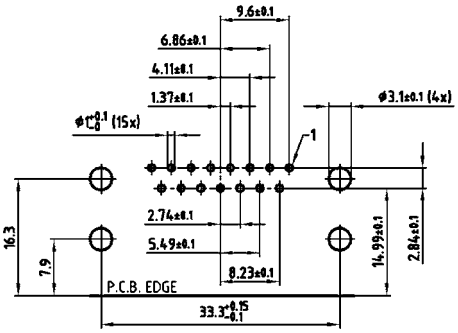
9 pos.



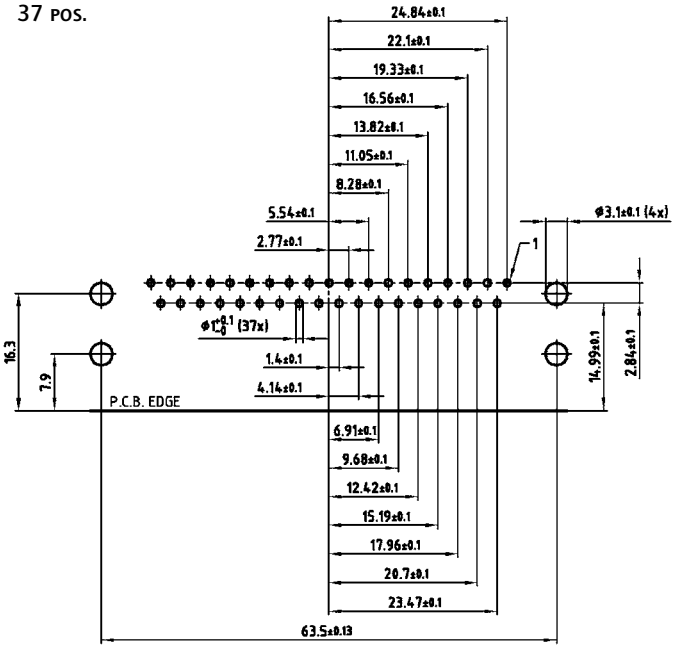

25 pos.




15 pos.




37 pos.

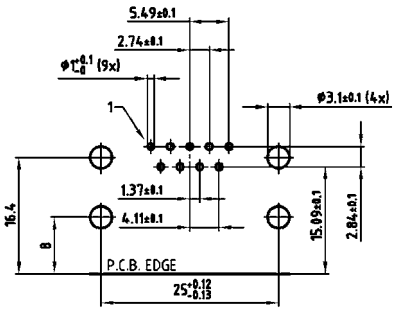



PCB layout Kat1kGKA (View: component side)

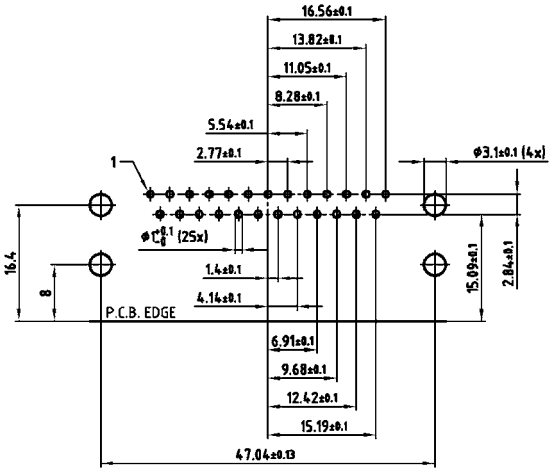
# PCB layout D-SUB Standard

## Solder pin, angled – .590" / 14.19 mm – Plastic bracket – Plug connector

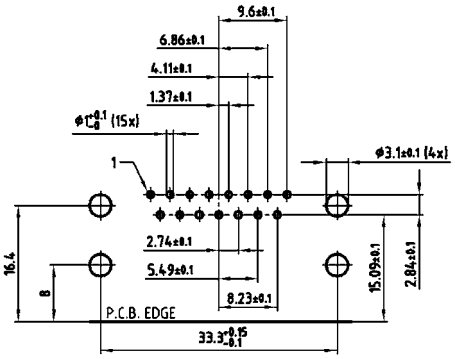
9 pos.



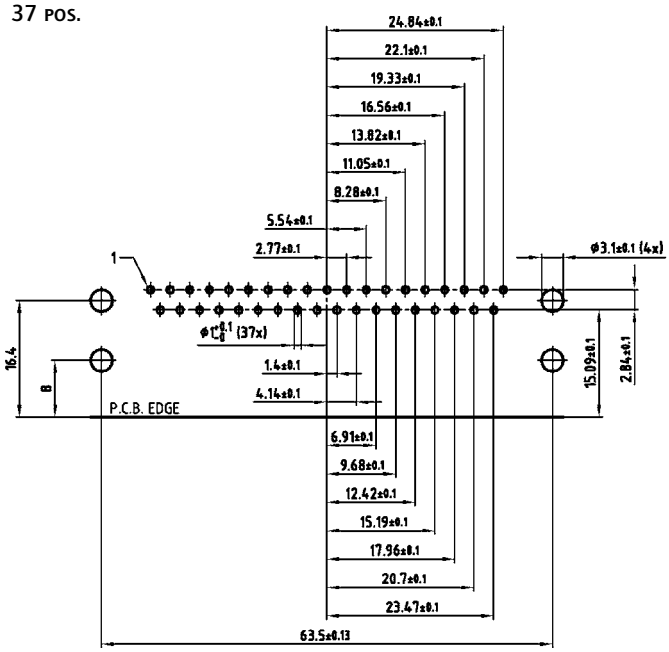

25 pos.




15 pos.




37 pos.

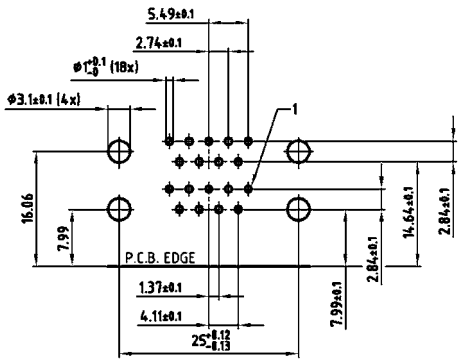



PCB layout Kat1kGLA (View: component side)

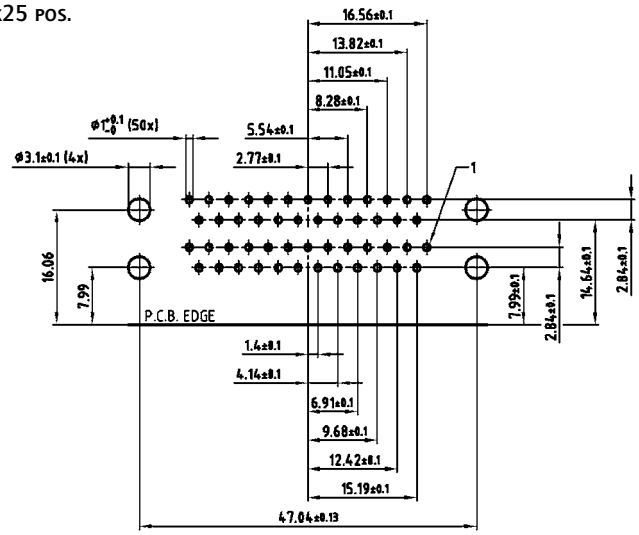
# PCB layout D-SUB Standard

## Dual port style – Socket connector bottom

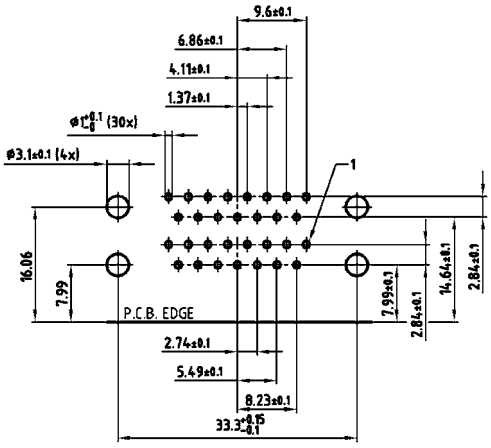
2x9 pos.



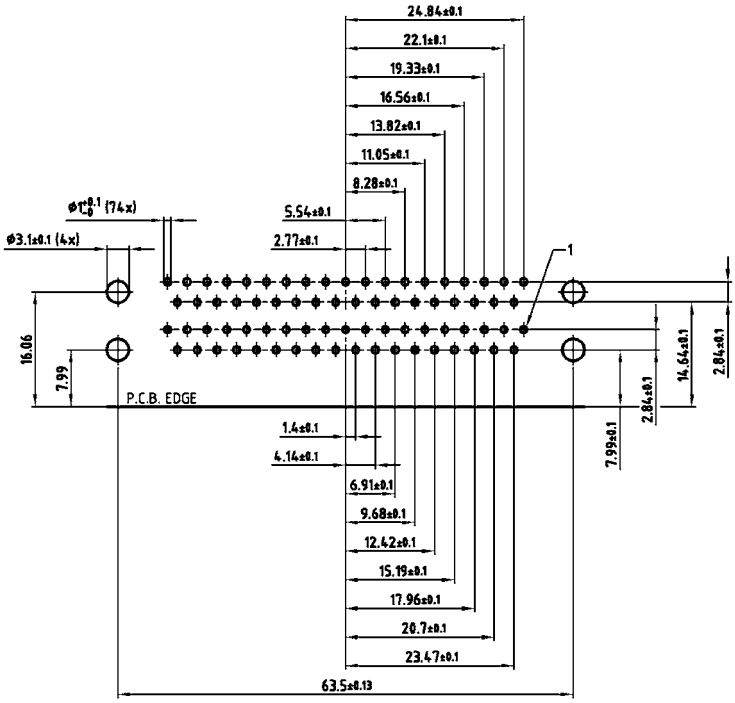

2x25 pos.




2x15 pos.




2x37 pos.

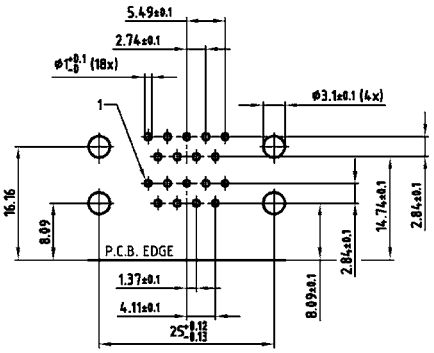



PCB layout Kat1iU6A (View: component side)

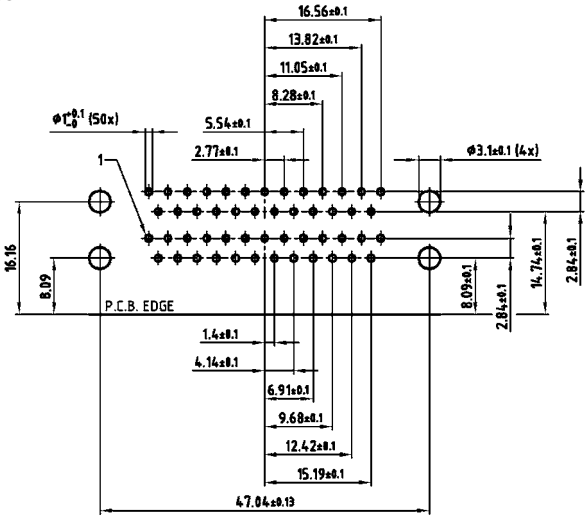
# PCB layout D-SUB Standard

## Dual port style – Plug connector bottom

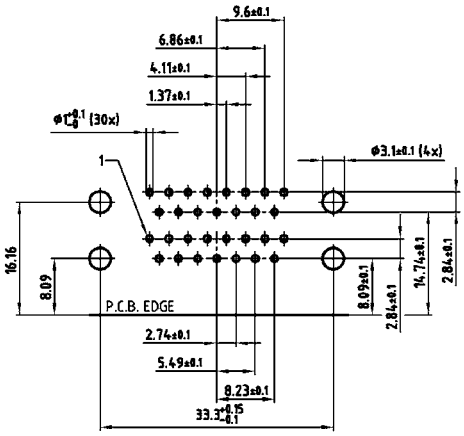
2x9 pos.



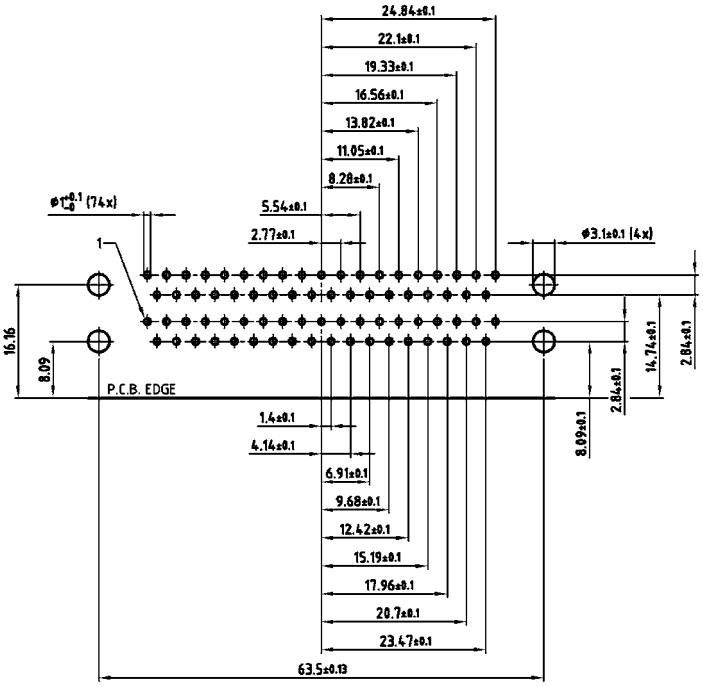

2x25 pos.




2x15 pos.




2x37 pos.

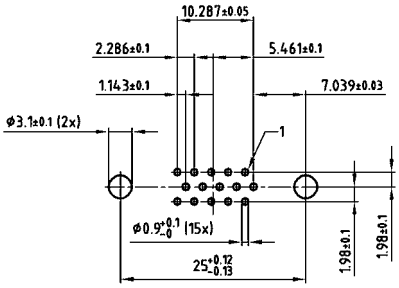



PCB layout Kat1iU5A (View: component side)

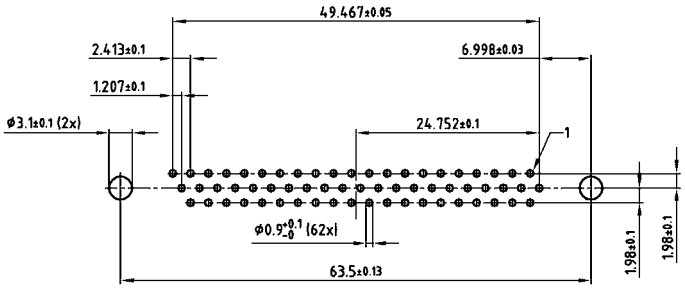
# PCB layout D-SUB High Density

## Solder pin, straight – Socket connector

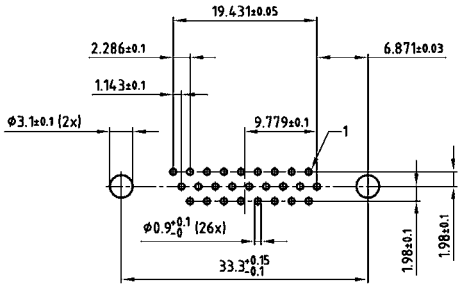
15 pos.



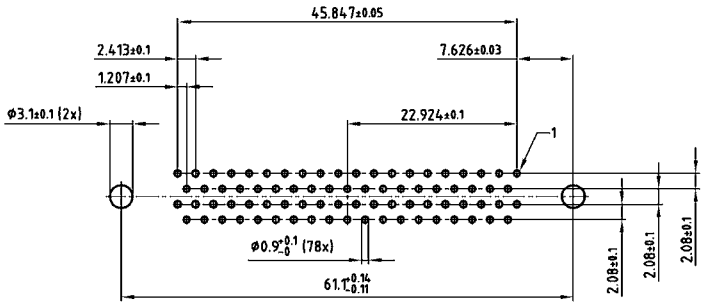

62 pos.



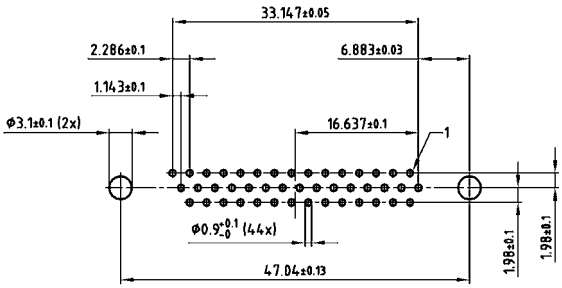

26 pos.




78 pos.




44 pos.

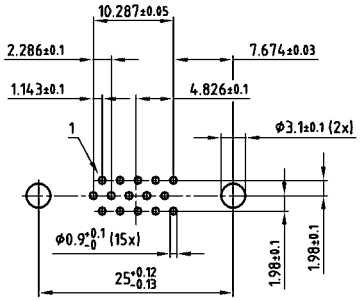



PCB layout Kat1iT9A (View: component side)

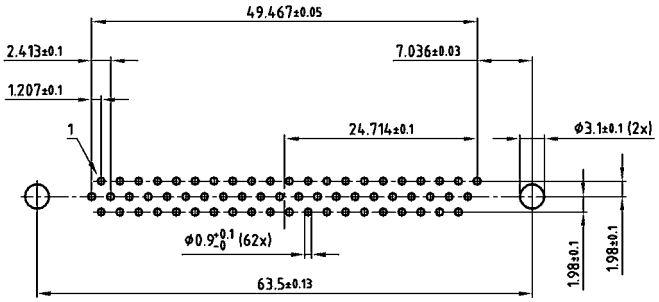
# PCB layout D-SUB High Density

## Solder pin, straight – Plug connector

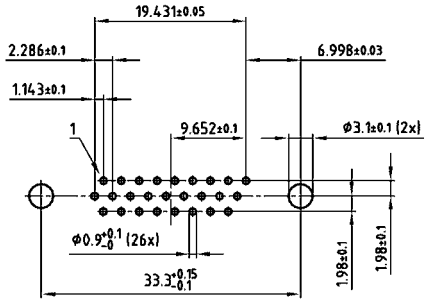
15 pos.



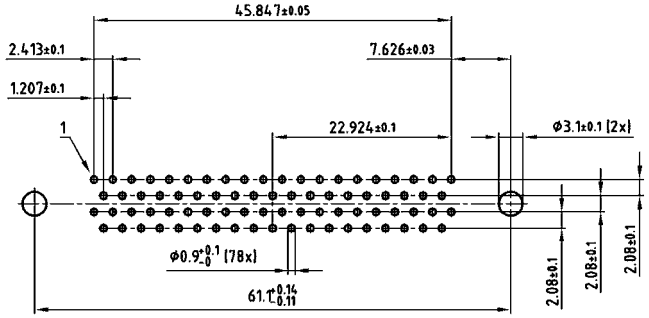

62 pos.



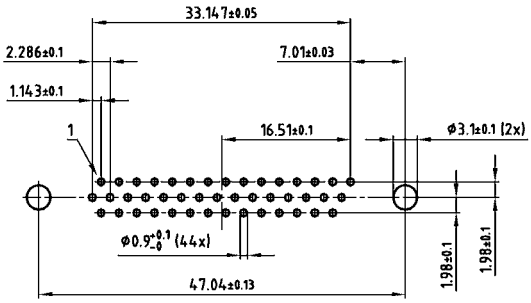

26 pos.




78 pos.




44 pos.

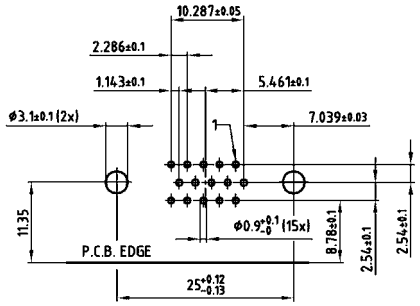



PCB layout Kat1iU0A (View: component side)

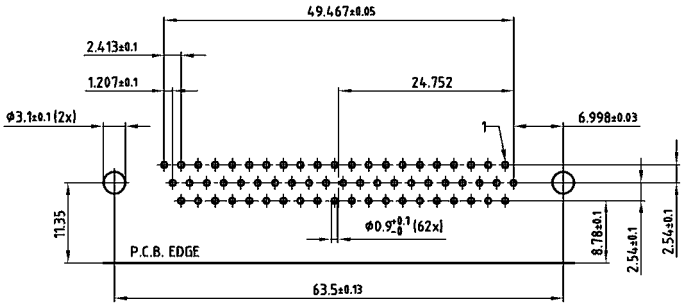
# PCB layout D-SUB High Density

## Solder pin, angled – .350" / 7.98 mm – Socket connector

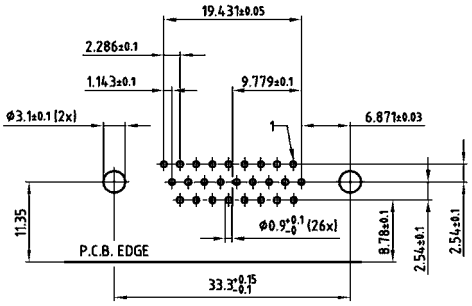
15 pos.



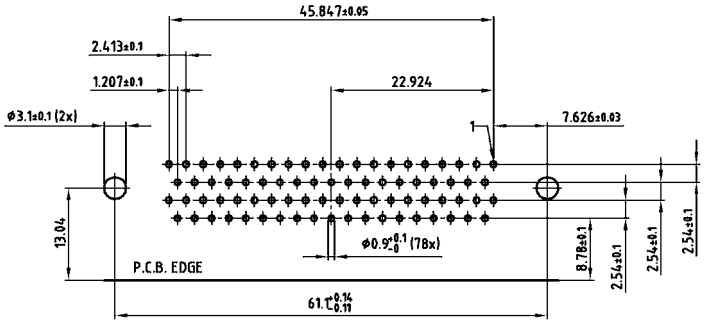

62 pos.



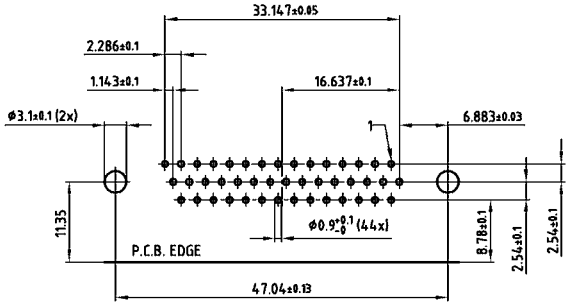

26 pos.




78 pos.




44 pos.

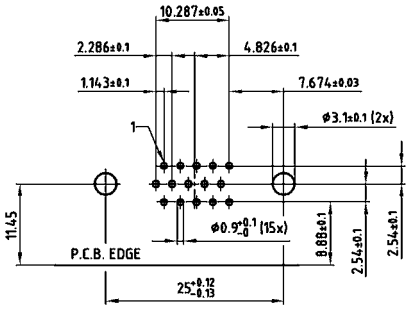



PCB layout Kat1iU1A (View: component side)

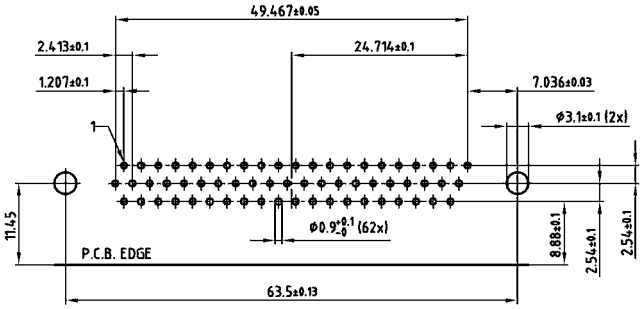
# PCB layout D-SUB High Density

## Solder pin, angled – .350" / 7.98 mm – Plug connector

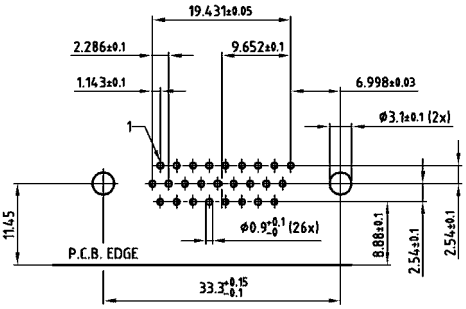
15 pos.



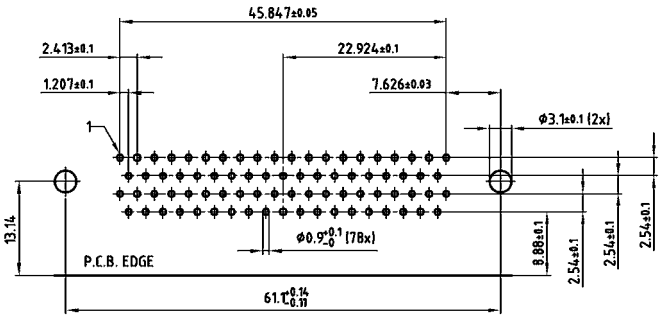

62 pos.



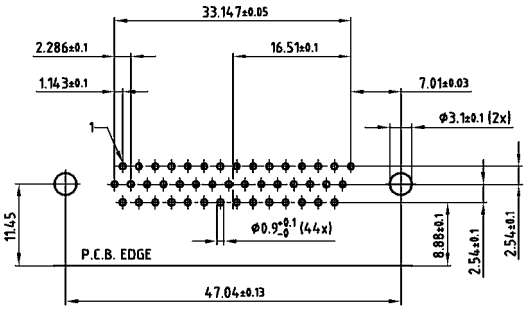

26 pos.




78 pos.




44 pos.



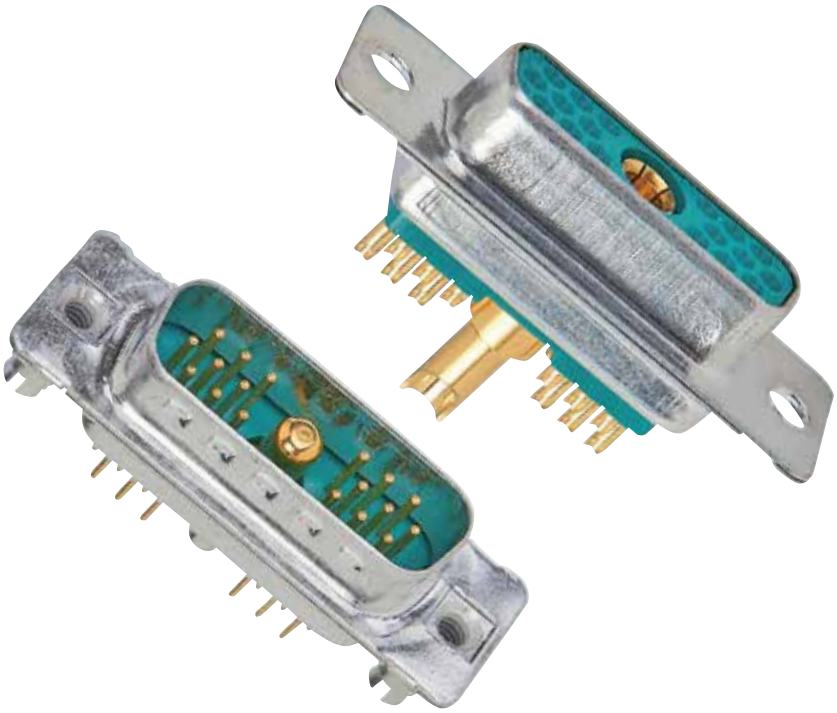

PCB layout Kat1iU2A (View: component side)

Section 2

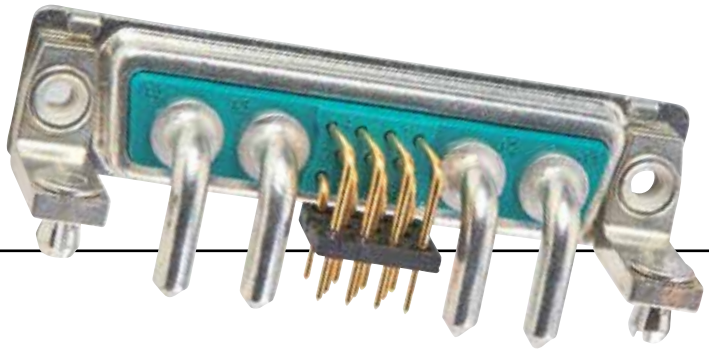
# Combination D-SUB Connectors

Combination D-SUB Connectors provide the ideal solution for applications to require power, signal and coaxial connections within one connector. This series of connectors achieves space saving on PCB's and I/O designs.

Within this product family are various pin out configurations possible. Almost endless selections can be created mixing power, signal and coaxial contacts.



Examples are coaxial contacts handling frequencies up to 2 GHz. Power contacts from 10 amp to 40 amp current handling. Signal contacts in various styles complete the product offering.



Industry standard terminations types, solder cup, PCB contacts in straight and angled pin configurations. Crimp types and wire wrap contacts.

**Here are just a few Product characteristics:**

- Space savings on the PCB
- Different wire terminations are possible in a single connector
- Cost savings - mixed layout
- Insertable and removable coaxial, power, high voltage and signal contacts
- Precision machined contacts
- Various quality classes are available
- Wide product range

A wide range of standard pin configurations fully loaded with signal contacts are available. Specially configured contacts with power, coaxial and signal contacts can be constructed. Please use the Part Number Creator on page 2|2 and 2|3 or contact technical support at your closest CONEC office.

# PART NUMBER CREATOR

## for standard version

3 003W3 S X X 6 1 A 1 O X

**Product Line**
3 = Shell steel tin plated
1 = Brass tin plated*
5 = Shell yellow chromated* (not RoHS compliant)
A = Stainless steel*
*on request

**Shell size and design**
1 = 5W1, 2W2C
2 = 3W3, 7W2, 11W1, 3W3C
3 = 5W5, 9W4, 13W3, 17W2, 21W1
4 = 8W8, 13W6, 17W5, 21WA4, 25W3, 27W2
5 = 24W7, 36W4, 43W2, 47W1
Empty positions ADD „0" = 003W3

**Contact type**
P = Plug connector
S = Socket connector

**Surface/Quality class for SIGNAL contacts**
A = Quality class 3 = 50 mating cycles
B = Quality class 2 = 200 mating cycles*
C = Quality class 1 = 500 mating cycles
J = Special application = > 500 mating cycles (on request)*
X = Crimp and 3W3, 5W5, 8W8, 2W2C, 3W3C (no contacts are supplied with the connector)
*on request

**Termination only for SIGNAL contacts**
K = Crimp without contacts
M = Solder cup
N = Wire wrap, .500"/12.7 mm
P = Press fit
R = Solder pin, straight, .220"/5.6 mm
T = Solder pin, angled, .280"/7.19 mm
U = Solder pin, angled, .370"/9.40 mm
W* = Solder pin, angled, .450"/11.43 mm
X = 3W3, 5W5, 8W8, 2W2C, 3W3C
Z* = Solder pin, angled, .540"/13.84 mm
* = please contact us

**Termination for HIGH POWER- or COAXIAL contacts**

**Quality class 3/Quality class 1**
C1 = Solder/Crimp angled 10 A
C2 = Solder/Crimp angled 20 A
C3 = Solder/Crimp angled 30 A
C4 = Solder/Crimp angled 40 A
F2,61/F1,41 = Solder cup 10 A
F4,62/F3,42 = Solder cup 20 A
F6,63/F5,43 = Solder cup 30 A
F8,64/F7,44 = Solder cup 40 A
68/48 = Solder pin, straight 20 A, D= .077"/1.95 mm
69/49 = Solder pin, straight 20 A, D= .102"/2.60 mm
70/50 = Solder pin, straight 20 A, D= .110"/2.85 mm
71/51 = Solder pin, straight 30 A, D= .130"/3.18 mm
72/52 = Solder pin, straight 40 A, D= .150"/3.75 mm

**Quality class 3/Quality class 1**
59/55 = Solder pin, angled 15 A
73/56 = Solder pin, angled 20 A
74/57 = Solder pin, angled 30 A
75/58 = Solder pin, angled 40 A
77/60 = Solder pin, angled 40 A
81/66 = Solder pin, angled 20 A
82/67 = Solder pin, angled 30 A
85/65 = Solder pin, angled 30 A
G7/76 = 3 Solder pins Straight 50 Ω
G9/78 = 3 Solder pins angled 50 Ω
H1/79 = 3 Solder pins angled 50 Ω
H4/80 = 5 Solder pins angled 50 Ω
G8/86 = 3 Solder pins Straight 75 Ω

**Quality class 3/Quality class 1**
H2/88 = 3 Solder pins angled 75 Ω
H3/89 = 3 Solder pins angled 75 Ω
H5/90 = 5 Solder pins angled 75 Ω
91 = Screw termination 20 A
/P1 = press fit 30A
/P2 = press fit 30A
/P4 = press fit 30A
99 = no high power, coax or crimp contacts loaded
Coaxial contacts with cable termination must be ordered separately.

**Mounting style**
A1 = Riveted
A2 = M3 threaded insert
A3 = 4-40 UNC threaded insert
A4 = M3 threaded rear spacer
A5 = 4-40 UNC threaded rear spacer
A6 = Float fastening
A7 = Threaded rear spacer for M3 press fit
A8 = Threaded rear spacer for 4-40 UNC press fit
C1 = M3 threaded rear spacer with PCB clip, PCB .063"/1.60 mm
C2 = 4-40 UNC threaded rear spacer with PCB clip, PCB .063"/1.60 mm
C3 = M3 threaded rear spacer with PCB clip, PCB .091"/2.30 mm
C4 = 4-40 UNC threaded rear spacer with PCB clip, PCB .091"/2.30 mm
C5 = M3 threaded rear spacer with PCB clip, PCB .126"/3.20 mm
C6 = 4-40 UNC Threaded rear spacer with PCB clip, PCB .126"/3.20 mm
D1 = M3 clip and threaded rear spacer with PCB clip, PCB .063"/1.60 mm
D2 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .063"/1.60 mm
D3 = M3 clip and threaded rear spacer with PCB clip, PCB .091"/2.30 mm
D4 = 4-40 UNC clip and threaded rear spacer clip, PCB .091"/2.30 mm
D5 = M3 clip and threaded rear spacer with PCB clip, PCB .126"/3.20 mm
D6 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .126"/3.20 mm
E1 = M3 threaded rear spacer with PCB clip, PCB .063"/1.60 mm
E2 = 4-40 UNC threaded rear spacer with PCB clip, PCB .063"/1.60 mm
E3 = M3 threaded rear spacer with PCB clip, PCB .091"/2.30 mm
E4 = 4-40 UNC threaded rear spacer with PCB clip, PCB .091"/2.30 mm
E5 = M3 threaded rear spacer with PCB clip, PCB .126"/3.20 mm
E6 = 4-40 UNC threaded rear spacer with PCB clip, PCB .126"/3.20 mm
F1 = M3 clip and threaded rear spacer with PCB clip, PCB .063"/1.60 mm
F2 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .063"/1.60 mm
F3 = M3 clip and threaded rear spacer with PCB clip, PCB .091"/2.30 mm
F4 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .091"/2.30 mm
F5 = M3 clip and threaded rear spacer with PCB clip, PCB .126"/3.20 mm
F6 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .126"/3.20 mm
G1 = Metal bracket, M3 threaded insert for .370"/9.40 mm
G2 = Metal bracket, 4-40 UNC threaded insert for .370"/9.40 mm
G3 = Metal bracket, M3 threaded insert and clip for .370"/9.40 mm
G4 = Metal bracket, 4-40 UNC threaded insert and clip for .370"/9.40 mm
H1 = Metal bracket, M3 threaded lock for .370"/9.40 mm
H2 = Metal bracket, 4-40 UNC threaded lock for .370"/9.40 mm
H3 = Metal bracket, M3 threaded lock and clip for .370"/9.40 mm
H4 = Metal bracket, 4-40 UNC threaded lock and clip for .370"/9.40 mm
N1 = Metal bracket, M3 threaded insert for .280"/7.19 mm
N2 = Metal bracket, 4-40 UNC threaded insert for .280"/7.19 mm
N3 = Metal bracket, M3 threaded insert and clip for .280"/7.19 mm
N4 = Metal bracket, 4-40 UNC threaded insert and clip for .280"/7.19 mm
P1 = Metal bracket, M3 threaded lock for .280"/7.19 mm
P2 = Metal bracket, 4-40 UNC threaded lock for .280"/7.19 mm
P3 = Metal bracket, M3 threaded lock and clip for .280"/7.19 mm
P4 = Metal bracket, 4-40 UNC threaded lock and clip for .280"/7.19 mm
W1 = Threaded rear spacer with M3 press in pin
W2 = Threaded rear spacer with 4-40 UNC press in pin

OX = Standard

# Part Number Creator

## for High Density

3 H19W1 S C M 4 1 A 1 0 X

**Product Line**
1 = Shell brass tin plated
3 = Shell tin plated*
5 = Shell yellow chromated* (not RoHS compliant)
A = Shell stainless steel*
*on request

**Shell size and design**
2 =19W1
3 =15W4
4 =45W2
H = High Density

**Contact type**
P = Plug connector
S = Socket connector

**Quality class for SIGNAL contacts**
A = Quality class 3 = 50 mating cycles
B = Quality class 2 = 200 mating cycles*
C = Quality class 1 = 500 mating cycles
J = Special application = > 500 mating cycles*
*on request

**Termination only for SIGNAL contacts**
M = Solder cup
P = Press-fit*
R = Solder pin, straight
W = Solder pin, angled .450" / 11,43 mm*
T = Solder pin, angled .350" / 7,98 mm
*on request

**Termination for HIGH POWER- or COAXIAL contacts**

**Quality class 3 / Quality class 1**
F2,61/F1,41 = Solder cup 10 A
F4,62/F3,42 = Solder cup 20 A
F6,63/F5,43 = Solder cup 30 A
F8,64/F7,44 = Solder cup 40 A
68/48 = Solder pin, straight 20 A, D= .077"/1.95 mm
69/49 = Solder pin, straight 20 A, D= .102"/2.60 mm
70/50 = Solder pin, straight 20 A, D= .110"/2.85 mm
71/51 = Solder pin, straight 30 A, D= .130"/3.18 mm
72/52 = Solder pin, straight 40 A, D= .150"/3.75 mm
59/55 = Solder pin, angled 15 A
73/56 = Solder pin, angled 20 A
74/57 = Solder pin, angled 30 A
75/58 = Solder pin, angled 40 A

**Quality class 3 / Quality class 1**
77/60 = Solder pin, angled 40 A
81/66 = Solder pin, angled 20 A
82/67 = Solder pin, angled 30 A
85/65 = Solder pin, angled 30 A
G7/76 = 3 Solder pins Straight 50 Ω
G9/78 = 3 Solder pins angled 50 Ω
H1/79 = 3 Solder pins angled 50 Ω
H4/80 = 5 Solder pins angled 50 Ω
G8/86 = 3 Solder pins Straight 75 Ω
H2/88 = 3 Solder pins angled 75 Ω
H3/89 = 3 Solder pins angled 75 Ω
H5/90 = 5 Solder pins angled 75 Ω
91 = Screw termination 20 A

**Quality class 1**
P1 = press fit 30A
P2 = press fit 30A
P4 = press fit 30A
99 = no high power, coax or crimp contacts loaded
Coaxial contacts with cable termination must be ordered separately.

**Mounting style**
A1 = Riveted
A2 = M3 threaded insert
A3 = 4-40 UNC threaded insert
A4 = M3 threaded rear spacer
A5 = 4-40 UNC threaded rear spacer
A6 = Float fastening
A7 = Threaded rear spacer for M3 press fit
A8 = Threaded rear spacer for 4-40 UNC press fit
E1 = M3 threaded rear spacer with PCB clip, PCB .063"/1.60 mm
E2 = 4-40 UNC threaded rear spacer with PCB clip, PCB .063"/1.60 mm
E3 = M3 threaded rear spacer with PCB clip, PCB .091"/2.30 mm
E4 = 4-40 UNC threaded rear spacer with PCB clip, PCB .091"/2.30 mm
E5 = M3 threaded rear spacer with PCB clip, PCB .126"/3.20 mm
E6 = 4-40 UNC threaded rear spacer with PCB clip, PCB .126"/3.20 mm
F1 = M3 clip and threaded rear spacer with PCB clip, PCB .063"/1.60 mm
F2 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .063"/1.60 mm
F3 = M3 clip and threaded rear spacer with PCB clip, PCB .091"/2.30 mm
F4 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .091"/2.30 mm
F5 = M3 clip and threaded rear spacer with PCB clip, PCB .126"/3.20 mm
F6 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .126"/3.20 mm
G5 = Metal bracket, M3 threaded insert for .350"/7,98 mm
G6 = Metal bracket, 4-40 UNC threaded insert for .350" /7,98 mm
G7 = Metal bracket, M3 threaded insert and Clip for .350"/7,98 mm
G8 = Metal bracket, 4-40 UNC threaded insert and Clip for .350"/7,98 mm
H5 = Metal bracket, M3 threaded lock for .350"/7,98 mm
H6 = Metal bracket, 4-40 UNC threaded lock for .350"/7,98 mm
H7 = Metal bracket, M3 threaded lock and Clip for .350"/7,98 mm
H8 = Metal bracket, 4-40 UNC threaded lock and Clip for .350"/7,98 mm
W1 = Threaded rear spacer with M3 press in pin
W2 = Threaded rear spacer with 4-40 UNC press in pin

0X = Standard

# Technical Data

## Standard version

| Materials | Connector with signal contacts | Coaxial contacts | High power contacts | High voltage contacts |
|---|---|---|---|---|
| Insulator<br>Green standard / black crimp | PBTP, GV<br>(UL94 V-0) | | | |
| Shell | steel tin plated<br>brass tin / stainless steel on request | | | |
| Contact plating | Gold plated over nickel | | | |
| Contact material | CU alloy | | | |
| Retaining clip | | CU alloy | | |
| Insulator | | PTFE/PBTP/PI | | PTFE |
| **Mechanical and electrical characteristics** | | | | |
| Current rating | 7,5A (UL) / 5A (CSA, VDE) | | | |
| Test voltage between 2 contacts<br>contact and shell | 1000 V, 50Hz<br>1 min. | | 1000 V, 50Hz<br>1 min. | |
| Resistance between mated contacts | max. 8 mΩ | max. 2.7 mΩ | max. 1 mΩ | max. 2.7 mΩ |
| Insulation resistance | ≥5 GΩ | ≥ 10 GΩ | ≥ 5 GΩ | ≥ $2x10^7$ MΩ |
| Volume resistivity | $10^{16}$ Ωcm | | | |
| Dielectric impedance | 50KV/mm | | | |
| Characteristic impedance | | 50/75 Ω | | |
| VSWR-value at according MIL-C-39012 1.2GHz<br>1.5GHz<br>2.0GHz | | ≤1,2<br>≤1,3<br>≤1,5 | | |
| Dielectric voltage | | 750V 50Hz | | 3.8kV |
| Frequency range | | 0-2GHz | | |
| Working voltage | 250 V | 250 V | 250 V | max. 2.8kV |
| Temperature range | -55°C to +125°C | | | |
| Insertion force per contact | 3.4N | 7N | 7N | 5N |
| Extraction force per contact | 0.2N | 7N | approx. 5N | approx. 2.5N |
| Mating cycles | A = Quality class 3 = 50 mating cycles, B = Quality class 2 = 200 mating cycles, C = Quality class 1 = 500 mating cycles | | | |

Technical specifications are subject to change without notice.

# Technical Data

## High Density

| Materials | Connector with signal contacts | Coaxial contacts | High power contacts | High voltage contacts |
|---|---|---|---|---|
| Insulator<br>Green standard / black crimp | PBTP, GV<br>(UL94 V-0) | | | |
| Shell | steel tin plated<br>brass tin / stainless steel on request | | | |
| Contact plating | Gold plated over nickel | | | |
| Contact material | CU alloy | | | |
| Retaining clip | | CU alloy | | |
| Insulator | | PTFE/PBTP/PI | | PTFE |
| **Mechanical and electrical characteristics** | | | | |
| Current rating | 3 A (UL,VDE) / 2,5 A (CSA) | | | |
| Test voltage between 2 contacts<br>contact and shell | 1000 V, 50Hz<br>1 min. | | 1000 V, 50Hz<br>1 min. | |
| Resistance between mated contacts | max. 10mΩ | max. 2.7mΩ | max. 1mΩ | max. 2.7mΩ |
| Insulation resistance | ≥5GΩ | ≥10 GΩ | ≥ 5GΩ | $2x10^7$ MΩ |
| Volume resistivity | $10^{16}$ Ωcm | | | |
| Dielectric impedance | 50kV/mm | | | |
| Characteristic impedance | | 50/75 Ω | | |
| VSWR-value at according<br>MIL-C-39012 1.2GHz<br>1.5GHz<br>2.0GHz | | ≤ 1.2<br>≤ 1.3<br>≤ 1.5 | | |
| Dielectric voltage | | 750V 50Hz | | 3.8kV |
| Frequency range | | 0-2GHz | | |
| Working voltage | 60V | 250 V | 250 V | max. 2.8kV |
| Temperature range | -55°C to +125°C | | | |
| Insertion force per contact | 3,4N | 7N | 7N | 5N |
| Extraction force per contact | 0,2N | 7N | approx. 5N | approx. 2.5N |
| Mating cycles | A =Quality class 3 = 50 mating cycles, B =Quality class 2 = 200 mating cycles, C = Quality class 1 = 500 mating cycles | | | |

Technical specifications are subject to change without notice.

# Pin configuration – Mating side of socket connector

## Shell size 1

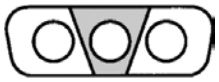
5W1

2W2C

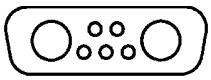
## Shell size 2

3W3

3W3C

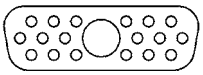


7W2



11W1

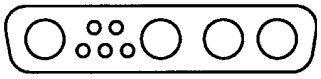
HD 19W1



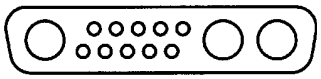
## Shell size 3

5W5

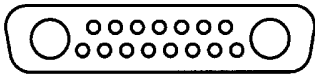
9W4



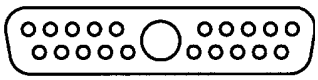
13W3



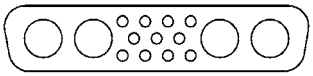
17W2



21W1



HD 15W4

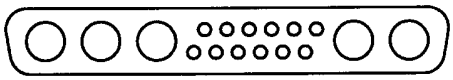


## Shell size 4

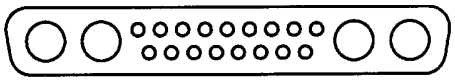
8W8

13W6

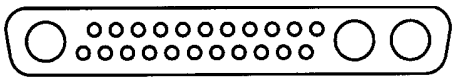
17W5



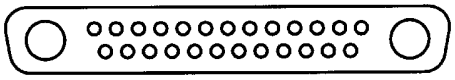
21WA4



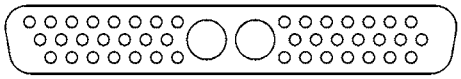
25W3



27W2

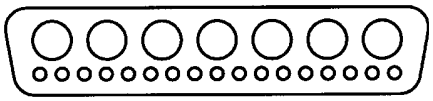


HD 45W2

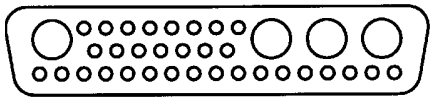


## Shell size 5

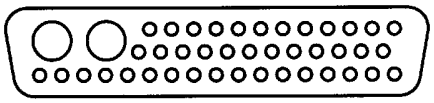
24W7



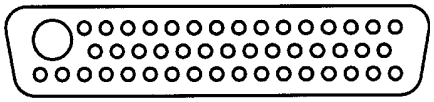
36W4



43W2



47W1



Connectors 3W3, 5W5 and 8W8 with female insulators: Socket contacts are fingerprobe safe according to UL 1950 and CSA 22.2.950.

# Technical information

## Skin effect

Alternating currents do not uniformly occupy the entire cross section of the conductor, rather inductance effect in the conductor deflects the current towards the surface of the conductor, whereby this deflection increases with the frequency.
The resistive attenuation of a transmission line increases with the frequency as a result of this skin effect.
The skin depth (equivalent thickness of the layer in which current flows) can be determined using

$$\delta = \frac{1}{\sqrt{f \pi \sigma \mu_0 \mu_r}}$$

f = frequency
$\sigma$ = conductivity of the conductor material
$\sigma_{Ag}$ = 62 x $10^6$ S/m
$\sigma_{Cu}$ = 58 x $10^6$ S/m
$\mu_0$ = 1,256 $10^6$ Vs / Am
$\mu_r$ ... relative permeability constant for the employed material

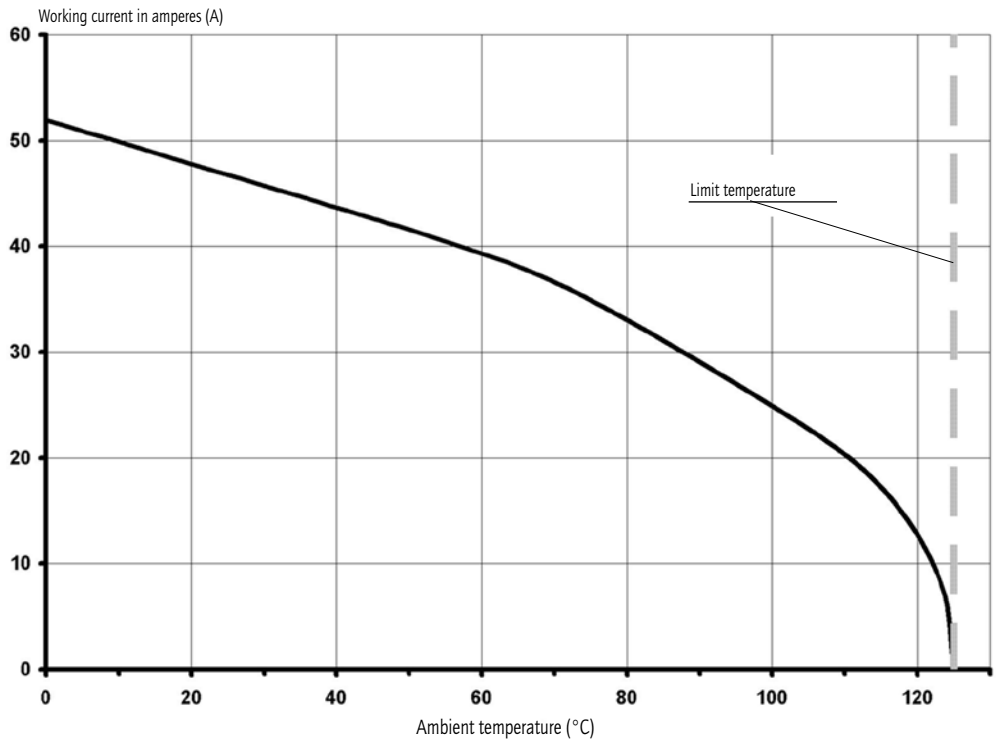
## VSWR-Value

The ratio between the value of the largest and the smallest voltages on a loss-free line is known as the ripple or voltage standing wave ratio s (where 1 m 1 ∞). The reciprocal value of the VSWR is known as the inverse voltage standing wave ratio m (where 0 m 1).
(VSWR = Voltage standing ware ratio)
The value of is linked with the → reflection coefficient r on s transmission line according to the equation

$$s = \frac{(1 + |r|)}{(1 - |r|)}$$

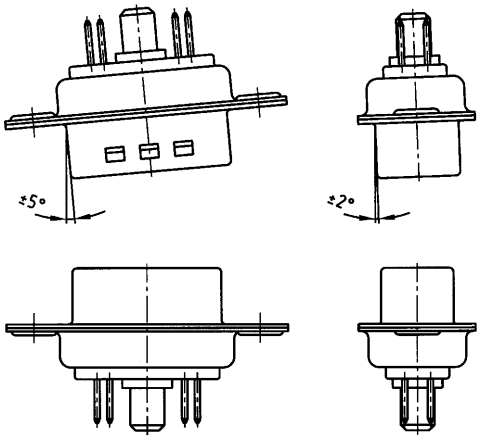
## DeRating Curve

Measurement is according to DIN 41640 part 3 whereas all power contacts are connected in series.
For test procedure – product-no. 3008W8SXX99A has been equipped with 132C11049X and 3008W8PXX99AA10X with 131C11049X.

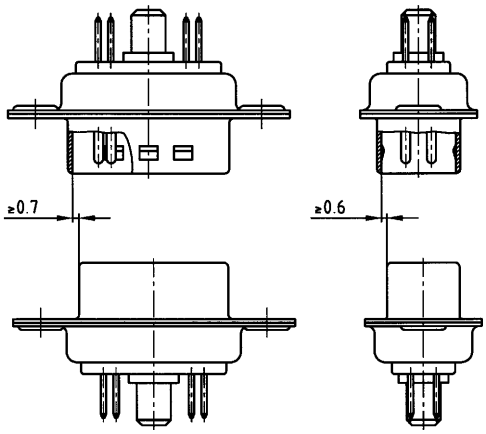


# Mating conditions

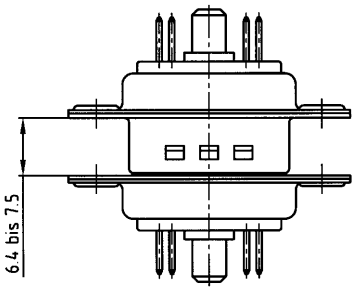
Float mount tolerance guide




Rigid mount tolerance guide

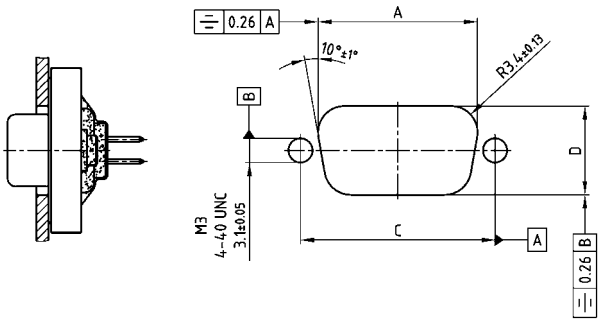



Rigid mount vertical to tolerance guide

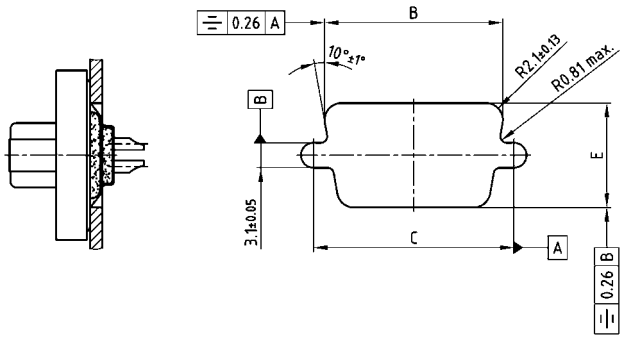



## Panel cut-out

Rear panel mounting

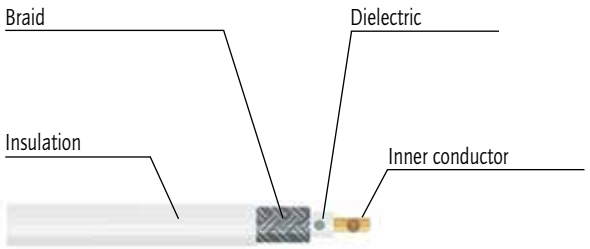



Front panel mounting




| Shell size | A ± 0,13 | B ± 0,13 | C ± 0,13 | D ± 0,13 | E ± 0,13 |
|---|---|---|---|---|---|
| 1 | 20.50 | 22.20 | 25.00 | 11.40 | 13.00 |
| 2 | 28.80 | 30.50 | 33.30 | 11.40 | 13.00 |
| 3 | 42.50 | 44.30 | 47.04 | 11.40 | 13.00 |
| 4 | 59.10 | 60.70 | 63.50 | 11.40 | 13.00 |
| 5 | 56.30 | 58.30 | 61.10 | 14.10 | 15.80 |

# Crimping instructions for coax contacts




Strip the wire
Using dimensions shown on the individual product drawings

Slide sleeve over coax cable

Crimp the inner contact on the inner conductor

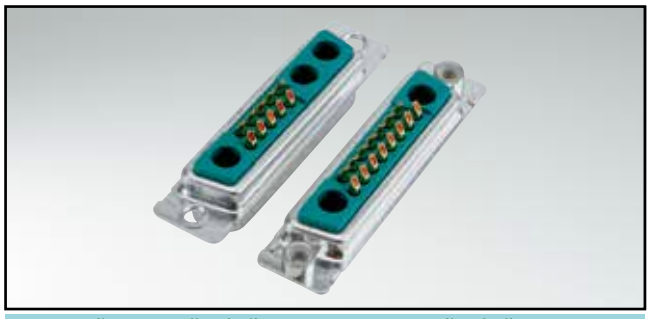
Snap the inner contact into the outer contact

Slide braid over outer contact

Crimp the sleeve on to outer contact

# COMBINATION D-SUB WITH SIGNAL CONTACTS

## Solder cup – Precision machined contacts – For wire size AWG 20

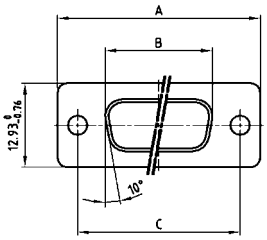


RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### DESCRIPTION

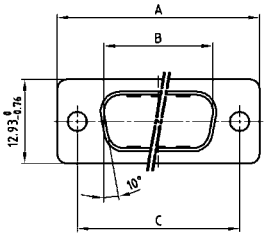
- Suitable for wire size **AWG 20**
- Mounting styles:
  - with through-hole, Ø .118" / 3 mm
  - with 4-40 UNC or M3 threaded insert
  - with floating mount
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
  (brass tin plated or stainless steel available on request)
- recommended plastic hoods look at page 7 | 16, 7 | 17

### SOCKET CONNECTOR



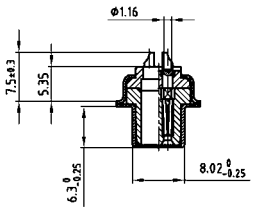

| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 1 | 31.19 | 16.46 | 25.00 +0.12 -0.13 |
| 2 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |
| 5 | 67.31 | 52.55 | 61.10 +0.14 -0.11 |

### PLUG CONNECTOR

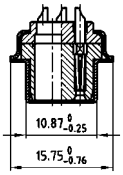



| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 1 | 31.19 | 16.79 | 25.00 +0.12 -0.13 | 6.12 |
| 2 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 5 | 67.31 | 52.68 | 61.10 +0.14 -0.11 | 5.99 |

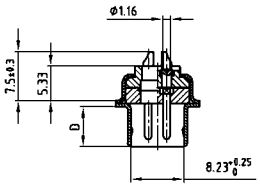
Shell size 1-4



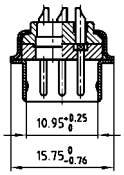

Shell size 5



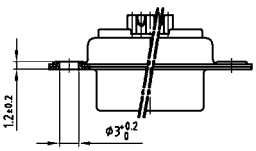

Shell size 1-4




Shell size 5




### ORDER DATA



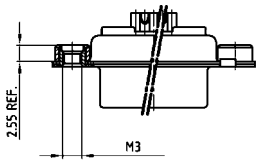

| SOCKET CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style** | **Part Number** |
| 5W1 | Through-hole | 3005W1SAM99A10X |
| 7W2 | Through-hole | 3007W2SAM99A10X |
| 11W1 | Through-hole | 3011W1SAM99A10X |
| 9W4 | Through-hole | 3009W4SAM99A10X |
| 13W3 | Through-hole | 3013W3SAM99A10X |
| 17W2 | Through-hole | 3017W2SAM99A10X |
| 21W1 | Through-hole | 3021W1SAM99A10X |
| 13W6 | Through-hole | 3013W6SAM99A10X |
| 17W5 | Through-hole | 3017W5SAM99A10X |
| 21WA4 | Through-hole | 321WA4SAM99A10X |
| 25W3 | Through-hole | 3025W3SAM99A10X |
| 27W2 | Through-hole | 3027W2SAM99A10X |
| 24W7 | Through-hole | 3024W7SAM99A10X |
| 36W4 | Through-hole | 3036W4SAM99A10X |
| 43W2 | Through-hole | 3043W2SAM99A10X |
| 47W1 | Through-hole | 3047W1SAM99A10X |

| PLUG CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style** | **Part Number** |
| 5W1 | Through-hole | 3005W1PAM99A10X |
| 7W2 | Through-hole | 3007W2PAM99A10X |
| 11W1 | Through-hole | 3011W1PAM99A10X |
| 9W4 | Through-hole | 3009W4PAM99A10X |
| 13W3 | Through-hole | 3013W3PAM99A10X |
| 17W2 | Through-hole | 3017W2PAM99A10X |
| 21W1 | Through-hole | 3021W1PAM99A10X |
| 13W6 | Through-hole | 3013W6PAM99A10X |
| 17W5 | Through-hole | 3017W5PAM99A10X |
| 21WA4 | Through-hole | 321WA4PAM99A10X |
| 25W3 | Through-hole | 3025W3PAM99A10X |
| 27W2 | Through-hole | 3027W2PAM99A10X |
| 24W7 | Through-hole | 3024W7PAM99A10X |
| 36W4 | Through-hole | 3036W4PAM99A10X |
| 43W2 | Through-hole | 3043W2PAM99A10X |
| 47W1 | Through-hole | 3047W1PAM99A10X |

# Combination D-SUB – Mounting styles

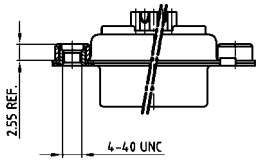
## Solder cup – Precision machined contacts – For wire size AWG 20

### Order data



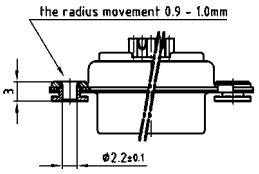

| Socket connector | | |
|---|---|---|
| Design | Mounting style M3 | Part Number |
| 5W1 | Threaded insert | 3005W1SAM99A20X |
| 7W2 | Threaded insert | 3007W2SAM99A20X |
| 11W1 | Threaded insert | 3011W1SAM99A20X |
| 9W4 | Threaded insert | 3009W4SAM99A20X |
| 13W3 | Threaded insert | 3013W3SAM99A20X |
| 17W2 | Threaded insert | 3017W2SAM99A20X |
| 21W1 | Threaded insert | 3021W1SAM99A20X |
| 13W6 | Threaded insert | 3013W6SAM99A20X |
| 17W5 | Threaded insert | 3017W5SAM99A20X |
| 21WA4 | Threaded insert | 321WA4SAM99A20X |
| 25W3 | Threaded insert | 3025W3SAM99A20X |
| 27W2 | Threaded insert | 3027W2SAM99A20X |
| 24W7 | Threaded insert | 3024W7SAM99A20X |
| 36W4 | Threaded insert | 3036W4SAM99A20X |
| 43W2 | Threaded insert | 3043W2SAM99A20X |
| 47W1 | Threaded insert | 3047W1SAM99A20X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style M3 | Part Number |
| 5W1 | Threaded insert | 3005W1PAM99A20X |
| 7W2 | Threaded insert | 3007W2PAM99A20X |
| 11W1 | Threaded insert | 3011W1PAM99A20X |
| 9W4 | Threaded insert | 3009W4PAM99A20X |
| 13W3 | Threaded insert | 3013W3PAM99A20X |
| 17W2 | Threaded insert | 3017W2PAM99A20X |
| 21W1 | Threaded insert | 3021W1PAM99A20X |
| 13W6 | Threaded insert | 3013W6PAM99A20X |
| 17W5 | Threaded insert | 3017W5PAM99A20X |
| 21WA4 | Threaded insert | 321WA4PAM99A20X |
| 25W3 | Threaded insert | 3025W3PAM99A20X |
| 27W2 | Threaded insert | 3027W2PAM99A20X |
| 24W7 | Threaded insert | 3024W7PAM99A20X |
| 36W4 | Threaded insert | 3036W4PAM99A20X |
| 43W2 | Threaded insert | 3043W2PAM99A20X |
| 47W1 | Threaded insert | 3047W1PAM99A20X |




| Socket connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded insert | 3005W1SAM99A30X |
| 7W2 | Threaded insert | 3007W2SAM99A30X |
| 11W1 | Threaded insert | 3011W1SAM99A30X |
| 9W4 | Threaded insert | 3009W4SAM99A30X |
| 13W3 | Threaded insert | 3013W3SAM99A30X |
| 17W2 | Threaded insert | 3017W2SAM99A30X |
| 21W1 | Threaded insert | 3021W1SAM99A30X |
| 13W6 | Threaded insert | 3013W6SAM99A30X |
| 17W5 | Threaded insert | 3017W5SAM99A30X |
| 21WA4 | Threaded insert | 321WA4SAM99A30X |
| 25W3 | Threaded insert | 3025W3SAM99A30X |
| 27W2 | Threaded insert | 3027W2SAM99A30X |
| 24W7 | Threaded insert | 3024W7SAM99A30X |
| 36W4 | Threaded insert | 3036W4SAM99A30X |
| 43W2 | Threaded insert | 3043W2SAM99A30X |
| 47W1 | Threaded insert | 3047W1SAM99A30X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded insert | 3005W1PAM99A30X |
| 7W2 | Threaded insert | 3007W2PAM99A30X |
| 11W1 | Threaded insert | 3011W1PAM99A30X |
| 9W4 | Threaded insert | 3009W4PAM99A30X |
| 13W3 | Threaded insert | 3013W3PAM99A30X |
| 17W2 | Threaded insert | 3017W2PAM99A30X |
| 21W1 | Threaded insert | 3021W1PAM99A30X |
| 13W6 | Threaded insert | 3013W6PAM99A30X |
| 17W5 | Threaded insert | 3017W5PAM99A30X |
| 21WA4 | Threaded insert | 321WA4PAM99A30X |
| 25W3 | Threaded insert | 3025W3PAM99A30X |
| 27W2 | Threaded insert | 3027W2PAM99A30X |
| 24W7 | Threaded insert | 3024W7PAM99A30X |
| 36W4 | Threaded insert | 3036W4PAM99A30X |
| 43W2 | Threaded insert | 3043W2PAM99A30X |
| 47W1 | Threaded insert | 3047W1PAM99A30X |

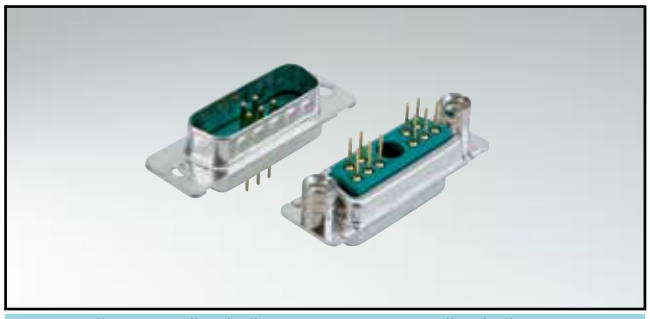



| Socket connector | | |
|---|---|---|
| Design | Mounting style | Part Number |
| 5W1 | Floating mount | 3005W1SAM99A60X |
| 7W2 | Floating mount | 3007W2SAM99A60X |
| 11W1 | Floating mount | 3011W1SAM99A60X |
| 9W4 | Floating mount | 3009W4SAM99A60X |
| 13W3 | Floating mount | 3013W3SAM99A60X |
| 17W2 | Floating mount | 3017W2SAM99A60X |
| 21W1 | Floating mount | 3021W1SAM99A60X |
| 13W6 | Floating mount | 3013W6SAM99A60X |
| 17W5 | Floating mount | 3017W5SAM99A60X |
| 21WA4 | Floating mount | 321WA4SAM99A60X |
| 25W3 | Floating mount | 3025W3SAM99A60X |
| 27W2 | Floating mount | 3027W2SAM99A60X |
| 24W7 | Floating mount | 3024W7SAM99A60X |
| 36W4 | Floating mount | 3036W4SAM99A60X |
| 43W2 | Floating mount | 3043W2SAM99A60X |
| 47W1 | Floating mount | 3047W1SAM99A60X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style | Part Number |
| 5W1 | Floating mount | 3005W1PAM99A60X |
| 7W2 | Floating mount | 3007W2PAM99A60X |
| 11W1 | Floating mount | 3011W1PAM99A60X |
| 9W4 | Floating mount | 3009W4PAM99A60X |
| 13W3 | Floating mount | 3013W3PAM99A60X |
| 17W2 | Floating mount | 3017W2PAM99A60X |
| 21W1 | Floating mount | 3021W1PAM99A60X |
| 13W6 | Floating mount | 3013W6PAM99A60X |
| 17W5 | Floating mount | 3017W5PAM99A60X |
| 21WA4 | Floating mount | 321WA4PAM99A60X |
| 25W3 | Floating mount | 3025W3PAM99A60X |
| 27W2 | Floating mount | 3027W2PAM99A60X |
| 24W7 | Floating mount | 3024W7PAM99A60X |
| 36W4 | Floating mount | 3036W4PAM99A60X |
| 43W2 | Floating mount | 3043W2PAM99A60X |
| 47W1 | Floating mount | 3047W1PAM99A60X |

# COMBINATION D-SUB WITH SIGNAL CONTACTS

## Solder pin – Straight – Precision machined contacts

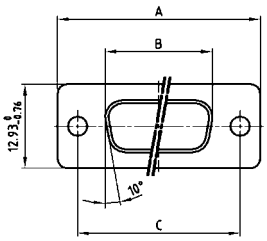


RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### DESCRIPTION

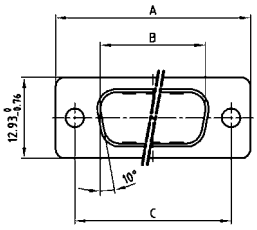
- Mounting styles:
  - with through-hole, Ø .118"/3 mm
  - with 4-40 UNC or M3 threaded insert
  - with 4-40 UNC or M3 threaded rear spacer
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
  (brass tin plated or stainless steel available on request)

### SOCKET CONNECTOR



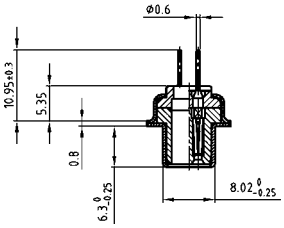

| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 1 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 2 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |
| 5 | 67.31 | 52.55 | 61.10 $^{+0.14}_{-0.11}$ |

### PLUG CONNECTOR

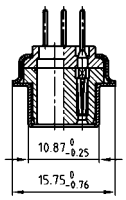



| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 1 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 2 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 5 | 67.31 | 52.68 | 61.10 $^{+0.14}_{-0.11}$ | 5.99 |

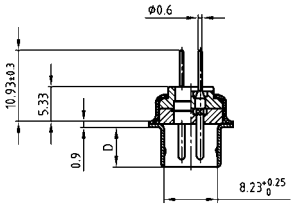
Shell size 1-4



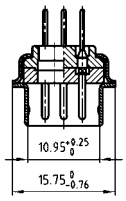

Shell size 5



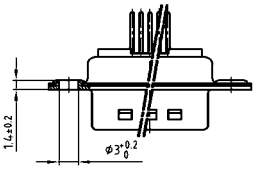

Shell size 1-4




Shell size 5




### ORDER DATA



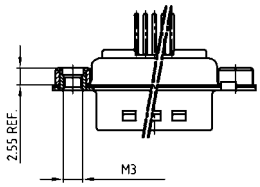

| SOCKET CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style** | **Part Number** |
| 5W1 | Through-hole | 3005W1SAR99A10X |
| 7W2 | Through-hole | 3007W2SAR99A10X |
| 11W1 | Through-hole | 3011W1SAR99A10X |
| 9W4 | Through-hole | 3009W4SAR99A10X |
| 13W3 | Through-hole | 3013W3SAR99A10X |
| 17W2 | Through-hole | 3017W2SAR99A10X |
| 21W1 | Through-hole | 3021W1SAR99A10X |
| 13W6 | Through-hole | 3013W6SAR99A10X |
| 17W5 | Through-hole | 3017W5SAR99A10X |
| 21WA4 | Through-hole | 321WA4SAR99A10X |
| 25W3 | Through-hole | 3025W3SAR99A10X |
| 27W2 | Through-hole | 3027W2SAR99A10X |
| 24W7 | Through-hole | 3024W7SAR99A10X |
| 36W4 | Through-hole | 3036W4SAR99A10X |
| 43W2 | Through-hole | 3043W2SAR99A10X |
| 47W1 | Through-hole | 3047W1SAR99A10X |

| PLUG CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style** | **Part Number** |
| 5W1 | Through-hole | 3005W1PAR99A10X |
| 7W2 | Through-hole | 3007W2PAR99A10X |
| 11W1 | Through-hole | 3011W1PAR99A10X |
| 9W4 | Through-hole | 3009W4PAR99A10X |
| 13W3 | Through-hole | 3013W3PAR99A10X |
| 17W2 | Through-hole | 3017W2PAR99A10X |
| 21W1 | Through-hole | 3021W1PAR99A10X |
| 13W6 | Through-hole | 3013W6PAR99A10X |
| 17W5 | Through-hole | 3017W5PAR99A10X |
| 21WA4 | Through-hole | 321WA4PAR99A10X |
| 25W3 | Through-hole | 3025W3PAR99A10X |
| 27W2 | Through-hole | 3027W2PAR99A10X |
| 24W7 | Through-hole | 3024W7PAR99A10X |
| 36W4 | Through-hole | 3036W4PAR99A10X |
| 43W2 | Through-hole | 3043W2PAR99A10X |
| 47W1 | Through-hole | 3047W1PAR99A10X |

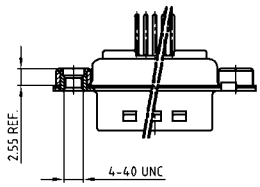
# Combination D-SUB – Mounting styles

## Solder pin – Straight – Precision machined contacts

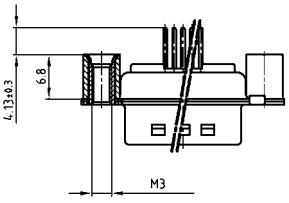
### Order data



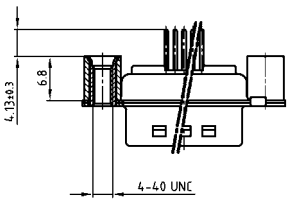

| Socket connector | | | Plug connector | | |
|---|---|---|---|---|---|
| Design | Mounting style M3 | Part Number | Design | Mounting style M3 | Part Number |
| 5W1 | Threaded insert | 3005W1SAR99A20X | 5W1 | Threaded insert | 3005W1PAR99A20X |
| 7W2 | Threaded insert | 3007W2SAR99A20X | 7W2 | Threaded insert | 3007W2PAR99A20X |
| 11W1 | Threaded insert | 3011W1SAR99A20X | 11W1 | Threaded insert | 3011W1PAR99A20X |
| 9W4 | Threaded insert | 3009W4SAR99A20X | 9W4 | Threaded insert | 3009W4PAR99A20X |
| 13W3 | Threaded insert | 3013W3SAR99A20X | 13W3 | Threaded insert | 3013W3PAR99A20X |
| 17W2 | Threaded insert | 3017W2SAR99A20X | 17W2 | Threaded insert | 3017W2PAR99A20X |
| 21W1 | Threaded insert | 3021W1SAR99A20X | 21W1 | Threaded insert | 3021W1PAR99A20X |
| 13W6 | Threaded insert | 3013W6SAR99A20X | 13W6 | Threaded insert | 3013W6PAR99A20X |
| 17W5 | Threaded insert | 3017W5SAR99A20X | 17W5 | Threaded insert | 3017W5PAR99A20X |
| 21WA4 | Threaded insert | 321WA4SAR99A20X | 21WA4 | Threaded insert | 321WA4PAR99A20X |
| 25W3 | Threaded insert | 3025W3SAR99A20X | 25W3 | Threaded insert | 3025W3PAR99A20X |
| 27W2 | Threaded insert | 3027W2SAR99A20X | 27W2 | Threaded insert | 3027W2PAR99A20X |
| 24W7 | Threaded insert | 3024W7SAR99A20X | 24W7 | Threaded insert | 3024W7PAR99A20X |
| 36W4 | Threaded insert | 3036W4SAR99A20X | 36W4 | Threaded insert | 3036W4PAR99A20X |
| 43W2 | Threaded insert | 3043W2SAR99A20X | 43W2 | Threaded insert | 3043W2PAR99A20X |
| 47W1 | Threaded insert | 3047W1SAR99A20X | 47W1 | Threaded insert | 3047W1PAR99A20X |




| Socket connector | | | Plug connector | | |
|---|---|---|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number | Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded insert | 3005W1SAR99A30X | 5W1 | Threaded insert | 3005W1PAR99A30X |
| 7W2 | Threaded insert | 3007W2SAR99A30X | 7W2 | Threaded insert | 3007W2PAR99A30X |
| 11W1 | Threaded insert | 3011W1SAR99A30X | 11W1 | Threaded insert | 3011W1PAR99A30X |
| 9W4 | Threaded insert | 3009W4SAR99A30X | 9W4 | Threaded insert | 3009W4PAR99A30X |
| 13W3 | Threaded insert | 3013W3SAR99A30X | 13W3 | Threaded insert | 3013W3PAR99A30X |
| 17W2 | Threaded insert | 3017W2SAR99A30X | 17W2 | Threaded insert | 3017W2PAR99A30X |
| 21W1 | Threaded insert | 3021W1SAR99A30X | 21W1 | Threaded insert | 3021W1PAR99A30X |
| 13W6 | Threaded insert | 3013W6SAR99A30X | 13W6 | Threaded insert | 3013W6PAR99A30X |
| 17W5 | Threaded insert | 3017W5SAR99A30X | 17W5 | Threaded insert | 3017W5PAR99A30X |
| 21WA4 | Threaded insert | 321WA4SAR99A30X | 21WA4 | Threaded insert | 321WA4PAR99A30X |
| 25W3 | Threaded insert | 3025W3SAR99A30X | 25W3 | Threaded insert | 3025W3PAR99A30X |
| 27W2 | Threaded insert | 3027W2SAR99A30X | 27W2 | Threaded insert | 3027W2PAR99A30X |
| 24W7 | Threaded insert | 3024W7SAR99A30X | 24W7 | Threaded insert | 3024W7PAR99A30X |
| 36W4 | Threaded insert | 3036W4SAR99A30X | 36W4 | Threaded insert | 3036W4PAR99A30X |
| 43W2 | Threaded insert | 3043W2SAR99A30X | 43W2 | Threaded insert | 3043W2PAR99A30X |
| 47W1 | Threaded insert | 3047W1SAR99A30X | 47W1 | Threaded insert | 3047W1PAR99A30X |



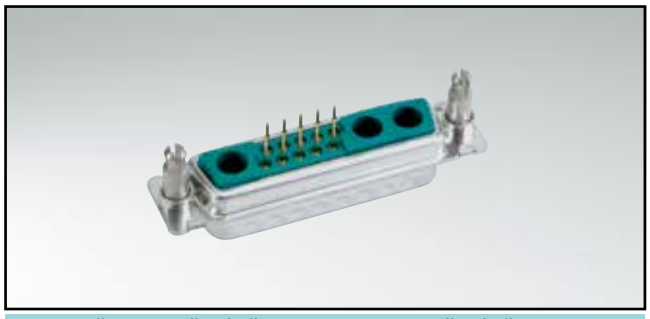

| Socket connector | | | Plug connector | | |
|---|---|---|---|---|---|
| Design | Mounting style M3 | Part Number | Design | Mounting style M3 | Part Number |
| 5W1 | Threaded rear spacer | 3005W1SAR99A40X | 5W1 | Threaded rear spacer | 3005W1PAR99A40X |
| 7W2 | Threaded rear spacer | 3007W2SAR99A40X | 7W2 | Threaded rear spacer | 3007W2PAR99A40X |
| 11W1 | Threaded rear spacer | 3011W1SAR99A40X | 11W1 | Threaded rear spacer | 3011W1PAR99A40X |
| 9W4 | Threaded rear spacer | 3009W4SAR99A40X | 9W4 | Threaded rear spacer | 3009W4PAR99A40X |
| 13W3 | Threaded rear spacer | 3013W3SAR99A40X | 13W3 | Threaded rear spacer | 3013W3PAR99A40X |
| 17W2 | Threaded rear spacer | 3017W2SAR99A40X | 17W2 | Threaded rear spacer | 3017W2PAR99A40X |
| 21W1 | Threaded rear spacer | 3021W1SAR99A40X | 21W1 | Threaded rear spacer | 3021W1PAR99A40X |
| 13W6 | Threaded rear spacer | 3013W6SAR99A40X | 13W6 | Threaded rear spacer | 3013W6PAR99A40X |
| 17W5 | Threaded rear spacer | 3017W5SAR99A40X | 17W5 | Threaded rear spacer | 3017W5PAR99A40X |
| 21WA4 | Threaded rear spacer | 321WA4SAR99A40X | 21WA4 | Threaded rear spacer | 321WA4PAR99A40X |
| 25W3 | Threaded rear spacer | 3025W3SAR99A40X | 25W3 | Threaded rear spacer | 3025W3PAR99A40X |
| 27W2 | Threaded rear spacer | 3027W2SAR99A40X | 27W2 | Threaded rear spacer | 3027W2PAR99A40X |
| 24W7 | Threaded rear spacer | 3024W7SAR99A40X | 24W7 | Threaded rear spacer | 3024W7PAR99A40X |
| 36W4 | Threaded rear spacer | 3036W4SAR99A40X | 36W4 | Threaded rear spacer | 3036W4PAR99A40X |
| 43W2 | Threaded rear spacer | 3043W2SAR99A40X | 43W2 | Threaded rear spacer | 3043W2PAR99A40X |
| 47W1 | Threaded rear spacer | 3047W1SAR99A40X | 47W1 | Threaded rear spacer | 3047W1PAR99A40X |




| Socket connector | | | Plug connector | | |
|---|---|---|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number | Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded rear spacer | 3005W1SAR99A50X | 5W1 | Threaded rear spacer | 3005W1PAR99A50X |
| 7W2 | Threaded rear spacer | 3007W2SAR99A50X | 7W2 | Threaded rear spacer | 3007W2PAR99A50X |
| 11W1 | Threaded rear spacer | 3011W1SAR99A50X | 11W1 | Threaded rear spacer | 3011W1PAR99A50X |
| 9W4 | Threaded rear spacer | 3009W4SAR99A50X | 9W4 | Threaded rear spacer | 3009W4PAR99A50X |
| 13W3 | Threaded rear spacer | 3013W3SAR99A50X | 13W3 | Threaded rear spacer | 3013W3PAR99A50X |
| 17W2 | Threaded rear spacer | 3017W2SAR99A50X | 17W2 | Threaded rear spacer | 3017W2PAR99A50X |
| 21W1 | Threaded rear spacer | 3021W1SAR99A50X | 21W1 | Threaded rear spacer | 3021W1PAR99A50X |
| 13W6 | Threaded rear spacer | 3013W6SAR99A50X | 13W6 | Threaded rear spacer | 3013W6PAR99A50X |
| 17W5 | Threaded rear spacer | 3017W5SAR99A50X | 17W5 | Threaded rear spacer | 3017W5PAR99A50X |
| 21WA4 | Threaded rear spacer | 321WA4SAR99A50X | 21WA4 | Threaded rear spacer | 321WA4PAR99A50X |
| 25W3 | Threaded rear spacer | 3025W3SAR99A50X | 25W3 | Threaded rear spacer | 3025W3PAR99A50X |
| 27W2 | Threaded rear spacer | 3027W2SAR99A50X | 27W2 | Threaded rear spacer | 3027W2PAR99A50X |
| 24W7 | Threaded rear spacer | 3024W7SAR99A50X | 24W7 | Threaded rear spacer | 3024W7PAR99A50X |
| 36W4 | Threaded rear spacer | 3036W4SAR99A50X | 36W4 | Threaded rear spacer | 3036W4PAR99A50X |
| 43W2 | Threaded rear spacer | 3043W2SAR99A50X | 43W2 | Threaded rear spacer | 3043W2PAR99A50X |
| 47W1 | Threaded rear spacer | 3047W1SAR99A50X | 47W1 | Threaded rear spacer | 3047W1PAR99A50X |

# COMBINATION D-SUB WITH SIGNAL CONTACTS

## Solder pin – Straight – Precision machined contacts

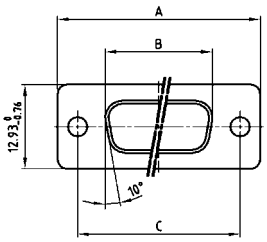


RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### DESCRIPTION

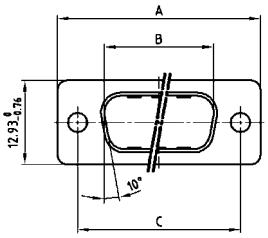
- **Threaded rear spacer .291"/7.4 mm**
  (the same installation high as D-SUB Standard on PCB)
- Mounting styles:
  - with 4-40 UNC threaded rear spacer with PCB clip (M3 on request)
  - with 4-40 UNC front and threaded rear spacer with PCB clip (M3 on request)
    for PCB thickness .063"/1.6 mm and .091"/2.3 mm
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
  (brass tin plated or stainless steel available on request)

### SOCKET CONNECTOR



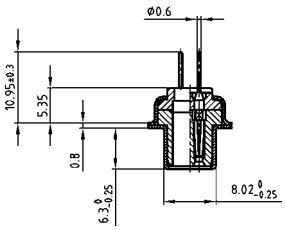

| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 1 | 31.19 | 16.46 | 25.00 +0.12 -0.13 |
| 2 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |
| 5 | 67.31 | 52.55 | 61.10 +0.14 -0.11 |

### PLUG CONNECTOR

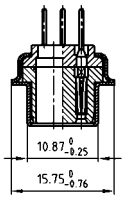



| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 1 | 31.19 | 16.79 | 25.00 +0.12 -0.13 | 6.12 |
| 2 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 5 | 67.31 | 52.68 | 61.10 +0.14 -0.11 | 5.99 |

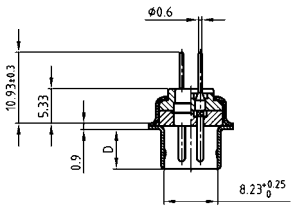
Shell size 1-4



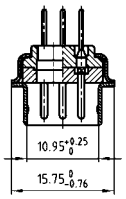

Shell size 5




Shell size 1-4

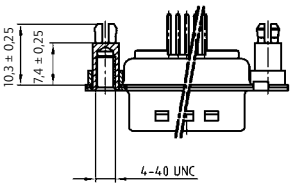



Shell size 5




### ORDER DATA

PCB thickness .063"/1.6 mm




**SOCKET CONNECTOR**

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 5W1 | Threaded rear spacer PCB clip | 3005W1SAR99E20X |
| 7W2 | Threaded rear spacer PCB clip | 3007W2SAR99E20X |
| 11W1 | Threaded rear spacer PCB clip | 3011W1SAR99E20X |
| 9W4 | Threaded rear spacer PCB clip | 3009W4SAR99E20X |
| 13W3 | Threaded rear spacer PCB clip | 3013W3SAR99E20X |
| 17W2 | Threaded rear spacer PCB clip | 3017W2SAR99E20X |
| 21W1 | Threaded rear spacer PCB clip | 3021W1SAR99E20X |
| 13W6 | Threaded rear spacer PCB clip | 3013W6SAR99E20X |
| 17W5 | Threaded rear spacer PCB clip | 3017W5SAR99E20X |
| 21WA4 | Threaded rear spacer PCB clip | 321WA4SAR99E20X |
| 25W3 | Threaded rear spacer PCB clip | 3025W3SAR99E20X |
| 27W2 | Threaded rear spacer PCB clip | 3027W2SAR99E20X |
| 24W7 | Threaded rear spacer PCB clip | 3024W7SAR99E20X |
| 36W4 | Threaded rear spacer PCB clip | 3036W4SAR99E20X |
| 43W2 | Threaded rear spacer PCB clip | 3043W2SAR99E20X |
| 47W1 | Threaded rear spacer PCB clip | 3047W1SAR99E20X |

**PLUG CONNECTOR**

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 5W1 | Threaded rear spacer PCB clip | 3005W1PAR99E20X |
| 7W2 | Threaded rear spacer PCB clip | 3007W2PAR99E20X |
| 11W1 | Threaded rear spacer PCB clip | 3011W1PAR99E20X |
| 9W4 | Threaded rear spacer PCB clip | 3009W4PAR99E20X |
| 13W3 | Threaded rear spacer PCB clip | 3013W3PAR99E20X |
| 17W2 | Threaded rear spacer PCB clip | 3017W2PAR99E20X |
| 21W1 | Threaded rear spacer PCB clip | 3021W1PAR99E20X |
| 13W6 | Threaded rear spacer PCB clip | 3013W6PAR99E20X |
| 17W5 | Threaded rear spacer PCB clip | 3017W5PAR99E20X |
| 21WA4 | Threaded rear spacer PCB clip | 321WA4PAR99E20X |
| 25W3 | Threaded rear spacer PCB clip | 3025W3PAR99E20X |
| 27W2 | Threaded rear spacer PCB clip | 3027W2PAR99E20X |
| 24W7 | Threaded rear spacer PCB clip | 3024W7PAR99E20X |
| 36W4 | Threaded rear spacer PCB clip | 3036W4PAR99E20X |
| 43W2 | Threaded rear spacer PCB clip | 3043W2PAR99E20X |
| 47W1 | Threaded rear spacer PCB clip | 3047W1PAR99E20X |

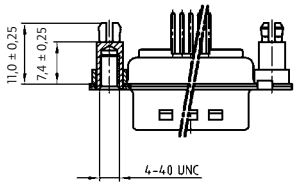
PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter

# Combination D-SUB – Mounting styles

## Solder pin – Straight – Precision machined contacts

### Order data

PCB thickness .091"/2.3 mm



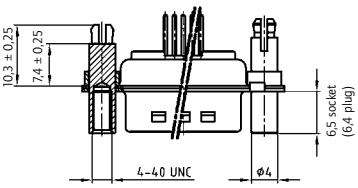

**Socket connector**

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 5W1 | Threaded rear spacer PCB clip | 3005W1SAR99E40X |
| 7W2 | Threaded rear spacer PCB clip | 3007W2SAR99E40X |
| 11W1 | Threaded rear spacer PCB clip | 3011W1SAR99E40X |
| 9W4 | Threaded rear spacer PCB clip | 3009W4SAR99E40X |
| 13W3 | Threaded rear spacer PCB clip | 3013W3SAR99E40X |
| 17W2 | Threaded rear spacer PCB clip | 3017W2SAR99E40X |
| 21W1 | Threaded rear spacer PCB clip | 3021W1SAR99E40X |
| 13W6 | Threaded rear spacer PCB clip | 3013W6SAR99E40X |
| 17W5 | Threaded rear spacer PCB clip | 3017W5SAR99E40X |
| 21WA4 | Threaded rear spacer PCB clip | 321WA4SAR99E40X |
| 25W3 | Threaded rear spacer PCB clip | 3025W3SAR99E40X |
| 27W2 | Threaded rear spacer PCB clip | 3027W2SAR99E40X |
| 24W7 | Threaded rear spacer PCB clip | 3024W7SAR99E40X |
| 36W4 | Threaded rear spacer PCB clip | 3036W4SAR99E40X |
| 43W2 | Threaded rear spacer PCB clip | 3043W2SAR99E40X |
| 47W1 | Threaded rear spacer PCB clip | 3047W1SAR99E40X |

**Plug connector**

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 5W1 | Threaded rear spacer PCB clip | 3005W1PAR99E40X |
| 7W2 | Threaded rear spacer PCB clip | 3007W2PAR99E40X |
| 11W1 | Threaded rear spacer PCB clip | 3011W1PAR99E40X |
| 9W4 | Threaded rear spacer PCB clip | 3009W4PAR99E40X |
| 13W3 | Threaded rear spacer PCB clip | 3013W3PAR99E40X |
| 17W2 | Threaded rear spacer PCB clip | 3017W2PAR99E40X |
| 21W1 | Threaded rear spacer PCB clip | 3021W1PAR99E40X |
| 13W6 | Threaded rear spacer PCB clip | 3013W6PAR99E40X |
| 17W5 | Threaded rear spacer PCB clip | 3017W5PAR99E40X |
| 21WA4 | Threaded rear spacer PCB clip | 321WA4PAR99E40X |
| 25W3 | Threaded rear spacer PCB clip | 3025W3PAR99E40X |
| 27W2 | Threaded rear spacer PCB clip | 3027W2PAR99E40X |
| 24W7 | Threaded rear spacer PCB clip | 3024W7PAR99E40X |
| 36W4 | Threaded rear spacer PCB clip | 3036W4PAR99E40X |
| 43W2 | Threaded rear spacer PCB clip | 3043W2PAR99E40X |
| 47W1 | Threaded rear spacer PCB clip | 3047W1PAR99E40X |

PCB thickness .063"/1.6 mm



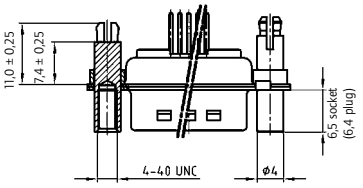

**Socket connector**

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 5W1 | Front/Threaded rear spacer PCB clip | 3005W1SAR99F20X |
| 7W2 | Front/Threaded rear spacer PCB clip | 3007W2SAR99F20X |
| 11W1 | Front/Threaded rear spacer PCB clip | 3011W1SAR99F20X |
| 9W4 | Front/Threaded rear spacer PCB clip | 3009W4SAR99F20X |
| 13W3 | Front/Threaded rear spacer PCB clip | 3013W3SAR99F20X |
| 17W2 | Front/Threaded rear spacer PCB clip | 3017W2SAR99F20X |
| 21W1 | Front/Threaded rear spacer PCB clip | 3021W1SAR99F20X |
| 13W6 | Front/Threaded rear spacer PCB clip | 3013W6SAR99F20X |
| 17W5 | Front/Threaded rear spacer PCB clip | 3017W5SAR99F20X |
| 21WA4 | Front/Threaded rear spacer PCB clip | 321WA4SAR99F20X |
| 25W3 | Front/Threaded rear spacer PCB clip | 3025W3SAR99F20X |
| 27W2 | Front/Threaded rear spacer PCB clip | 3027W2SAR99F20X |
| 24W7 | Front/Threaded rear spacer PCB clip | 3024W7SAR99F20X |
| 36W4 | Front/Threaded rear spacer PCB clip | 3036W4SAR99F20X |
| 43W2 | Front/Threaded rear spacer PCB clip | 3043W2SAR99F20X |
| 47W1 | Front/Threaded rear spacer PCB clip | 3047W1SAR99F20X |

**Plug connector**

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 5W1 | Front/Threaded rear spacer PCB clip | 3005W1PAR99F20X |
| 7W2 | Front/Threaded rear spacer PCB clip | 3007W2PAR99F20X |
| 11W1 | Front/Threaded rear spacer PCB clip | 3011W1PAR99F20X |
| 9W4 | Front/Threaded rear spacer PCB clip | 3009W4PAR99F20X |
| 13W3 | Front/Threaded rear spacer PCB clip | 3013W3PAR99F20X |
| 17W2 | Front/Threaded rear spacer PCB clip | 3017W2PAR99F20X |
| 21W1 | Front/Threaded rear spacer PCB clip | 3021W1PAR99F20X |
| 13W6 | Front/Threaded rear spacer PCB clip | 3013W6PAR99F20X |
| 17W5 | Front/Threaded rear spacer PCB clip | 3017W5PAR99F20X |
| 21WA4 | Front/Threaded rear spacer PCB clip | 321WA4PAR99F20X |
| 25W3 | Front/Threaded rear spacer PCB clip | 3025W3PAR99F20X |
| 27W2 | Front/Threaded rear spacer PCB clip | 3027W2PAR99F20X |
| 24W7 | Front/Threaded rear spacer PCB clip | 3024W7PAR99F20X |
| 36W4 | Front/Threaded rear spacer PCB clip | 3036W4PAR99F20X |
| 43W2 | Front/Threaded rear spacer PCB clip | 3043W2PAR99F20X |
| 47W1 | Front/Threaded rear spacer PCB clip | 3047W1PAR99F20X |

PCB thickness .091"/2.3 mm




**Socket connector**

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 5W1 | Front/Threaded rear spacer PCB clip | 3005W1SAR99F40X |
| 7W2 | Front/Threaded rear spacer PCB clip | 3007W2SAR99F40X |
| 11W1 | Front/Threaded rear spacer PCB clip | 3011W1SAR99F40X |
| 9W4 | Front/Threaded rear spacer PCB clip | 3009W4SAR99F40X |
| 13W3 | Front/Threaded rear spacer PCB clip | 3013W3SAR99F40X |
| 17W2 | Front/Threaded rear spacer PCB clip | 3017W2SAR99F40X |
| 21W1 | Front/Threaded rear spacer PCB clip | 3021W1SAR99F40X |
| 13W6 | Front/Threaded rear spacer PCB clip | 3013W6SAR99F40X |
| 17W5 | Front/Threaded rear spacer PCB clip | 3017W5SAR99F40X |
| 21WA4 | Front/Threaded rear spacer PCB clip | 321WA4SAR99F40X |
| 25W3 | Front/Threaded rear spacer PCB clip | 3025W3SAR99F40X |
| 27W2 | Front/Threaded rear spacer PCB clip | 3027W2SAR99F40X |
| 24W7 | Front/Threaded rear spacer PCB clip | 3024W7SAR99F40X |
| 36W4 | Front/Threaded rear spacer PCB clip | 3036W4SAR99F40X |
| 43W2 | Front/Threaded rear spacer PCB clip | 3043W2SAR99F40X |
| 47W1 | Front/Threaded rear spacer PCB clip | 3047W1SAR99F40X |

**Plug connector**

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 5W1 | Front/Threaded rear spacer PCB clip | 3005W1PAR99F40X |
| 7W2 | Front/Threaded rear spacer PCB clip | 3007W2PAR99F40X |
| 11W1 | Front/Threaded rear spacer PCB clip | 3011W1PAR99F40X |
| 9W4 | Front/Threaded rear spacer PCB clip | 3009W4PAR99F40X |
| 13W3 | Front/Threaded rear spacer PCB clip | 3013W3PAR99F40X |
| 17W2 | Front/Threaded rear spacer PCB clip | 3017W2PAR99F40X |
| 21W1 | Front/Threaded rear spacer PCB clip | 3021W1PAR99F40X |
| 13W6 | Front/Threaded rear spacer PCB clip | 3013W6PAR99F40X |
| 17W5 | Front/Threaded rear spacer PCB clip | 3017W5PAR99F40X |
| 21WA4 | Front/Threaded rear spacer PCB clip | 321WA4PAR99F40X |
| 25W3 | Front/Threaded rear spacer PCB clip | 3025W3PAR99F40X |
| 27W2 | Front/Threaded rear spacer PCB clip | 3027W2PAR99F40X |
| 24W7 | Front/Threaded rear spacer PCB clip | 3024W7PAR99F40X |
| 36W4 | Front/Threaded rear spacer PCB clip | 3036W4PAR99F40X |
| 43W2 | Front/Threaded rear spacer PCB clip | 3043W2PAR99F40X |
| 47W1 | Front/Threaded rear spacer PCB clip | 3047W1PAR99F40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter

# COMBINATION D-SUB WITH SIGNAL CONTACTS

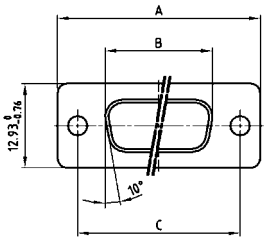
## Solder pin – Straight – Precision machined contacts

RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### DESCRIPTION

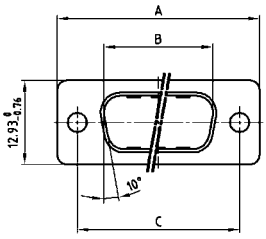
- **Threaded rear spacer .256"/6.5 mm**
- Mounting style:
  with 4-40 UNC threaded rear spacer with PCB clip
  for PCB thickness .063"/1.6 mm
  for PCB thickness .091"/2.3 mm
  for PCB thickness .126"/3.2 mm
- M3 and PCB clip with front spacer available on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
  (brass tin plated or stainless steel available on request)

### SOCKET CONNECTOR



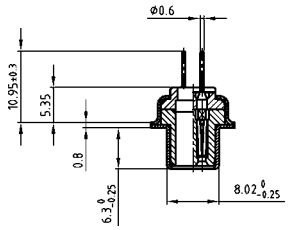

| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 1 | 31.19 | 16.46 | 25.00 +0.12 -0.13 |
| 2 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |
| 5 | 67.31 | 52.55 | 61.10 +0.14 -0.11 |

### PLUG CONNECTOR

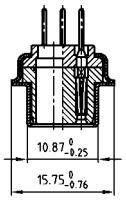



| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 1 | 31.19 | 16.79 | 25.00 +0.12 -0.13 | 6.12 |
| 2 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 5 | 67.31 | 52.68 | 61.10 +0.14 -0.11 | 5.99 |

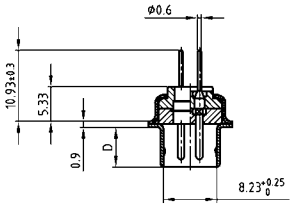
Shell size 1-4



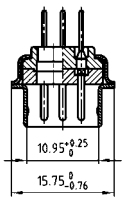

Shell size 5




Shell size 1-4

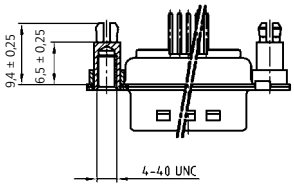



Shell size 5




### ORDER DATA

PCB thickness .063"/1.6 mm




| SOCKET CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 5W1 | Threaded rear spacer PCB clip | 3005W1SAR99C20X |
| 7W2 | Threaded rear spacer PCB clip | 3007W2SAR99C20X |
| 11W1 | Threaded rear spacer PCB clip | 3011W1SAR99C20X |
| 9W4 | Threaded rear spacer PCB clip | 3009W4SAR99C20X |
| 13W3 | Threaded rear spacer PCB clip | 3013W3SAR99C20X |
| 17W2 | Threaded rear spacer PCB clip | 3017W2SAR99C20X |
| 21W1 | Threaded rear spacer PCB clip | 3021W1SAR99C20X |
| 13W6 | Threaded rear spacer PCB clip | 3013W6SAR99C20X |
| 17W5 | Threaded rear spacer PCB clip | 3017W5SAR99C20X |
| 21WA4 | Threaded rear spacer PCB clip | 321WA4SAR99C20X |
| 25W3 | Threaded rear spacer PCB clip | 3025W3SAR99C20X |
| 27W2 | Threaded rear spacer PCB clip | 3027W2SAR99C20X |
| 24W7 | Threaded rear spacer PCB clip | 3024W7SAR99C20X |
| 36W4 | Threaded rear spacer PCB clip | 3036W4SAR99C20X |
| 43W2 | Threaded rear spacer PCB clip | 3043W2SAR99C20X |
| 47W1 | Threaded rear spacer PCB clip | 3047W1SAR99C20X |

| PLUG CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 5W1 | Threaded rear spacer PCB clip | 3005W1PAR99C20X |
| 7W2 | Threaded rear spacer PCB clip | 3007W2PAR99C20X |
| 11W1 | Threaded rear spacer PCB clip | 3011W1PAR99C20X |
| 9W4 | Threaded rear spacer PCB clip | 3009W4PAR99C20X |
| 13W3 | Threaded rear spacer PCB clip | 3013W3PAR99C20X |
| 17W2 | Threaded rear spacer PCB clip | 3017W2PAR99C20X |
| 21W1 | Threaded rear spacer PCB clip | 3021W1PAR99C20X |
| 13W6 | Threaded rear spacer PCB clip | 3013W6PAR99C20X |
| 17W5 | Threaded rear spacer PCB clip | 3017W5PAR99C20X |
| 21WA4 | Threaded rear spacer PCB clip | 321WA4PAR99C20X |
| 25W3 | Threaded rear spacer PCB clip | 3025W3PAR99C20X |
| 27W2 | Threaded rear spacer PCB clip | 3027W2PAR99C20X |
| 24W7 | Threaded rear spacer PCB clip | 3024W7PAR99C20X |
| 36W4 | Threaded rear spacer PCB clip | 3036W4PAR99C20X |
| 43W2 | Threaded rear spacer PCB clip | 3043W2PAR99C20X |
| 47W1 | Threaded rear spacer PCB clip | 3047W1PAR99C20X |

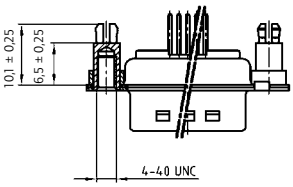
PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter

# Combination D-SUB – Mounting styles

## Solder pin – Straight – Precision machined contacts

### Order data

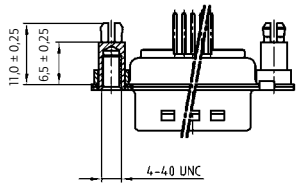
PCB thickness .091"/2.3 mm




| Socket connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded rear spacer PCB clip | 3005W1SAR99C40X |
| 7W2 | Threaded rear spacer PCB clip | 3007W2SAR99C40X |
| 11W1 | Threaded rear spacer PCB clip | 3011W1SAR99C40X |
| 9W4 | Threaded rear spacer PCB clip | 3009W4SAR99C40X |
| 13W3 | Threaded rear spacer PCB clip | 3013W3SAR99C40X |
| 17W2 | Threaded rear spacer PCB clip | 3017W2SAR99C40X |
| 21W1 | Threaded rear spacer PCB clip | 3021W1SAR99C40X |
| 13W6 | Threaded rear spacer PCB clip | 3013W6SAR99C40X |
| 17W5 | Threaded rear spacer PCB clip | 3017W5SAR99C40X |
| 21WA4 | Threaded rear spacer PCB clip | 321WA4SAR99C40X |
| 25W3 | Threaded rear spacer PCB clip | 3025W3SAR99C40X |
| 27W2 | Threaded rear spacer PCB clip | 3027W2SAR99C40X |
| 24W7 | Threaded rear spacer PCB clip | 3024W7SAR99C40X |
| 36W4 | Threaded rear spacer PCB clip | 3036W4SAR99C40X |
| 43W2 | Threaded rear spacer PCB clip | 3043W2SAR99C40X |
| 47W1 | Threaded rear spacer PCB clip | 3047W1SAR99C40X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded rear spacer PCB clip | 3005W1PAR99C40X |
| 7W2 | Threaded rear spacer PCB clip | 3007W2PAR99C40X |
| 11W1 | Threaded rear spacer PCB clip | 3011W1PAR99C40X |
| 9W4 | Threaded rear spacer PCB clip | 3009W4PAR99C40X |
| 13W3 | Threaded rear spacer PCB clip | 3013W3PAR99C40X |
| 17W2 | Threaded rear spacer PCB clip | 3017W2PAR99C40X |
| 21W1 | Threaded rear spacer PCB clip | 3021W1PAR99C40X |
| 13W6 | Threaded rear spacer PCB clip | 3013W6PAR99C40X |
| 17W5 | Threaded rear spacer PCB clip | 3017W5PAR99C40X |
| 21WA4 | Threaded rear spacer PCB clip | 321WA4PAR99C40X |
| 25W3 | Threaded rear spacer PCB clip | 3025W3PAR99C40X |
| 27W2 | Threaded rear spacer PCB clip | 3027W2PAR99C40X |
| 24W7 | Threaded rear spacer PCB clip | 3024W7PAR99C40X |
| 36W4 | Threaded rear spacer PCB clip | 3036W4PAR99C40X |
| 43W2 | Threaded rear spacer PCB clip | 3043W2PAR99C40X |
| 47W1 | Threaded rear spacer PCB clip | 3047W1PAR99C40X |

PCB thickness .126"/3.2 mm




| Socket connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded rear spacer PCB clip | 3005W1SAR99C60X |
| 7W2 | Threaded rear spacer PCB clip | 3007W2SAR99C60X |
| 11W1 | Threaded rear spacer PCB clip | 3011W1SAR99C60X |
| 9W4 | Threaded rear spacer PCB clip | 3009W4SAR99C60X |
| 13W3 | Threaded rear spacer PCB clip | 3013W3SAR99C60X |
| 17W2 | Threaded rear spacer PCB clip | 3017W2SAR99C60X |
| 21W1 | Threaded rear spacer PCB clip | 3021W1SAR99C60X |
| 13W6 | Threaded rear spacer PCB clip | 3013W6SAR99C60X |
| 17W5 | Threaded rear spacer PCB clip | 3017W5SAR99C60X |
| 21WA4 | Threaded rear spacer PCB clip | 321WA4SAR99C60X |
| 25W3 | Threaded rear spacer PCB clip | 3025W3SAR99C60X |
| 27W2 | Threaded rear spacer PCB clip | 3027W2SAR99C60X |
| 24W7 | Threaded rear spacer PCB clip | 3024W7SAR99C60X |
| 36W4 | Threaded rear spacer PCB clip | 3036W4SAR99C60X |
| 43W2 | Threaded rear spacer PCB clip | 3043W2SAR99C60X |
| 47W1 | Threaded rear spacer PCB clip | 3047W1SAR99C60X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded rear spacer PCB clip | 3005W1PAR99C60X |
| 7W2 | Threaded rear spacer PCB clip | 3007W2PAR99C60X |
| 11W1 | Threaded rear spacer PCB clip | 3011W1PAR99C60X |
| 9W4 | Threaded rear spacer PCB clip | 3009W4PAR99C60X |
| 13W3 | Threaded rear spacer PCB clip | 3013W3PAR99C60X |
| 17W2 | Threaded rear spacer PCB clip | 3017W2PAR99C60X |
| 21W1 | Threaded rear spacer PCB clip | 3021W1PAR99C60X |
| 13W6 | Threaded rear spacer PCB clip | 3013W6PAR99C60X |
| 17W5 | Threaded rear spacer PCB clip | 3017W5PAR99C60X |
| 21WA4 | Threaded rear spacer PCB clip | 321WA4PAR99C60X |
| 25W3 | Threaded rear spacer PCB clip | 3025W3PAR99C60X |
| 27W2 | Threaded rear spacer PCB clip | 3027W2PAR99C60X |
| 24W7 | Threaded rear spacer PCB clip | 3024W7PAR99C60X |
| 36W4 | Threaded rear spacer PCB clip | 3036W4PAR99C60X |
| 43W2 | Threaded rear spacer PCB clip | 3043W2PAR99C60X |
| 47W1 | Threaded rear spacer PCB clip | 3047W1PAR99C60X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter

# COMBINATION D-SUB WITH SIGNAL CONTACTS

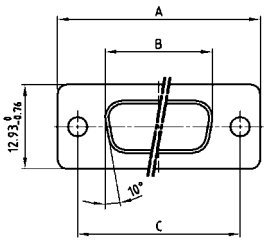
## Press-fit – Straight – Precision machined contacts

RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### DESCRIPTION

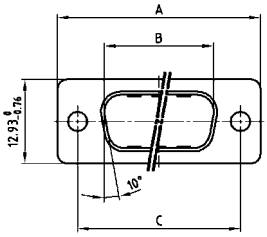
- Mounting styles:
  - with 4-40 UNC or M3 threaded rear spacer
  - with M3 or 4-40 UNC rear press-fit spacer
- For .040" / 1.0 mm $^{+.003"/0.09\ mm}_{-.002"/0.06\ mm}$ finished through-hole diameter
  Refer to product drawing for details
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
  (brass tin plated or stainless steel available on request)
- For power contacts please contact factory

### SOCKET CONNECTOR



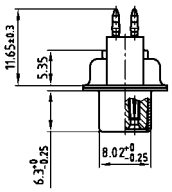

| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 1 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 2 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |
| 5 | 67.31 | 52.55 | 61.10 $^{+0.14}_{-0.11}$ |

### PLUG CONNECTOR

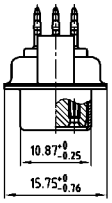



| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 1 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 2 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 5 | 67.31 | 52.68 | 61.10 $^{+0.14}_{-0.11}$ | 5.99 |

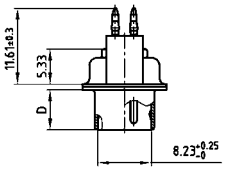
Shell size 1-4



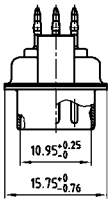

Shell size 5



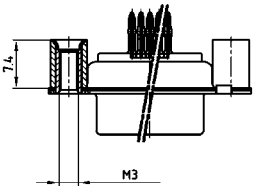

Shell size 1-4




Shell size 5




### ORDER DATA




**SOCKET CONNECTOR**

| Design | Mounting style M3 | Part Number |
|---|---|---|
| 5W1 | Threaded rear spacer | 3005W1SAP99A70X |
| 7W2 | Threaded rear spacer | 3007W2SAP99A70X |
| 11W1 | Threaded rear spacer | 3011W1SAP99A70X |
| 9W4 | Threaded rear spacer | 3009W4SAP99A70X |
| 13W3 | Threaded rear spacer | 3013W3SAP99A70X |
| 17W2 | Threaded rear spacer | 3017W2SAP99A70X |
| 21W1 | Threaded rear spacer | 3021W1SAP99A70X |
| 13W6 | Threaded rear spacer | 3013W6SAP99A70X |
| 17W5 | Threaded rear spacer | 3017W5SAP99A70X |
| 21WA4 | Threaded rear spacer | 321WA4SAP99A70X |
| 25W3 | Threaded rear spacer | 3025W3SAP99A70X |
| 27W2 | Threaded rear spacer | 3027W2SAP99A70X |
| 24W7 | Threaded rear spacer | 3024W7SAP99A70X |
| 36W4 | Threaded rear spacer | 3036W4SAP99A70X |
| 43W2 | Threaded rear spacer | 3043W2SAP99A70X |
| 47W1 | Threaded rear spacer | 3047W1SAP99A70X |

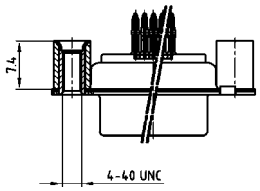
**PLUG CONNECTOR**

| Design | Mounting style M3 | Part Number |
|---|---|---|
| 5W1 | Threaded rear spacer | 3005W1PAP99A70X |
| 7W2 | Threaded rear spacer | 3007W2PAP99A70X |
| 11W1 | Threaded rear spacer | 3011W1PAP99A70X |
| 9W4 | Threaded rear spacer | 3009W4PAP99A70X |
| 13W3 | Threaded rear spacer | 3013W3PAP99A70X |
| 17W2 | Threaded rear spacer | 3017W2PAP99A70X |
| 21W1 | Threaded rear spacer | 3021W1PAP99A70X |
| 13W6 | Threaded rear spacer | 3013W6PAP99A70X |
| 17W5 | Threaded rear spacer | 3017W5PAP99A70X |
| 21WA4 | Threaded rear spacer | 321WA4PAP99A70X |
| 25W3 | Threaded rear spacer | 3025W3PAP99A70X |
| 27W2 | Threaded rear spacer | 3027W2PAP99A70X |
| 24W7 | Threaded rear spacer | 3024W7PAP99A70X |
| 36W4 | Threaded rear spacer | 3036W4PAP99A70X |
| 43W2 | Threaded rear spacer | 3043W2PAP99A70X |
| 47W1 | Threaded rear spacer | 3047W1PAP99A70X |

# Combination D-SUB – Mounting styles

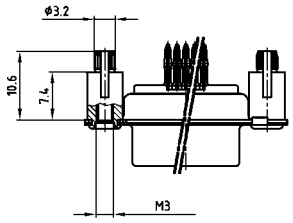
## Press-fit – Straight – Precision machined contacts

### Order data



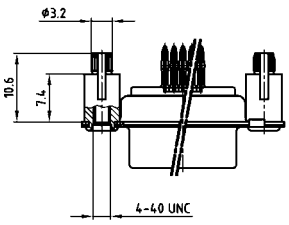

| Socket connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded rear spacer | 3005W1SAP99A80X |
| 7W2 | Threaded rear spacer | 3007W2SAP99A80X |
| 11W1 | Threaded rear spacer | 3011W1SAP99A80X |
| 9W4 | Threaded rear spacer | 3009W4SAP99A80X |
| 13W3 | Threaded rear spacer | 3013W3SAP99A80X |
| 17W2 | Threaded rear spacer | 3017W2SAP99A80X |
| 21W1 | Threaded rear spacer | 3021W1SAP99A80X |
| 13W6 | Threaded rear spacer | 3013W6SAP99A80X |
| 17W5 | Threaded rear spacer | 3017W5SAP99A80X |
| 21WA4 | Threaded rear spacer | 321WA4SAP99A80X |
| 25W3 | Threaded rear spacer | 3025W3SAP99A80X |
| 27W2 | Threaded rear spacer | 3027W2SAP99A80X |
| 24W7 | Threaded rear spacer | 3024W7SAP99A80X |
| 36W4 | Threaded rear spacer | 3036W4SAP99A80X |
| 43W2 | Threaded rear spacer | 3043W2SAP99A80X |
| 47W1 | Threaded rear spacer | 3047W1SAP99A80X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded rear spacer | 3005W1PAP99A80X |
| 7W2 | Threaded rear spacer | 3007W2PAP99A80X |
| 11W1 | Threaded rear spacer | 3011W1PAP99A80X |
| 9W4 | Threaded rear spacer | 3009W4PAP99A80X |
| 13W3 | Threaded rear spacer | 3013W3PAP99A80X |
| 17W2 | Threaded rear spacer | 3017W2PAP99A80X |
| 21W1 | Threaded rear spacer | 3021W1PAP99A80X |
| 13W6 | Threaded rear spacer | 3013W6PAP99A80X |
| 17W5 | Threaded rear spacer | 3017W5PAP99A80X |
| 21WA4 | Threaded rear spacer | 321WA4PAP99A80X |
| 25W3 | Threaded rear spacer | 3025W3PAP99A80X |
| 27W2 | Threaded rear spacer | 3027W2PAP99A80X |
| 24W7 | Threaded rear spacer | 3024W7PAP99A80X |
| 36W4 | Threaded rear spacer | 3036W4PAP99A80X |
| 43W2 | Threaded rear spacer | 3043W2PAP99A80X |
| 47W1 | Threaded rear spacer | 3047W1PAP99A80X |




| Socket connector | | |
|---|---|---|
| Design | Mounting style M3 | Part Number |
| 5W1 | Rear press-fit spacer | 3005W1SAP99W10X |
| 7W2 | Rear press-fit spacer | 3007W2SAP99W10X |
| 11W1 | Rear press-fit spacer | 3011W1SAP99W10X |
| 9W4 | Rear press-fit spacer | 3009W4SAP99W10X |
| 13W3 | Rear press-fit spacer | 3013W3SAP99W10X |
| 17W2 | Rear press-fit spacer | 3017W2SAP99W10X |
| 21W1 | Rear press-fit spacer | 3021W1SAP99W10X |
| 13W6 | Rear press-fit spacer | 3013W6SAP99W10X |
| 17W5 | Rear press-fit spacer | 3017W5SAP99W10X |
| 21WA4 | Rear press-fit spacer | 321WA4SAP99W10X |
| 25W3 | Rear press-fit spacer | 3025W3SAP99W10X |
| 27W2 | Rear press-fit spacer | 3027W2SAP99W10X |
| 24W7 | Rear press-fit spacer | 3024W7SAP99W10X |
| 36W4 | Rear press-fit spacer | 3036W4SAP99W10X |
| 43W2 | Rear press-fit spacer | 3043W2SAP99W10X |
| 47W1 | Rear press-fit spacer | 3047W1SAP99W10X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style M3 | Part Number |
| 5W1 | Rear press-fit spacer | 3005W1PAP99W10X |
| 7W2 | Rear press-fit spacer | 3007W2PAP99W10X |
| 11W1 | Rear press-fit spacer | 3011W1PAP99W10X |
| 9W4 | Rear press-fit spacer | 3009W4PAP99W10X |
| 13W3 | Rear press-fit spacer | 3013W3PAP99W10X |
| 17W2 | Rear press-fit spacer | 3017W2PAP99W10X |
| 21W1 | Rear press-fit spacer | 3021W1PAP99W10X |
| 13W6 | Rear press-fit spacer | 3013W6PAP99W10X |
| 17W5 | Rear press-fit spacer | 3017W5PAP99W10X |
| 21WA4 | Rear press-fit spacer | 321WA4PAP99W10X |
| 25W3 | Rear press-fit spacer | 3025W3PAP99W10X |
| 27W2 | Rear press-fit spacer | 3027W2PAP99W10X |
| 24W7 | Rear press-fit spacer | 3024W7PAP99W10X |
| 36W4 | Rear press-fit spacer | 3036W4PAP99W10X |
| 43W2 | Rear press-fit spacer | 3043W2PAP99W10X |
| 47W1 | Rear press-fit spacer | 3047W1PAP99W10X |



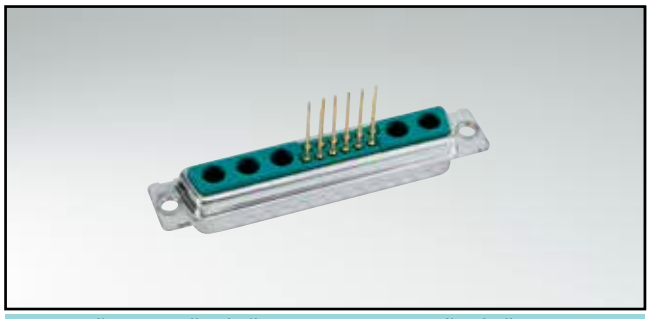

| Socket connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Rear press-fit spacer | 3005W1SAP99W20X |
| 7W2 | Rear press-fit spacer | 3007W2SAP99W20X |
| 11W1 | Rear press-fit spacer | 3011W1SAP99W20X |
| 9W4 | Rear press-fit spacer | 3009W4SAP99W20X |
| 13W3 | Rear press-fit spacer | 3013W3SAP99W20X |
| 17W2 | Rear press-fit spacer | 3017W2SAP99W20X |
| 21W1 | Rear press-fit spacer | 3021W1SAP99W20X |
| 13W6 | Rear press-fit spacer | 3013W6SAP99W20X |
| 17W5 | Rear press-fit spacer | 3017W5SAP99W20X |
| 21WA4 | Rear press-fit spacer | 321WA4SAP99W20X |
| 25W3 | Rear press-fit spacer | 3025W3SAP99W20X |
| 27W2 | Rear press-fit spacer | 3027W2SAP99W20X |
| 24W7 | Rear press-fit spacer | 3024W7SAP99W20X |
| 36W4 | Rear press-fit spacer | 3036W4SAP99W20X |
| 43W2 | Rear press-fit spacer | 3043W2SAP99W20X |
| 47W1 | Rear press-fit spacer | 3047W1SAP99W20X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Rear press-fit spacer | 3005W1PAP99W20X |
| 7W2 | Rear press-fit spacer | 3007W2PAP99W20X |
| 11W1 | Rear press-fit spacer | 3011W1PAP99W20X |
| 9W4 | Rear press-fit spacer | 3009W4PAP99W20X |
| 13W3 | Rear press-fit spacer | 3013W3PAP99W20X |
| 17W2 | Rear press-fit spacer | 3017W2PAP99W20X |
| 21W1 | Rear press-fit spacer | 3021W1PAP99W20X |
| 13W6 | Rear press-fit spacer | 3013W6PAP99W20X |
| 17W5 | Rear press-fit spacer | 3017W5PAP99W20X |
| 21WA4 | Rear press-fit spacer | 321WA4PAP99W20X |
| 25W3 | Rear press-fit spacer | 3025W3PAP99W20X |
| 27W2 | Rear press-fit spacer | 3027W2PAP99W20X |
| 24W7 | Rear press-fit spacer | 3024W7PAP99W20X |
| 36W4 | Rear press-fit spacer | 3036W4PAP99W20X |
| 43W2 | Rear press-fit spacer | 3043W2PAP99W20X |
| 47W1 | Rear press-fit spacer | 3047W1PAP99W20X |

Rear press-fit spacer (snap in) .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# Combination D-SUB with signal contacts

## Wire wrap – Precision machined contacts

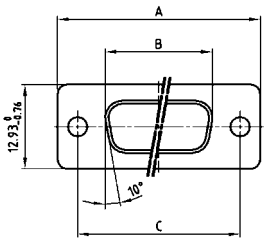


RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### Description

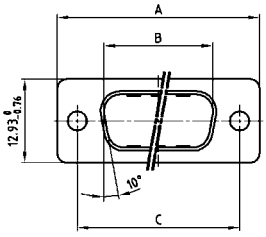
- Mounting styles:
  - with through-hole, Ø .118"/3 mm
  - with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
  (brass tin plated or stainless steel available on request)

### Socket connector



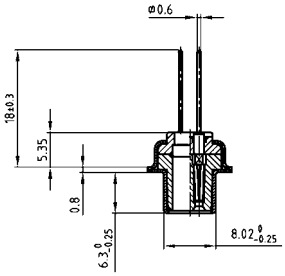

| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 1 | 31.19 | 16.46 | 25.00 +0.12 -0.13 |
| 2 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |
| 5 | 67.31 | 52.55 | 61.10 +0.14 -0.11 |

### Plug connector

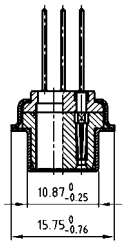



| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 1 | 31.19 | 16.79 | 25.00 +0.12 -0.13 | 6.12 |
| 2 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 5 | 67.31 | 52.68 | 61.10 +0.14 -0.11 | 5.99 |

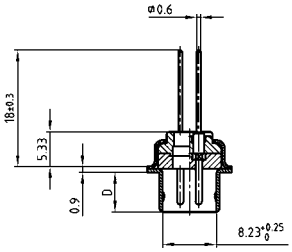
Shell size 1-4



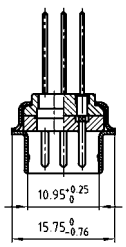

Shell size 5



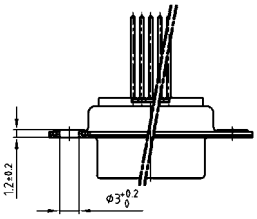

Shell size 1-4




Shell size 5




### Order data




**Socket connector**

| Design | Mounting style | Part Number |
|---|---|---|
| 5W1 | Through-hole | 3005W1SAN99A10X |
| 7W2 | Through-hole | 3007W2SAN99A10X |
| 11W1 | Through-hole | 3011W1SAN99A10X |
| 9W4 | Through-hole | 3009W4SAN99A10X |
| 13W3 | Through-hole | 3013W3SAN99A10X |
| 17W2 | Through-hole | 3017W2SAN99A10X |
| 21W1 | Through-hole | 3021W1SAN99A10X |
| 13W6 | Through-hole | 3013W6SAN99A10X |
| 17W5 | Through-hole | 3017W5SAN99A10X |
| 21WA4 | Through-hole | 321WA4SAN99A10X |
| 25W3 | Through-hole | 3025W3SAN99A10X |
| 27W2 | Through-hole | 3027W2SAN99A10X |
| 24W7 | Through-hole | 3024W7SAN99A10X |
| 36W4 | Through-hole | 3036W4SAN99A10X |
| 43W2 | Through-hole | 3043W2SAN99A10X |
| 47W1 | Through-hole | 3047W1SAN99A10X |

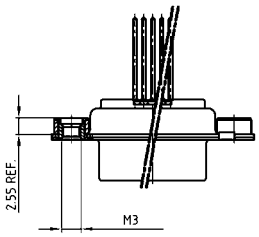
**Plug connector**

| Design | Mounting style | Part Number |
|---|---|---|
| 5W1 | Through-hole | 3005W1PAN99A10X |
| 7W2 | Through-hole | 3007W2PAN99A10X |
| 11W1 | Through-hole | 3011W1PAN99A10X |
| 9W4 | Through-hole | 3009W4PAN99A10X |
| 13W3 | Through-hole | 3013W3PAN99A10X |
| 17W2 | Through-hole | 3017W2PAN99A10X |
| 21W1 | Through-hole | 3021W1PAN99A10X |
| 13W6 | Through-hole | 3013W6PAN99A10X |
| 17W5 | Through-hole | 3017W5PAN99A10X |
| 21WA4 | Through-hole | 321WA4PAN99A10X |
| 25W3 | Through-hole | 3025W3PAN99A10X |
| 27W2 | Through-hole | 3027W2PAN99A10X |
| 24W7 | Through-hole | 3024W7PAN99A10X |
| 36W4 | Through-hole | 3036W4PAN99A10X |
| 43W2 | Through-hole | 3043W2PAN99A10X |
| 47W1 | Through-hole | 3047W1PAN99A10X |

# Combination D-SUB – Mounting styles

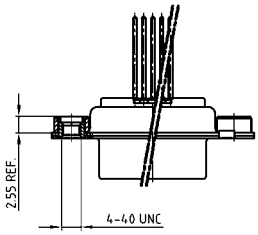
## Wire wrap – Precision machined contacts

### Order data




| Socket connector | | |
|---|---|---|
| Design | Mounting style M3 | Part Number |
| 5W1 | Threaded insert | 3005W1SAN99A20X |
| 7W2 | Threaded insert | 3007W2SAN99A20X |
| 11W1 | Threaded insert | 3011W1SAN99A20X |
| 9W4 | Threaded insert | 3009W4SAN99A20X |
| 13W3 | Threaded insert | 3013W3SAN99A20X |
| 17W2 | Threaded insert | 3017W2SAN99A20X |
| 21W1 | Threaded insert | 3021W1SAN99A20X |
| 13W6 | Threaded insert | 3013W6SAN99A20X |
| 17W5 | Threaded insert | 3017W5SAN99A20X |
| 21WA4 | Threaded insert | 321WA4SAN99A20X |
| 25W3 | Threaded insert | 3025W3SAN99A20X |
| 27W2 | Threaded insert | 3027W2SAN99A20X |
| 24W7 | Threaded insert | 3024W7SAN99A20X |
| 36W4 | Threaded insert | 3036W4SAN99A20X |
| 43W2 | Threaded insert | 3043W2SAN99A20X |
| 47W1 | Threaded insert | 3047W1SAN99A20X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style M3 | Part Number |
| 5W1 | Threaded insert | 3005W1PAN99A20X |
| 7W2 | Threaded insert | 3007W2PAN99A20X |
| 11W1 | Threaded insert | 3011W1PAN99A20X |
| 9W4 | Threaded insert | 3009W4PAN99A20X |
| 13W3 | Threaded insert | 3013W3PAN99A20X |
| 17W2 | Threaded insert | 3017W2PAN99A20X |
| 21W1 | Threaded insert | 3021W1PAN99A20X |
| 13W6 | Threaded insert | 3013W6PAN99A20X |
| 17W5 | Threaded insert | 3017W5PAN99A20X |
| 21WA4 | Threaded insert | 321WA4PAN99A20X |
| 25W3 | Threaded insert | 3025W3PAN99A20X |
| 27W2 | Threaded insert | 3027W2PAN99A20X |
| 24W7 | Threaded insert | 3024W7PAN99A20X |
| 36W4 | Threaded insert | 3036W4PAN99A20X |
| 43W2 | Threaded insert | 3043W2PAN99A20X |
| 47W1 | Threaded insert | 3047W1PAN99A20X |

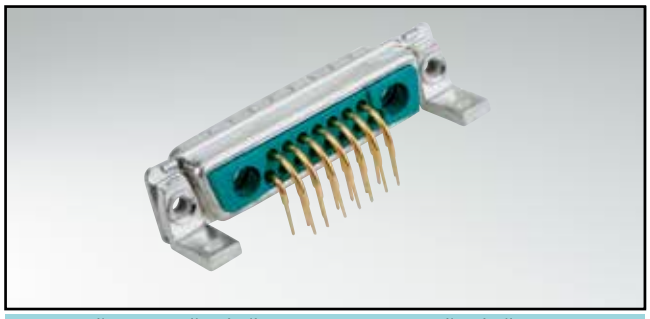



| Socket connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded insert | 3005W1SAN99A30X |
| 7W2 | Threaded insert | 3007W2SAN99A30X |
| 11W1 | Threaded insert | 3011W1SAN99A30X |
| 9W4 | Threaded insert | 3009W4SAN99A30X |
| 13W3 | Threaded insert | 3013W3SAN99A30X |
| 17W2 | Threaded insert | 3017W2SAN99A30X |
| 21W1 | Threaded insert | 3021W1SAN99A30X |
| 13W6 | Threaded insert | 3013W6SAN99A30X |
| 17W5 | Threaded insert | 3017W5SAN99A30X |
| 21WA4 | Threaded insert | 321WA4SAN99A30X |
| 25W3 | Threaded insert | 3025W3SAN99A30X |
| 27W2 | Threaded insert | 3027W2SAN99A30X |
| 24W7 | Threaded insert | 3024W7SAN99A30X |
| 36W4 | Threaded insert | 3036W4SAN99A30X |
| 43W2 | Threaded insert | 3043W2SAN99A30X |
| 47W1 | Threaded insert | 3047W1SAN99A30X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded insert | 3005W1PAN99A30X |
| 7W2 | Threaded insert | 3007W2PAN99A30X |
| 11W1 | Threaded insert | 3011W1PAN99A30X |
| 9W4 | Threaded insert | 3009W4PAN99A30X |
| 13W3 | Threaded insert | 3013W3PAN99A30X |
| 17W2 | Threaded insert | 3017W2PAN99A30X |
| 21W1 | Threaded insert | 3021W1PAN99A30X |
| 13W6 | Threaded insert | 3013W6PAN99A30X |
| 17W5 | Threaded insert | 3017W5PAN99A30X |
| 21WA4 | Threaded insert | 321WA4PAN99A30X |
| 25W3 | Threaded insert | 3025W3PAN99A30X |
| 27W2 | Threaded insert | 3027W2PAN99A30X |
| 24W7 | Threaded insert | 3024W7PAN99A30X |
| 36W4 | Threaded insert | 3036W4PAN99A30X |
| 43W2 | Threaded insert | 3043W2PAN99A30X |
| 47W1 | Threaded insert | 3047W1PAN99A30X |

# COMBINATION D-SUB WITH SIGNAL CONTACTS

## Solder pin – Angled – .318"/7.19 mm – Precision machined contacts – Metal bracket

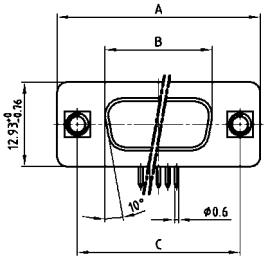


RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

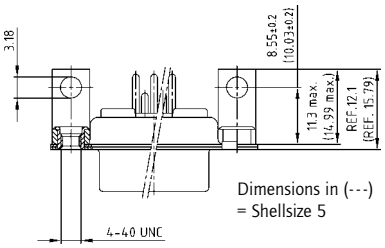
### DESCRIPTION

- Mounting styles:
  - with mounting bracket and 4-40 UNC threaded insert
  - with mounting bracket and 4-40 UNC front spacer
  - with mounting bracket, PCB clip and 4-40 UNC threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC front spacer
- M3 thread design available on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
  (brass tin plated or stainless steel available on request)

### SOCKET CONNECTOR

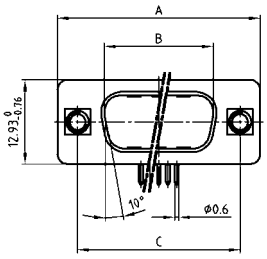



| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 1 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 2 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |
| 5 | 67.31 | 52.55 | 61.10 $^{+0.14}_{-0.11}$ |

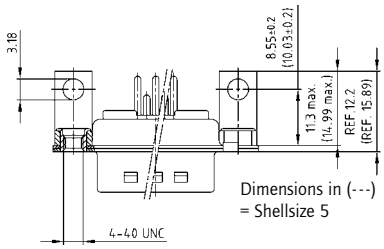



Dimensions in (---)
= Shellsize 5

### PLUG CONNECTOR

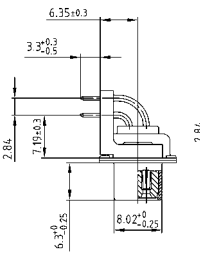



| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 1 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 2 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 5 | 67.31 | 52.68 | 61.10 $^{+0.14}_{-0.11}$ | 5.99 |

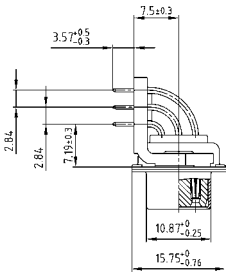



Dimensions in (---)
= Shellsize 5

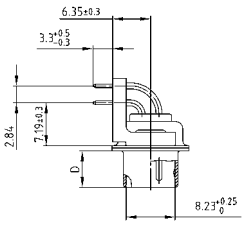
Shell size 1-4



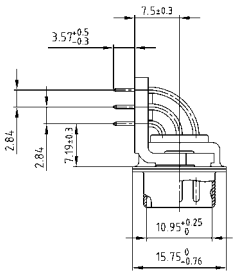

Shell size 5



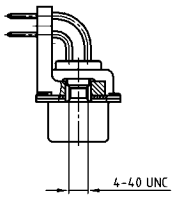

Shell size 1-4




Shell size 5




### ORDER DATA



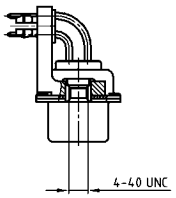

| SOCKET CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 5W1 | Threaded insert | 3005W1SAT99N20X |
| 7W2 | Threaded insert | 3007W2SAT99N20X |
| 11W1 | Threaded insert | 3011W1SAT99N20X |
| 9W4 | Threaded insert | 3009W4SAT99N20X |
| 13W3 | Threaded insert | 3013W3SAT99N20X |
| 17W2 | Threaded insert | 3017W2SAT99N20X |
| 21W1 | Threaded insert | 3021W1SAT99N20X |
| 13W6 | Threaded insert | 3013W6SAT99N20X |
| 17W5 | Threaded insert | 3017W5SAT99N20X |
| 21WA4 | Threaded insert | 321WA4SAT99N20X |
| 25W3 | Threaded insert | 3025W3SAT99N20X |
| 27W2 | Threaded insert | 3027W2SAT99N20X |
| 24W7 | Threaded insert | 3024W7SAT99N20X |
| 36W4 | Threaded insert | 3036W4SAT99N20X |
| 43W2 | Threaded insert | 3043W2SAT99N20X |
| 47W1 | Threaded insert | 3047W1SAT99N20X |

| PLUG CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 5W1 | Threaded insert | 3005W1PAT99N20X |
| 7W2 | Threaded insert | 3007W2PAT99N20X |
| 11W1 | Threaded insert | 3011W1PAT99N20X |
| 9W4 | Threaded insert | 3009W4PAT99N20X |
| 13W3 | Threaded insert | 3013W3PAT99N20X |
| 17W2 | Threaded insert | 3017W2PAT99N20X |
| 21W1 | Threaded insert | 3021W1PAT99N20X |
| 13W6 | Threaded insert | 3013W6PAT99N20X |
| 17W5 | Threaded insert | 3017W5PAT99N20X |
| 21WA4 | Threaded insert | 321WA4PAT99N20X |
| 25W3 | Threaded insert | 3025W3PAT99N20X |
| 27W2 | Threaded insert | 3027W2PAT99N20X |
| 24W7 | Threaded insert | 3024W7PAT99N20X |
| 36W4 | Threaded insert | 3036W4PAT99N20X |
| 43W2 | Threaded insert | 3043W2PAT99N20X |
| 47W1 | Threaded insert | 3047W1PAT99N20X |

# Combination D-SUB – Mounting styles

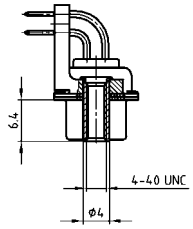
## Solder pin – Angled – .318"/7.19 mm – Precision machined contacts – Metal bracket

### Order data



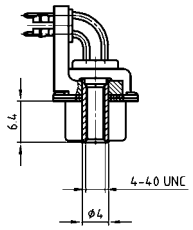

| Socket connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded insert/PCB clip | 3005W1SAT99N40X |
| 7W2 | Threaded insert/PCB clip | 3007W2SAT99N40X |
| 11W1 | Threaded insert/PCB clip | 3011W1SAT99N40X |
| 9W4 | Threaded insert/PCB clip | 3009W4SAT99N40X |
| 13W3 | Threaded insert/PCB clip | 3013W3SAT99N40X |
| 17W2 | Threaded insert/PCB clip | 3017W2SAT99N40X |
| 21W1 | Threaded insert/PCB clip | 3021W1SAT99N40X |
| 13W6 | Threaded insert/PCB clip | 3013W6SAT99N40X |
| 17W5 | Threaded insert/PCB clip | 3017W5SAT99N40X |
| 21WA4 | Threaded insert/PCB clip | 321WA4SAT99N40X |
| 25W3 | Threaded insert/PCB clip | 3025W3SAT99N40X |
| 27W2 | Threaded insert/PCB clip | 3027W2SAT99N40X |
| 24W7 | Threaded insert/PCB clip | 3024W7SAT99N40X |
| 36W4 | Threaded insert/PCB clip | 3036W4SAT99N40X |
| 43W2 | Threaded insert/PCB clip | 3043W2SAT99N40X |
| 47W1 | Threaded insert/PCB clip | 3047W1SAT99N40X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded insert/PCB clip | 3005W1PAT99N40X |
| 7W2 | Threaded insert/PCB clip | 3007W2PAT99N40X |
| 11W1 | Threaded insert/PCB clip | 3011W1PAT99N40X |
| 9W4 | Threaded insert/PCB clip | 3009W4PAT99N40X |
| 13W3 | Threaded insert/PCB clip | 3013W3PAT99N40X |
| 17W2 | Threaded insert/PCB clip | 3017W2PAT99N40X |
| 21W1 | Threaded insert/PCB clip | 3021W1PAT99N40X |
| 13W6 | Threaded insert/PCB clip | 3013W6PAT99N40X |
| 17W5 | Threaded insert/PCB clip | 3017W5PAT99N40X |
| 21WA4 | Threaded insert/PCB clip | 321WA4PAT99N40X |
| 25W3 | Threaded insert/PCB clip | 3025W3PAT99N40X |
| 27W2 | Threaded insert/PCB clip | 3027W2PAT99N40X |
| 24W7 | Threaded insert/PCB clip | 3024W7PAT99N40X |
| 36W4 | Threaded insert/PCB clip | 3036W4PAT99N40X |
| 43W2 | Threaded insert/PCB clip | 3043W2PAT99N40X |
| 47W1 | Threaded insert/PCB clip | 3047W1PAT99N40X |




| Socket connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Front spacer | 3005W1SAT99P20X |
| 7W2 | Front spacer | 3007W2SAT99P20X |
| 11W1 | Front spacer | 3011W1SAT99P20X |
| 9W4 | Front spacer | 3009W4SAT99P20X |
| 13W3 | Front spacer | 3013W3SAT99P20X |
| 17W2 | Front spacer | 3017W2SAT99P20X |
| 21W1 | Front spacer | 3021W1SAT99P20X |
| 13W6 | Front spacer | 3013W6SAT99P20X |
| 17W5 | Front spacer | 3017W5SAT99P20X |
| 21WA4 | Front spacer | 321WA4SAT99P20X |
| 25W3 | Front spacer | 3025W3SAT99P20X |
| 27W2 | Front spacer | 3027W2SAT99P20X |
| 24W7 | Front spacer | 3024W7SAT99P20X |
| 36W4 | Front spacer | 3036W4SAT99P20X |
| 43W2 | Front spacer | 3043W2SAT99P20X |
| 47W1 | Front spacer | 3047W1SAT99P20X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Front spacer | 3005W1PAT99P20X |
| 7W2 | Front spacer | 3007W2PAT99P20X |
| 11W1 | Front spacer | 3011W1PAT99P20X |
| 9W4 | Front spacer | 3009W4PAT99P20X |
| 13W3 | Front spacer | 3013W3PAT99P20X |
| 17W2 | Front spacer | 3017W2PAT99P20X |
| 21W1 | Front spacer | 3021W1PAT99P20X |
| 13W6 | Front spacer | 3013W6PAT99P20X |
| 17W5 | Front spacer | 3017W5PAT99P20X |
| 21WA4 | Front spacer | 321WA4PAT99P20X |
| 25W3 | Front spacer | 3025W3PAT99P20X |
| 27W2 | Front spacer | 3027W2PAT99P20X |
| 24W7 | Front spacer | 3024W7PAT99P20X |
| 36W4 | Front spacer | 3036W4PAT99P20X |
| 43W2 | Front spacer | 3043W2PAT99P20X |
| 47W1 | Front spacer | 3047W1PAT99P20X |



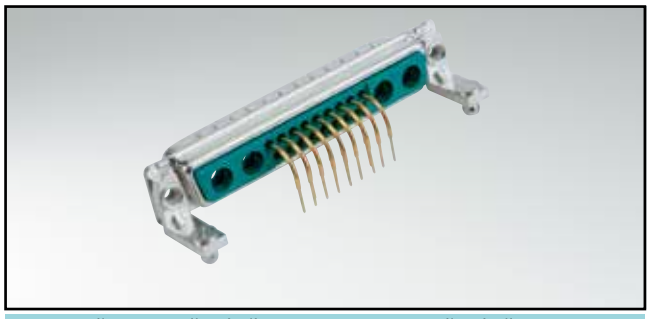

| Socket connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Front spacer/PCB clip | 3005W1SAT99P40X |
| 7W2 | Front spacer/PCB clip | 3007W2SAT99P40X |
| 11W1 | Front spacer/PCB clip | 3011W1SAT99P40X |
| 9W4 | Front spacer/PCB clip | 3009W4SAT99P40X |
| 13W3 | Front spacer/PCB clip | 3013W3SAT99P40X |
| 17W2 | Front spacer/PCB clip | 3017W2SAT99P40X |
| 21W1 | Front spacer/PCB clip | 3021W1SAT99P40X |
| 13W6 | Front spacer/PCB clip | 3013W6SAT99P40X |
| 17W5 | Front spacer/PCB clip | 3017W5SAT99P40X |
| 21WA4 | Front spacer/PCB clip | 321WA4SAT99P40X |
| 25W3 | Front spacer/PCB clip | 3025W3SAT99P40X |
| 27W2 | Front spacer/PCB clip | 3027W2SAT99P40X |
| 24W7 | Front spacer/PCB clip | 3024W7SAT99P40X |
| 36W4 | Front spacer/PCB clip | 3036W4SAT99P40X |
| 43W2 | Front spacer/PCB clip | 3043W2SAT99P40X |
| 47W1 | Front spacer/PCB clip | 3047W1SAT99P40X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Front spacer/PCB clip | 3005W1PAT99P40X |
| 7W2 | Front spacer/PCB clip | 3007W2PAT99P40X |
| 11W1 | Front spacer/PCB clip | 3011W1PAT99P40X |
| 9W4 | Front spacer/PCB clip | 3009W4PAT99P40X |
| 13W3 | Front spacer/PCB clip | 3013W3PAT99P40X |
| 17W2 | Front spacer/PCB clip | 3017W2PAT99P40X |
| 21W1 | Front spacer/PCB clip | 3021W1PAT99P40X |
| 13W6 | Front spacer/PCB clip | 3013W6PAT99P40X |
| 17W5 | Front spacer/PCB clip | 3017W5PAT99P40X |
| 21WA4 | Front spacer/PCB clip | 321WA4PAT99P40X |
| 25W3 | Front spacer/PCB clip | 3025W3PAT99P40X |
| 27W2 | Front spacer/PCB clip | 3027W2PAT99P40X |
| 24W7 | Front spacer/PCB clip | 3024W7PAT99P40X |
| 36W4 | Front spacer/PCB clip | 3036W4PAT99P40X |
| 43W2 | Front spacer/PCB clip | 3043W2PAT99P40X |
| 47W1 | Front spacer/PCB clip | 3047W1PAT99P40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# COMBINATION D-SUB WITH SIGNAL CONTACTS

## Solder pin – Angled – .370"/9.4 mm – Precision machined contacts – Metal bracket

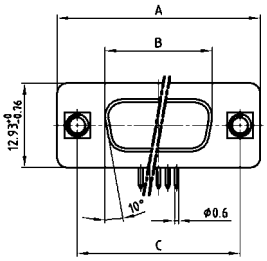


RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

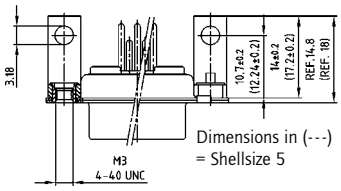
### DESCRIPTION

- Mounting styles:
  - with mounting bracket and threaded insert
  - with mounting bracket with 4-40 UNC front spacer
  - with mounting bracket, PCB clip and threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC front spacer
- M3 thread design available on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
  (brass tin plated or stainless steel available on request)

### SOCKET CONNECTOR

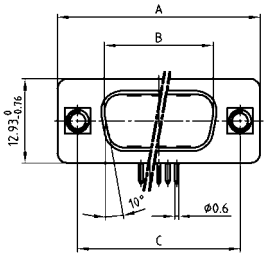



| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 1 | 31.19 | 16.46 | 25.00 +0.12 −0.13 |
| 2 | 39.52 | 24.79 | 33.30 +0.15 −0.10 |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |
| 5 | 67.31 | 52.55 | 61.10 +0.14 −0.11 |

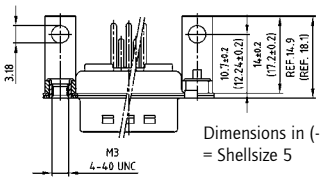



Dimensions in (---)
= Shellsize 5

### PLUG CONNECTOR

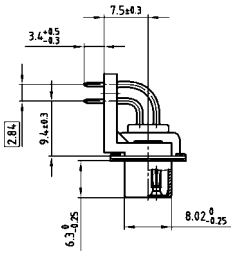



| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 1 | 31.19 | 16.79 | 25.00 +0.12 −0.13 | 6.12 |
| 2 | 39.52 | 25.12 | 33.30 +0.15 −0.10 | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 5 | 67.31 | 52.68 | 61.10 +0.14 −0.11 | 5.99 |

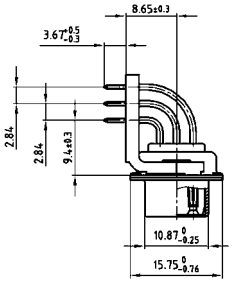



Dimensions in (---)
= Shellsize 5

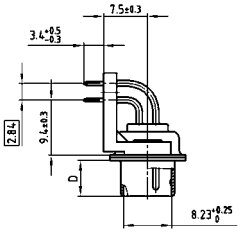
Shell size 1-4



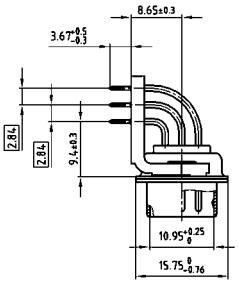

Shell size 5



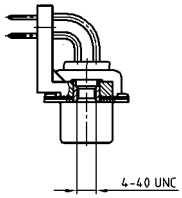

Shell size 1-4




Shell size 5




### ORDER DATA




**SOCKET CONNECTOR**

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 5W1 | Threaded insert | 3005W1SAU99G20X |
| 7W2 | Threaded insert | 3007W2SAU99G20X |
| 11W1 | Threaded insert | 3011W1SAU99G20X |
| 9W4 | Threaded insert | 3009W4SAU99G20X |
| 13W3 | Threaded insert | 3013W3SAU99G20X |
| 17W2 | Threaded insert | 3017W2SAU99G20X |
| 21W1 | Threaded insert | 3021W1SAU99G20X |
| 13W6 | Threaded insert | 3013W6SAU99G20X |
| 17W5 | Threaded insert | 3017W5SAU99G20X |
| 21WA4 | Threaded insert | 321WA4SAU99G20X |
| 25W3 | Threaded insert | 3025W3SAU99G20X |
| 27W2 | Threaded insert | 3027W2SAU99G20X |
| 24W7 | Threaded insert | 3024W7SAU99G20X |
| 36W4 | Threaded insert | 3036W4SAU99G20X |
| 43W2 | Threaded insert | 3043W2SAU99G20X |
| 47W1 | Threaded insert | 3047W1SAU99G20X |

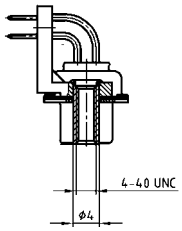
**PLUG CONNECTOR**

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 5W1 | Threaded insert | 3005W1PAU99G20X |
| 7W2 | Threaded insert | 3007W2PAU99G20X |
| 11W1 | Threaded insert | 3011W1PAU99G20X |
| 9W4 | Threaded insert | 3009W4PAU99G20X |
| 13W3 | Threaded insert | 3013W3PAU99G20X |
| 17W2 | Threaded insert | 3017W2PAU99G20X |
| 21W1 | Threaded insert | 3021W1PAU99G20X |
| 13W6 | Threaded insert | 3013W6PAU99G20X |
| 17W5 | Threaded insert | 3017W5PAU99G20X |
| 21WA4 | Threaded insert | 321WA4PAU99G20X |
| 25W3 | Threaded insert | 3025W3PAU99G20X |
| 27W2 | Threaded insert | 3027W2PAU99G20X |
| 24W7 | Threaded insert | 3024W7PAU99G20X |
| 36W4 | Threaded insert | 3036W4PAU99G20X |
| 43W2 | Threaded insert | 3043W2PAU99G20X |
| 47W1 | Threaded insert | 3047W1PAU99G20X |

# Combination D-SUB – Mounting styles

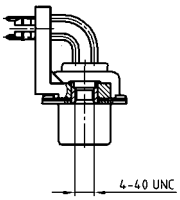
## Solder pin – Angled – .370"/9.4 mm – Precision machined contacts – Metal bracket

### Order data



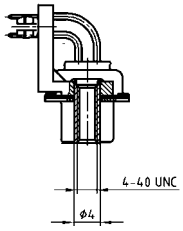

| Socket connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Front spacer | 3005W1SAU99H20X |
| 7W2 | Front spacer | 3007W2SAU99H20X |
| 11W1 | Front spacer | 3011W1SAU99H20X |
| 9W4 | Front spacer | 3009W4SAU99H20X |
| 13W3 | Front spacer | 3013W3SAU99H20X |
| 17W2 | Front spacer | 3017W2SAU99H20X |
| 21W1 | Front spacer | 3021W1SAU99H20X |
| 13W6 | Front spacer | 3013W6SAU99H20X |
| 17W5 | Front spacer | 3017W5SAU99H20X |
| 21WA4 | Front spacer | 321WA4SAU99H20X |
| 25W3 | Front spacer | 3025W3SAU99H20X |
| 27W2 | Front spacer | 3027W2SAU99H20X |
| 24W7 | Front spacer | 3024W7SAU99H20X |
| 36W4 | Front spacer | 3036W4SAU99H20X |
| 43W2 | Front spacer | 3043W2SAU99H20X |
| 47W1 | Front spacer | 3047W1SAU99H20X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Front spacer | 3005W1PAU99H20X |
| 7W2 | Front spacer | 3007W2PAU99H20X |
| 11W1 | Front spacer | 3011W1PAU99H20X |
| 9W4 | Front spacer | 3009W4PAU99H20X |
| 13W3 | Front spacer | 3013W3PAU99H20X |
| 17W2 | Front spacer | 3017W2PAU99H20X |
| 21W1 | Front spacer | 3021W1PAU99H20X |
| 13W6 | Front spacer | 3013W6PAU99H20X |
| 17W5 | Front spacer | 3017W5PAU99H20X |
| 21WA4 | Front spacer | 321WA4PAU99H20X |
| 25W3 | Front spacer | 3025W3PAU99H20X |
| 27W2 | Front spacer | 3027W2PAU99H20X |
| 24W7 | Front spacer | 3024W7PAU99H20X |
| 36W4 | Front spacer | 3036W4PAU99H20X |
| 43W2 | Front spacer | 3043W2PAU99H20X |
| 47W1 | Front spacer | 3047W1PAU99H20X |




| Socket connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded insert/PCB clip | 3005W1SAU99G40X |
| 7W2 | Threaded insert/PCB clip | 3007W2SAU99G40X |
| 11W1 | Threaded insert/PCB clip | 3011W1SAU99G40X |
| 9W4 | Threaded insert/PCB clip | 3009W4SAU99G40X |
| 13W3 | Threaded insert/PCB clip | 3013W3SAU99G40X |
| 17W2 | Threaded insert/PCB clip | 3017W2SAU99G40X |
| 21W1 | Threaded insert/PCB clip | 3021W1SAU99G40X |
| 13W6 | Threaded insert/PCB clip | 3013W6SAU99G40X |
| 17W5 | Threaded insert/PCB clip | 3017W5SAU99G40X |
| 21WA4 | Threaded insert/PCB clip | 321WA4SAU99G40X |
| 25W3 | Threaded insert/PCB clip | 3025W3SAU99G40X |
| 27W2 | Threaded insert/PCB clip | 3027W2SAU99G40X |
| 24W7 | Threaded insert/PCB clip | 3024W7SAU99G40X |
| 36W4 | Threaded insert/PCB clip | 3036W4SAU99G40X |
| 43W2 | Threaded insert/PCB clip | 3043W2SAU99G40X |
| 47W1 | Threaded insert/PCB clip | 3047W1SAU99G40X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded insert/PCB clip | 3005W1PAU99G40X |
| 7W2 | Threaded insert/PCB clip | 3007W2PAU99G40X |
| 11W1 | Threaded insert/PCB clip | 3011W1PAU99G40X |
| 9W4 | Threaded insert/PCB clip | 3009W4PAU99G40X |
| 13W3 | Threaded insert/PCB clip | 3013W3PAU99G40X |
| 17W2 | Threaded insert/PCB clip | 3017W2PAU99G40X |
| 21W1 | Threaded insert/PCB clip | 3021W1PAU99G40X |
| 13W6 | Threaded insert/PCB clip | 3013W6PAU99G40X |
| 17W5 | Threaded insert/PCB clip | 3017W5PAU99G40X |
| 21WA4 | Threaded insert/PCB clip | 321WA4PAU99G40X |
| 25W3 | Threaded insert/PCB clip | 3025W3PAU99G40X |
| 27W2 | Threaded insert/PCB clip | 3027W2PAU99G40X |
| 24W7 | Threaded insert/PCB clip | 3024W7PAU99G40X |
| 36W4 | Threaded insert/PCB clip | 3036W4PAU99G40X |
| 43W2 | Threaded insert/PCB clip | 3043W2PAU99G40X |
| 47W1 | Threaded insert/PCB clip | 3047W1PAU99G40X |



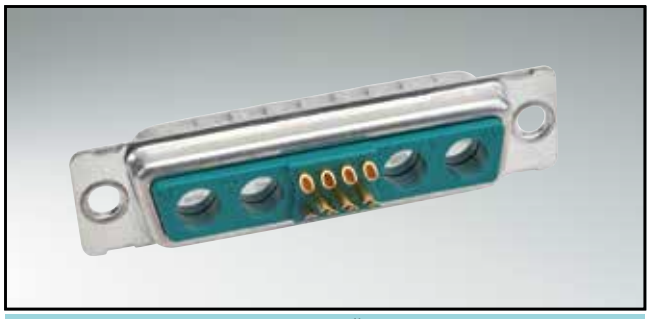

| Socket connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Front spacer/PCB clip | 3005W1SAU99H40X |
| 7W2 | Front spacer/PCB clip | 3007W2SAU99H40X |
| 11W1 | Front spacer/PCB clip | 3011W1SAU99H40X |
| 9W4 | Front spacer/PCB clip | 3009W4SAU99H40X |
| 13W3 | Front spacer/PCB clip | 3013W3SAU99H40X |
| 17W2 | Front spacer/PCB clip | 3017W2SAU99H40X |
| 21W1 | Front spacer/PCB clip | 3021W1SAU99H40X |
| 13W6 | Front spacer/PCB clip | 3013W6SAU99H40X |
| 17W5 | Front spacer/PCB clip | 3017W5SAU99H40X |
| 21WA4 | Front spacer/PCB clip | 321WA4SAU99H40X |
| 25W3 | Front spacer/PCB clip | 3025W3SAU99H40X |
| 27W2 | Front spacer/PCB clip | 3027W2SAU99H40X |
| 24W7 | Front spacer/PCB clip | 3024W7SAU99H40X |
| 36W4 | Front spacer/PCB clip | 3036W4SAU99H40X |
| 43W2 | Front spacer/PCB clip | 3043W2SAU99H40X |
| 47W1 | Front spacer/PCB clip | 3047W1SAU99H40X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Front spacer/PCB clip | 3005W1PAU99H40X |
| 7W2 | Front spacer/PCB clip | 3007W2PAU99H40X |
| 11W1 | Front spacer/PCB clip | 3011W1PAU99H40X |
| 9W4 | Front spacer/PCB clip | 3009W4PAU99H40X |
| 13W3 | Front spacer/PCB clip | 3013W3PAU99H40X |
| 17W2 | Front spacer/PCB clip | 3017W2PAU99H40X |
| 21W1 | Front spacer/PCB clip | 3021W1PAU99H40X |
| 13W6 | Front spacer/PCB clip | 3013W6PAU99H40X |
| 17W5 | Front spacer/PCB clip | 3017W5PAU99H40X |
| 21WA4 | Front spacer/PCB clip | 321WA4PAU99H40X |
| 25W3 | Front spacer/PCB clip | 3025W3PAU99H40X |
| 27W2 | Front spacer/PCB clip | 3027W2PAU99H40X |
| 24W7 | Front spacer/PCB clip | 3024W7PAU99H40X |
| 36W4 | Front spacer/PCB clip | 3036W4PAU99H40X |
| 43W2 | Front spacer/PCB clip | 3043W2PAU99H40X |
| 47W1 | Front spacer/PCB clip | 3047W1PAU99H40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# COMBINATION D-SUB HIGH DENSITY WITH SIGNAL CONTACTS

## Solder cup – Precision machined contacts – For wire size AWG 22

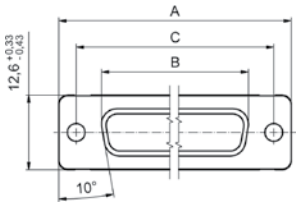


RoHS compliant

### DESCRIPTION

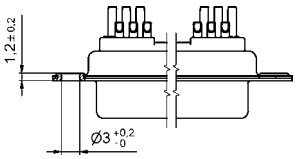
- Suitable for wire size **AWG 22**
- Mounting styles:
  - with through-hole, Ø .118" / 3 mm
  - with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
  (brass tin plated or stainless steel available on request)

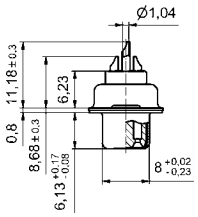
### SOCKET CONNECTOR



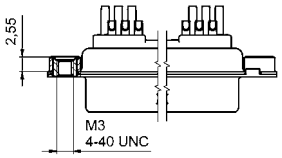

| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 2 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |

Mounting style: Through-hole

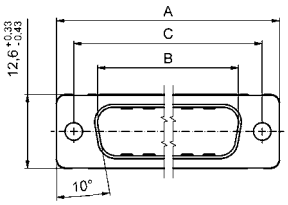



Mounting style Threaded insert

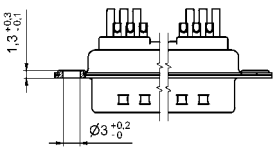


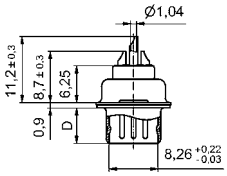

### PLUG CONNECTOR



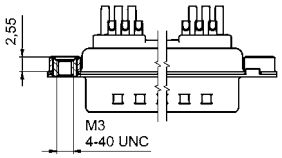

| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 2 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

Mounting style: Through-hole




Mounting style Threaded insert




### ORDER DATA

**SOCKET CONNECTOR**

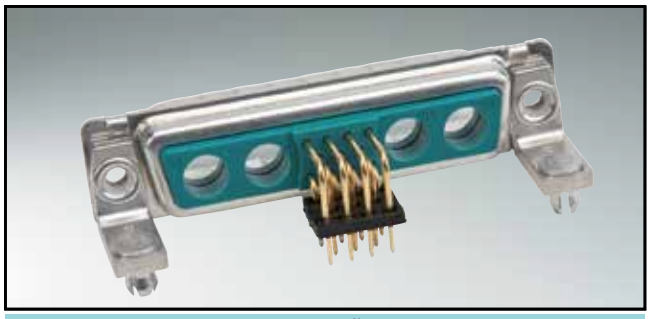
| Design | Mounting style | Part Number |
|---|---|---|
| 19W1 | Through-hole | 3H19W1SAM99A10X |
| 15W4 | Through-hole | 3H15W4SAM99A10X |
| 45W2 | Through-hole | 3H45W2SAM99A10X |
| 19W1 | M3 threaded insert | 3H19W1SAM99A20X |
| 15W4 | M3 threaded insert | 3H15W4SAM99A20X |
| 45W2 | M3 threaded insert | 3H45W2SAM99A20X |
| 19W1 | 4-40 UNC threaded insert | 3H19W1SAM99A30X |
| 15W4 | 4-40 UNC threaded insert | 3H15W4SAM99A30X |
| 45W2 | 4-40 UNC threaded insert | 3H45W2SAM99A30X |

**PLUG CONNECTOR**

| Design | Mounting style | Part Number |
|---|---|---|
| 19W1 | Through-hole | 3H19W1PAM99A10X |
| 15W4 | Through-hole | 3H15W4PAM99A10X |
| 45W2 | Through-hole | 3H45W2PAM99A10X |
| 19W1 | M3 threaded insert | 3H19W1PAM99A20X |
| 15W4 | M3 threaded insert | 3H15W4PAM99A20X |
| 45W2 | M3 threaded insert | 3H45W2PAM99A20X |
| 19W1 | 4-40 UNC threaded insert | 3H19W1PAM99A30X |
| 15W4 | 4-40 UNC threaded insert | 3H15W4PAM99A30X |
| 45W2 | 4-40 UNC threaded insert | 3H45W2PAM99A30X |

# Combination D-SUB High Density with signal contacts

## Solder pin – angled – ,350"/7,98 mm – Precision machined contacts – Metal bracket

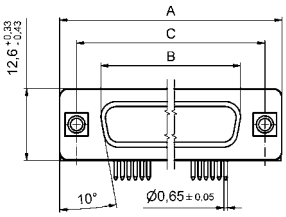


RoHS compliant

### Description

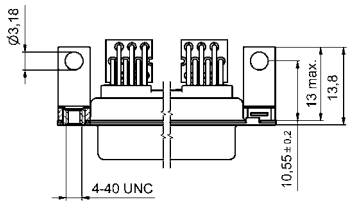
- Mounting styles:
  - mounting bracket and threaded insert 4-40 UNC
  - mounting bracket with front spacer 4-40 UNC
  - mounting bracket, PCB clip and threaded insert 4-40 UNC
  - mounting bracket, PCB clip and frontspacer 4-40 UNC
- Threaded lock M3 available on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
  (brass tin plated or stainless steel available on request)

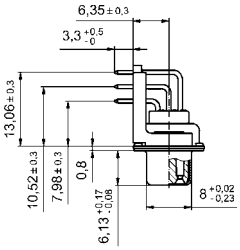
### Socket connector



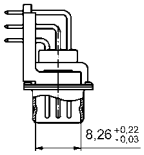

| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 2 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |

Mounting style: Through-hole

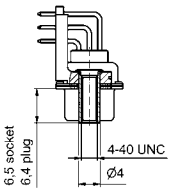


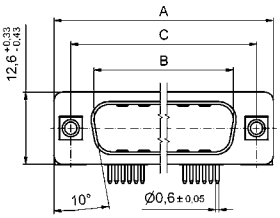

Mounting style: Threaded insert




Mounting style: Front spacer

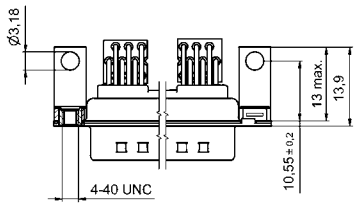


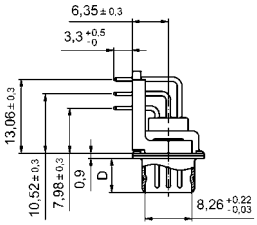

### Plug connector



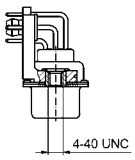

| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 2 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

Mounting style: Through-hole

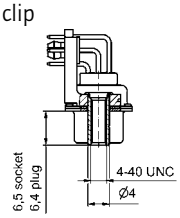



Mounting style: Threaded insert




Mounting style: Front spacer and PCB clip




### Order data

**Socket connector**

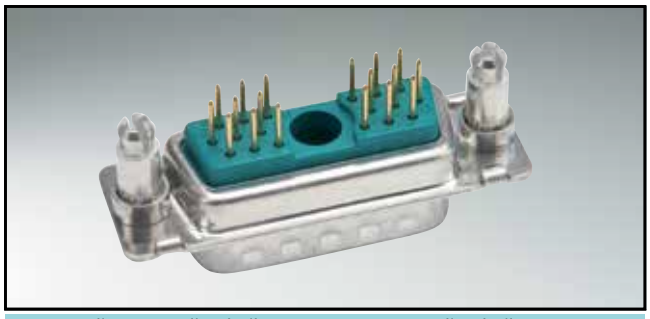
| Design | Mounting style | Part Number |
|---|---|---|
| 19W1 | 4-40 UNC threaded insert | 3H19W1SAT99G60X |
| 15W4 | 4-40 UNC threaded insert | 3H15W4SAT99G60X |
| 45W2 | 4-40 UNC threaded insert | 3H45W2SAT99G60X |
| 19W1 | 4-40 UNC threaded insert and PCB clip | 3H19W1SAT99G80X |
| 15W4 | 4-40 UNC threaded insert and PCB clip | 3H15W4SAT99G80X |
| 45W2 | 4-40 UNC threaded insert and PCB clip | 3H45W2SAT99G80X |
| 19W1 | 4-40 UNC front spacer | 3H19W1SAT99H60X |
| 15W4 | 4-40 UNC front spacer | 3H15W4SAT99H60X |
| 45W2 | 4-40 UNC front spacer | 3H45W2SAT99H60X |
| 19W1 | 4-40 UNC front spacer and PCB clip | 3H19W1SAT99H80X |
| 15W4 | 4-40 UNC front spacer and PCB clip | 3H15W4SAT99H80X |
| 45W2 | 4-40 UNC front spacer and PCB clip | 3H45W2SAT99H80X |

**Plug connector**

| Design | Mounting style | Part Number |
|---|---|---|
| 19W1 | 4-40 UNC threaded insert | 3H19W1PAT99G60X |
| 15W4 | 4-40 UNC threaded insert | 3H15W4PAT99G60X |
| 45W2 | 4-40 UNC threaded insert | 3H45W2PAT99G60X |
| 19W1 | 4-40 UNC threaded insert and PCB clip | 3H19W1PAT99G80X |
| 15W4 | 4-40 UNC threaded insert and PCB clip | 3H15W4PAT99G80X |
| 45W2 | 4-40 UNC threaded insert and PCB clip | 3H45W2PAT99G80X |
| 19W1 | 4-40 UNC front spacer | 3H19W1PAT99H60X |
| 15W4 | 4-40 UNC front spacer | 3H15W4PAT99H60X |
| 45W2 | 4-40 UNC front spacer | 3H45W2PAT99H60X |
| 19W1 | 4-40 UNC front spacer and PCB clip | 3H19W1PAT99H80X |
| 15W4 | 4-40 UNC front spacer and PCB clip | 3H15W4PAT99H80X |
| 45W2 | 4-40 UNC front spacer and PCB clip | 3H45W2PAT99H80X |

# COMBINATION D-SUB HIGH DENSITY – WITH SIGNAL CONTACTS

## Solder pin – Straight – Precision machined contacts

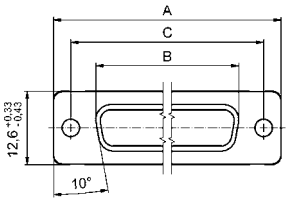


RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### DESCRIPTION

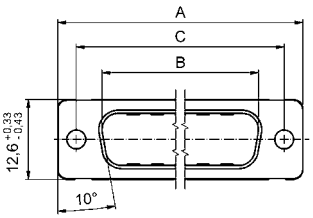
- Mounting styles:
  - with through-hole, Ø .118"/3 mm
  - with 4-40 UNC threaded insert
  - with 4-40 UNC threaded rear spacer
  - with 4-40 UNC threaded look and spacer clip
- M3 thread on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
  (brass tin plated or stainless steel available on request)

### SOCKET CONNECTOR



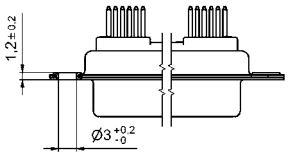

| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 2 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |

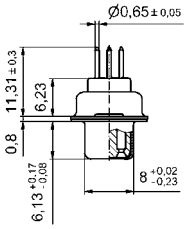
### PLUG CONNECTOR



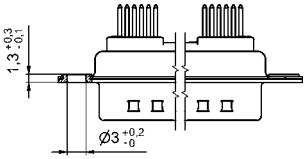

| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 2 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

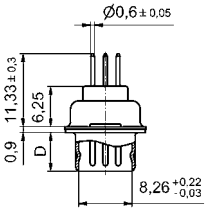
Mounting style: Through-hole



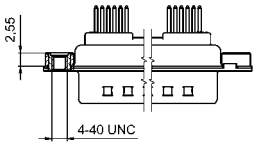




Mounting style: Through-hole




### ORDER DATA




**SOCKET CONNECTOR**

| Design | Mounting style | Part Number |
|---|---|---|
| 19W1 | Through-hole | 3H19W1SAR99A10X |
| 15W4 | Through-hole | 3H15W4SAR99A10X |
| 45W2 | Through-hole | 3H45W2SAR99A10X |
| 19W1 | 4-40 UNC threaded insert | 3H19W1SAR99A30X |
| 15W4 | 4-40 UNC threaded insert | 3H15W4SAR99A30X |
| 45W2 | 4-40 UNC threaded insert | 3H45W2SAR99A30X |

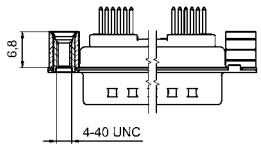
**PLUG CONNECTOR**

| Design | Mounting style | Part Number |
|---|---|---|
| 19W1 | Through-hole | 3H19W1PAR99A10X |
| 15W4 | Through-hole | 3H15W4PAR99A10X |
| 45W2 | Through-hole | 3H45W2PAR99A10X |
| 19W1 | 4-40 UNC threaded insert | 3H19W1PAR99A30X |
| 15W4 | 4-40 UNC threaded insert | 3H15W4PAR99A30X |
| 45W2 | 4-40 UNC threaded insert | 3H45W2PAR99A30X |

# Combination D-SUB High Density – Mounting styles

## Solder pin – Straight – Precision machined contacts

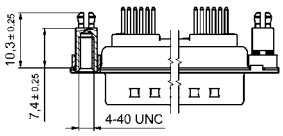
### Order data




| Socket connector | | |
|---|---|---|
| Design | Mounting style | Part Number |
| 19W1 | 4-40 UNC threaded rear spacer | 3H19W1SAR99A50X |
| 15W4 | 4-40 UNC threaded rear spacer | 3H15W4SAR99A50X |
| 45W2 | 4-40 UNC threaded rear spacer | 3H45W2SAR99A50X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style | Part Number |
| 19W1 | 4-40 UNC threaded rear spacer | 3H19W1PAR99A50X |
| 15W4 | 4-40 UNC threaded rear spacer | 3H15W4PAR99A50X |
| 45W2 | 4-40 UNC threaded rear spacer | 3H45W2PAR99A50X |

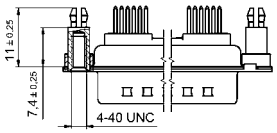
PCB thickness .063"/1,6 mm




| Socket connector | | |
|---|---|---|
| Design | Mounting style | Part Number |
| 19W1 | 4-40 UNC threaded rear spacer with PCB clip | 3H19W1SAR99E20X |
| 15W4 | 4-40 UNC threaded rear spacer with PCB clip | 3H15W4SAR99E20X |
| 45W2 | 4-40 UNC threaded rear spacer with PCB clip | 3H45W2SAR99E20X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style | Part Number |
| 19W1 | 4-40 UNC threaded rear spacer with PCB clip | 3H19W1PAR99E20X |
| 15W4 | 4-40 UNC threaded rear spacer with PCB clip | 3H15W4PAR99E20X |
| 45W2 | 4-40 UNC threaded rear spacer with PCB clip | 3H45W2PAR99E20X |

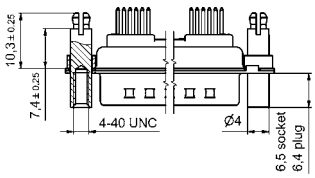
PCB thickness .091"/2,3 mm




| Socket connector | | |
|---|---|---|
| Design | Mounting style | Part Number |
| 19W1 | 4-40 UNC threaded rear spacer with PCB clip | 3H19W1SAR99E40X |
| 15W4 | 4-40 UNC threaded rear spacer with PCB clip | 3H15W4SAR99E40X |
| 45W2 | 4-40 UNC threaded rear spacer with PCB clip | 3H45W2SAR99E40X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style | Part Number |
| 19W1 | 4-40 UNC threaded rear spacer with PCB clip | 3H19W1SAR99E40X |
| 15W4 | 4-40 UNC threaded rear spacer with PCB clip | 3H15W4SAR99E40X |
| 45W2 | 4-40 UNC threaded rear spacer with PCB clip | 3H45W2SAR99E40X |

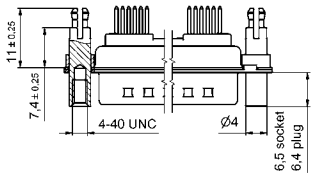
PCB thickness .063"/1,6 mm




| Socket connector | | |
|---|---|---|
| Design | Mounting style | Part Number |
| 19W1 | 4-40 UNC threaded lock and spacer clip | 3H19W1SAR99F20X |
| 15W4 | 4-40 UNC threaded lock and spacer clip | 3H15W4SAR99F20X |
| 45W2 | 4-40 UNC threaded lock and spacer clip | 3H45W2SAR99F20X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style | Part Number |
| 19W1 | 4-40 UNC threaded lock and spacer clip | 3H19W1PAR99F20X |
| 15W4 | 4-40 UNC threaded lock and spacer clip | 3H15W4PAR99F20X |
| 45W2 | 4-40 UNC threaded lock and spacer clip | 3H45W2PAR99F20X |

PCB thickness .091"/2,3 mm




| Socket connector | | |
|---|---|---|
| Design | Mounting style | Part Number |
| 19W1 | 4-40 UNC threaded lock and spacer clip | 3H19W1SAR99F40X |
| 15W4 | 4-40 UNC threaded lock and spacer clip | 3H15W4SAR99F40X |
| 45W2 | 4-40 UNC threaded lock and spacer clip | 3H45W2SAR99F40X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style | Part Number |
| 19W1 | 4-40 UNC threaded lock and spacer clip | 3H19W1PAR99F40X |
| 15W4 | 4-40 UNC threaded lock and spacer clip | 3H15W4PAR99F40X |
| 45W2 | 4-40 UNC threaded lock and spacer clip | 3H45W2PAR99F40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter

# COMBINATION D-SUB WITHOUT CONTACTS

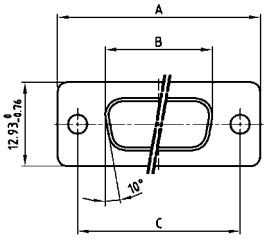
## For straight high power, coaxial or high voltage contacts

RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### DESCRIPTION

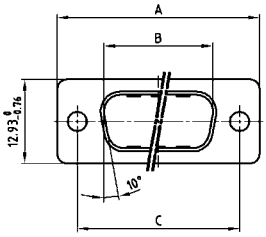
- Designs: **2W2C; 3W3; 3W3C; 5W5; 8W8**
- Mounting styles:
  - with through-hole, Ø .118"/3 mm, with 4-40 UNC threaded insert, with 4-40 UNC threaded rear spacer, with 4-40 UNC threaded rear spacer with PCB clip .291"/7.4 mm for PCB thickness .063"/1.6 mm, .091"/2.3 mm, .126"/3.2 mm
- On request: Threaded rear spacer with PCB clip .256"/6.5 mm available
- On request: M3 thread design available
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)
- recommended plastic hoods look at page 7|16, 7|17

### SOCKET CONNECTOR



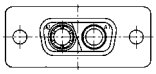

| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 1 | 31.19 | 16.46 | 25.00 +0.12 -0.13 |
| 2 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |

### PLUG CONNECTOR

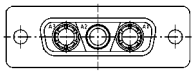



| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 1 | 31.19 | 16.79 | 25.00 +0.12 -0.13 | 6.12 |
| 2 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

### Coded socket connectors

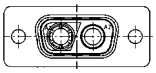


2W2C = 1 Socket – 1 Plug

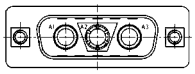


3W3C = 2 Sockets – 1 Plug

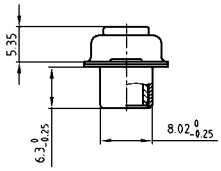
### Coded plug connectors

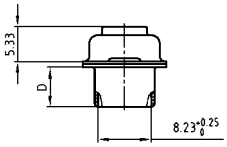


2W2C = 1 Plug – 1 Socket

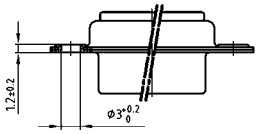


3W3C = 2 Plugs – 1 Socket



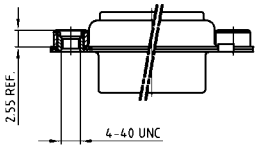




### ORDER DATA




| SOCKET CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style** | **Part Number** |
| 3W3 | Through-hole | 3003W3SXX99A10X |
| 5W5 | Through-hole | 3005W5SXX99A10X |
| 8W8 | Through-hole | 3008W8SXX99A10X |
| Coded version | | |
| 2W2C | Through-hole | 302W2CSXX99A10X |
| 3W3C | Through-hole | 303W3CSXX99A10X |

| PLUG CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style** | **Part Number** |
| 3W3 | Through-hole | 3003W3PXX99A10X |
| 5W5 | Through-hole | 3005W5PXX99A10X |
| 8W8 | Through-hole | 3008W8PXX99A10X |
| Coded version | | |
| 2W2C | Through-hole | 302W2CPXX99A10X |
| 3W3C | Through-hole | 303W3CPXX99A10X |



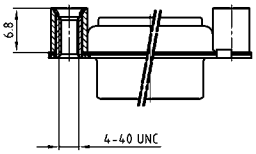

| SOCKET CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded insert | 3003W3SXX99A30X |
| 5W5 | Threaded insert | 3005W5SXX99A30X |
| 8W8 | Threaded insert | 3008W8SXX99A30X |
| Coded version | | |
| 2W2C | Threaded insert | 302W2CSXX99A30X |
| 3W3C | Threaded insert | 303W3CSXX99A30X |

| PLUG CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded insert | 3003W3PXX99A30X |
| 5W5 | Threaded insert | 3005W5PXX99A30X |
| 8W8 | Threaded insert | 3008W8PXX99A30X |
| Coded version | | |
| 2W2C | Threaded insert | 302W2CPXX99A30X |
| 3W3C | Threaded insert | 303W3CPXX99A30X |

# Combination D-SUB – Mounting styles

## For straight high power, coaxial or high voltage contacts

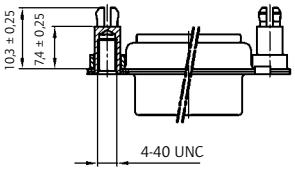
### Order data




| Socket connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded rear spacer | 3003W3SXX99A50X |
| 5W5 | Threaded rear spacer | 3005W5SXX99A50X |
| 8W8 | Threaded rear spacer | 3008W8SXX99A50X |
| Coded version | | |
| 2W2C | Threaded rear spacer | 302W2CSXX99A50X |
| 3W3C | Threaded rear spacer | 303W3CSXX99A50X |

| Plug connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded rear spacer | 3003W3PXX99A50X |
| 5W5 | Threaded rear spacer | 3005W5PXX99A50X |
| 8W8 | Threaded rear spacer | 3008W8PXX99A50X |
| Coded version | | |
| 2W2C | Threaded rear spacer | 302W2CPXX99A50X |
| 3W3C | Threaded rear spacer | 303W3CPXX99A50X |

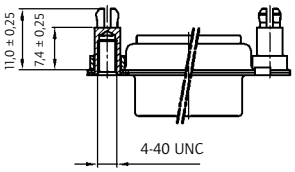
PCB thickness .063"/1.6 mm




| Socket connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded rear spacer PCB clip | 3003W3SXX99E20X |
| 5W5 | Threaded rear spacer PCB clip | 3005W5SXX99E20X |
| 8W8 | Threaded rear spacer PCB clip | 3008W8SXX99E20X |
| Coded version | | |
| 2W2C | Threaded rear spacer PCB clip | 302W2CSXX99E20X |
| 3W3C | Threaded rear spacer PCB clip | 303W3CSXX99E20X |

| Plug connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded rear spacer PCB clip | 3003W3PXX99E20X |
| 5W5 | Threaded rear spacer PCB clip | 3005W5PXX99E20X |
| 8W8 | Threaded rear spacer PCB clip | 3008W8PXX99E20X |
| Coded version | | |
| 2W2C | Threaded rear spacer PCB clip | 302W2CPXX99E20X |
| 3W3C | Threaded rear spacer PCB clip | 303W3CPXX99E20X |

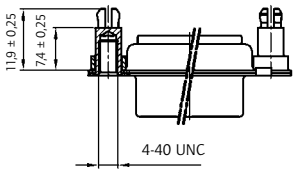
PCB thickness .091"/2.3 mm




| Socket connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded rear spacer PCB clip | 3003W3SXX99E40X |
| 5W5 | Threaded rear spacer PCB clip | 3005W5SXX99E40X |
| 8W8 | Threaded rear spacer PCB clip | 3008W8SXX99E40X |
| Coded version | | |
| 2W2C | Threaded rear spacer PCB clip | 302W2CSXX99E40X |
| 3W3C | Threaded rear spacer PCB clip | 303W3CSXX99E40X |

| Plug connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded rear spacer PCB clip | 3003W3PXX99E40X |
| 5W5 | Threaded rear spacer PCB clip | 3005W5PXX99E40X |
| 8W8 | Threaded rear spacer PCB clip | 3008W8PXX99E40X |
| Coded version | | |
| 2W2C | Threaded rear spacer PCB clip | 302W2CPXX99E40X |
| 3W3C | Threaded rear spacer PCB clip | 303W3CPXX99E40X |

PCB thickness .126"/3.2 mm



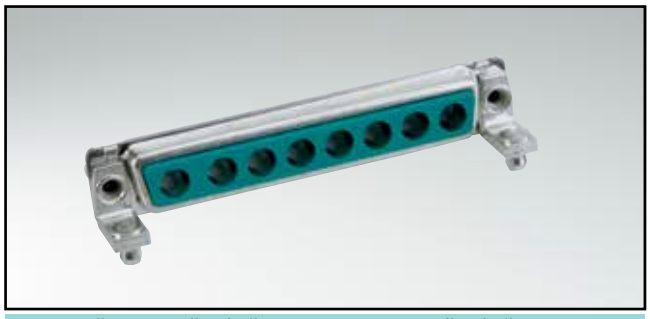

| Socket connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded rear spacer PCB clip | 3003W3SXX99E60X |
| 5W5 | Threaded rear spacer PCB clip | 3005W5SXX99E60X |
| 8W8 | Threaded rear spacer PCB clip | 3008W8SXX99E60X |
| Coded version | | |
| 2W2C | Threaded rear spacer PCB clip | 302W2CSXX99E60X |
| 3W3C | Threaded rear spacer PCB clip | 303W3CSXX99E60X |

| Plug connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded rear spacer PCB clip | 3003W3PXX99E60X |
| 5W5 | Threaded rear spacer PCB clip | 3005W5PXX99E60X |
| 8W8 | Threaded rear spacer PCB clip | 3008W8PXX99E60X |
| Coded version | | |
| 2W2C | Threaded rear spacer PCB clip | 302W2CPXX99E60X |
| 3W3C | Threaded rear spacer PCB clip | 303W3CPXX99E60X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter

# COMBINATION D-SUB WITHOUT CONTACTS

## For angled high power or coaxial contacts – Short metal bracket

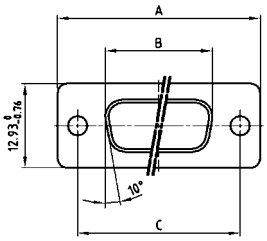


RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### DESCRIPTION

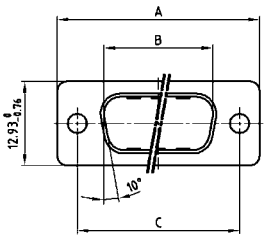
- Designs: **2W2C; 3W3; 3W3C; 5W5; 8W8**
- Mounting styles:
  - Mounting bracket and 4-40 UNC threaded insert
  - Mounting bracket with 4-40 UNC front spacer
  - Mounting bracket, PCB clip and 4-40 UNC threaded insert
  - Mounting bracket, PCB clip and 4-40 UNC front spacer
- M3 thread design available on request
- Shell: Steel tin plated
  (brass tin plated or stainless steel available on request)

### SOCKET CONNECTOR



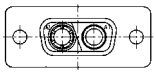

| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 1 | 31.19 | 16.46 | 25.00 +0.12 -0.13 |
| 2 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |

### PLUG CONNECTOR

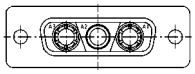



| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 1 | 31.19 | 16.79 | 25.00 +0.12 -0.13 | 6.12 |
| 2 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

### Coded socket connectors

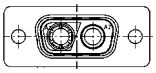


2W2C = 1 Socket – 1 Plug

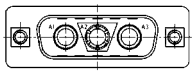


3W3C = 2 Sockets – 1 Plug

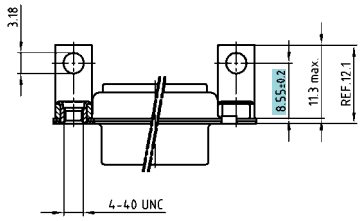
### Coded plug connectors

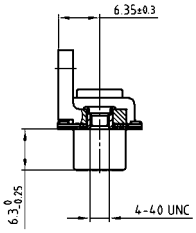


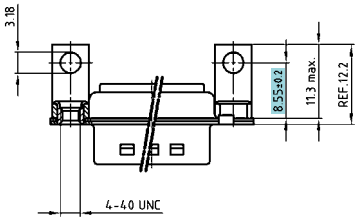
2W2C = 1 Plug – 1 Socket

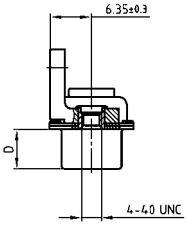


3W3C = 2 Plugs – 1 Socket

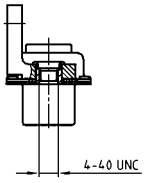



### ORDER DATA



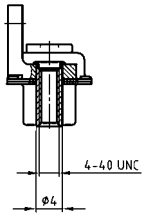

| SOCKET CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded insert | 3003W3SXX99N20X |
| 5W5 | Threaded insert | 3005W5SXX99N20X |
| 8W8 | Threaded insert | 3008W8SXX99N20X |
| Coded version | | |
| 2W2C | Threaded insert | 302W2CSXX99N20X |
| 3W3C | Threaded insert | 303W3CSXX99N20X |

| PLUG CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded insert | 3003W3PXX99N20X |
| 5W5 | Threaded insert | 3005W5PXX99N20X |
| 8W8 | Threaded insert | 3008W8PXX99N20X |
| Coded version | | |
| 2W2C | Threaded insert | 302W2CPXX99N20X |
| 3W3C | Threaded insert | 303W3CPXX99N20X |

# Combination D-SUB – Mounting styles

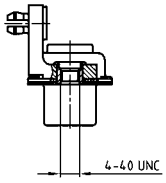
## For angled high power or coaxial contacts – Short metal bracket

### Order data



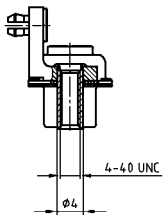

| Socket connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Front spacer | 3003W3SXX99P20X |
| 5W5 | Front spacer | 3005W5SXX99P20X |
| 8W8 | Front spacer | 3008W8SXX99P20X |
| Coded version | | |
| 2W2C | Front spacer | 302W2CSXX99P20X |
| 3W3C | Front spacer | 303W3CSXX99P20X |

| Plug connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Front spacer | 3003W3PXX99P20X |
| 5W5 | Front spacer | 3005W5PXX99P20X |
| 8W8 | Front spacer | 3008W8PXX99P20X |
| Coded version | | |
| 2W2C | Front spacer | 302W2CPXX99P20X |
| 3W3C | Front spacer | 303W3CPXX99P20X |




| Socket connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded insert / PCB clip | 3003W3SXX99N40X |
| 5W5 | Threaded insert / PCB clip | 3005W5SXX99N40X |
| 8W8 | Threaded insert / PCB clip | 3008W8SXX99N40X |
| Coded version | | |
| 2W2C | Threaded insert / PCB clip | 302W2CSXX99N40X |
| 3W3C | Threaded insert / PCB clip | 303W3CSXX99N40X |

| Plug connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded insert / PCB clip | 3003W3PXX99N40X |
| 5W5 | Threaded insert / PCB clip | 3005W5PXX99N40X |
| 8W8 | Threaded insert / PCB clip | 3008W8PXX99N40X |
| Coded version | | |
| 2W2C | Threaded insert / PCB clip | 302W2CPXX99N40X |
| 3W3C | Threaded insert / PCB clip | 303W3CPXX99N40X |



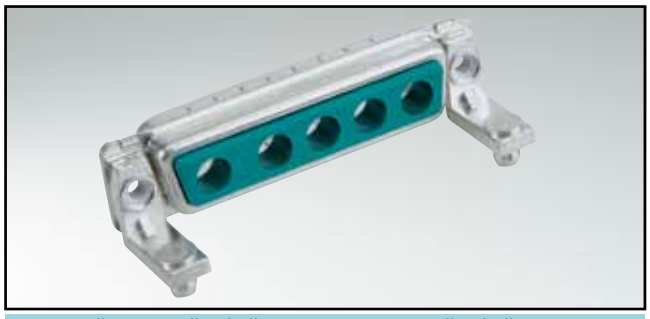

| Socket connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Front spacer / PCB clip | 3003W3SXX99P40X |
| 5W5 | Front spacer / PCB clip | 3005W5SXX99P40X |
| 8W8 | Front spacer / PCB clip | 3008W8SXX99P40X |
| Coded version | | |
| 2W2C | Front spacer / PCB clip | 302W2CSXX99P40X |
| 3W3C | Front spacer / PCB clip | 303W3CSXX99P40X |

| Plug connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Front spacer / PCB clip | 3003W3PXX99P40X |
| 5W5 | Front spacer / PCB clip | 3005W5PXX99P40X |
| 8W8 | Front spacer / PCB clip | 3008W8PXX99P40X |
| Coded version | | |
| 2W2C | Front spacer / PCB clip | 302W2CPXX99P40X |
| 3W3C | Front spacer / PCB clip | 303W3CPXX99P40X |

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness

# COMBINATION D-SUB WITHOUT CONTACTS

## For angled high power or coaxial contacts – Long metal bracket

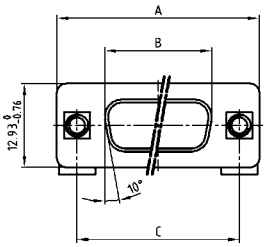


RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### DESCRIPTION

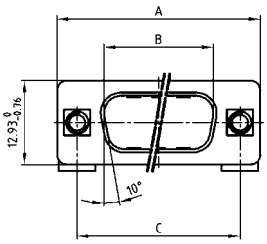
- Designs: **2W2C; 3W3; 3W3C; 5W5; 8W8**
- Mounting styles:
  - with mounting bracket and 4-40 UNC threaded insert
  - with mounting bracket with 4-40 UNC front spacer
  - with mounting bracket, PCB clip and 4-40 UNC threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC front spacer
- M3 thread design available on request
- Shell: Steel tin plated
  (brass tin plated or stainless steel available on request)

### SOCKET CONNECTOR



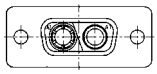

| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 1 | 31.19 | 16.46 | 25.00 +0.12 -0.13 |
| 2 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |

### PLUG CONNECTOR

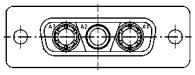



| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 1 | 31.19 | 16.79 | 25.00 +0.12 -0.13 | 6.12 |
| 2 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

### CODED SOCKET CONNECTORS

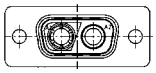


2W2C = 1 Socket – 1 Plug

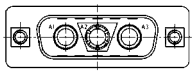


3W3C = 2 Sockets – 1 Plug

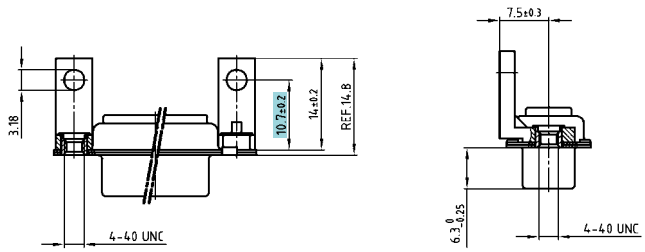
### CODED PLUG CONNECTORS

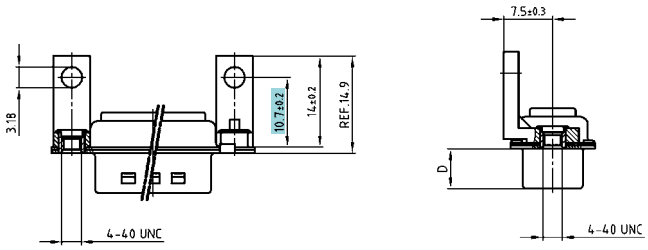


2W2C = 1 Plug – 1 Socket

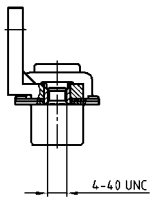


3W3C = 2 Plugs – 1 Socket




### ORDER DATA



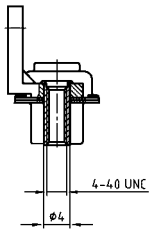

| SOCKET CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded insert | 3003W3SXX99G20X |
| 5W5 | Threaded insert | 3005W5SXX99G20X |
| 8W8 | Threaded insert | 3008W8SXX99G20X |
| Coded version | | |
| 2W2C | Threaded insert | 302W2CSXX99G20X |
| 3W3C | Threaded insert | 303W3CSXX99G20X |

| PLUG CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded insert | 3003W3PXX99G20X |
| 5W5 | Threaded insert | 3005W5PXX99G20X |
| 8W8 | Threaded insert | 3008W8PXX99G20X |
| Coded version | | |
| 2W2C | Threaded insert | 302W2CPXX99G20X |
| 3W3C | Threaded insert | 303W3CPXX99G20X |

# Combination D-SUB – Mounting styles

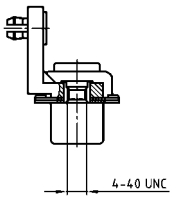
## For angled high power or coaxial contacts – Long metal bracket

### Order data



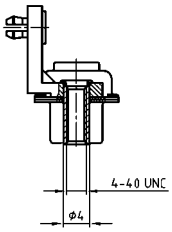

| Socket connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Front spacer | 3003W3SXX99H20X |
| 5W5 | Front spacer | 3005W5SXX99H20X |
| 8W8 | Front spacer | 3008W8SXX99H20X |
| Coded version | | |
| 2W2C | Front spacer | 302W2CSXX99H20X |
| 3W3C | Front spacer | 303W3CSXX99H20X |

| Plug connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Front spacer | 3003W3PXX99H20X |
| 5W5 | Front spacer | 3005W5PXX99H20X |
| 8W8 | Front spacer | 3008W8PXX99H20X |
| Coded version | | |
| 2W2C | Front spacer | 302W2CPXX99H20X |
| 3W3C | Front spacer | 303W3CPXX99H20X |




| Socket connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded insert / PCB clip | 3003W3SXX99G40X |
| 5W5 | Threaded insert / PCB clip | 3005W5SXX99G40X |
| 8W8 | Threaded insert / PCB clip | 3008W8SXX99G40X |
| Coded version | | |
| 2W2C | Threaded insert / PCB clip | 302W2CSXX99G40X |
| 3W3C | Threaded insert / PCB clip | 303W3CSXX99G40X |

| Plug connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded insert / PCB clip | 3003W3PXX99G40X |
| 5W5 | Threaded insert / PCB clip | 3005W5PXX99G40X |
| 8W8 | Threaded insert / PCB clip | 3008W8PXX99G40X |
| Coded version | | |
| 2W2C | Threaded insert / PCB clip | 302W2CPXX99G40X |
| 3W3C | Threaded insert / PCB clip | 303W3CPXX99G40X |




| Socket connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Front spacer / PCB clip | 3003W3SXX99H40X |
| 5W5 | Front spacer / PCB clip | 3005W5SXX99H40X |
| 8W8 | Front spacer / PCB clip | 3008W8SXX99H40X |
| Coded version | | |
| 2W2C | Front spacer / PCB clip | 302W2CSXX99H40X |
| 3W3C | Front spacer / PCB clip | 303W3CSXX99H40X |

| Plug connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Front spacer / PCB clip | 3003W3PXX99H40X |
| 5W5 | Front spacer / PCB clip | 3005W5PXX99H40X |
| 8W8 | Front spacer / PCB clip | 3008W8PXX99H40X |
| Coded version | | |
| 2W2C | Front spacer / PCB clip | 302W2CPXX99H40X |
| 3W3C | Front spacer / PCB clip | 303W3CPXX99H40X |

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness

# COMBINATION D-SUB WIHTOUT CONTACTS

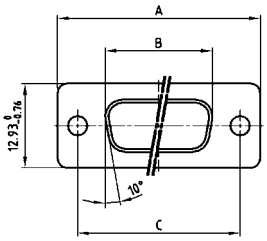
## Crimp body – For wire size AWG 20...24 and AWG 26...28

RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### DESCRIPTION

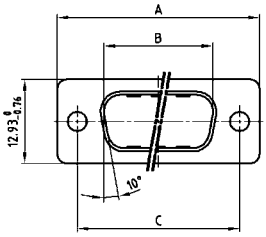
- For precision machined contacts for wire size **AWG 20...24** and **AWG 26...28**
- Mounting styles:
  - with through-hole, Ø .118"/3 mm
  - with 4-40 UNC or M3 threaded insert
- Shell: Steel tin plated
  (brass tin plated or stainless steel available on request)
- recommended plastic hoods look at page 7|16, 7|17

### SOCKET CONNECTOR

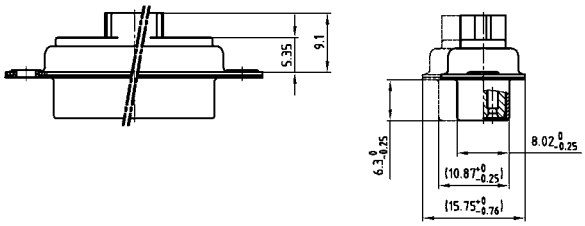



| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 1 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 2 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |
| 5 | 67.31 | 52.55 | 61.10 $^{+0.14}_{-0.11}$ |

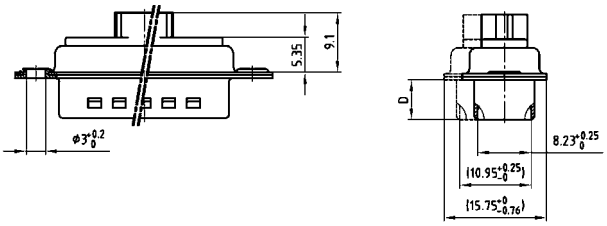
### PLUG CONNECTOR




| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 1 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 2 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 5 | 67.31 | 52.68 | 61.10 $^{+0.14}_{-0.11}$ | 5.99 |

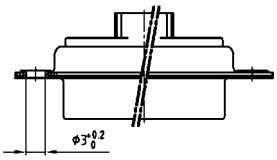



Shell size 5 = Dim. in (..)




Shell size 5 = Dim. in (..)

### ORDER DATA



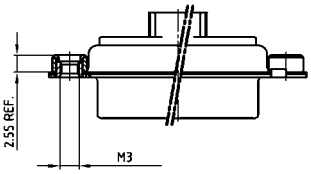

| SOCKET CONNECTOR | | |
|---|---|---|
| Design | Mounting style | Part Number |
| 5W1 | Through-hole | 3005W1SXK99A10X |
| 7W2 | Through-hole | 3007W2SXK99A10X |
| 11W1 | Through-hole | 3011W1SXK99A10X |
| 9W4 | Through-hole | 3009W4SXK99A10X |
| 13W3 | Through-hole | 3013W3SXK99A10X |
| 17W2 | Through-hole | 3017W2SXK99A10X |
| 21W1 | Through-hole | 3021W1SXK99A10X |
| 13W6 | Through-hole | 3013W6SXK99A10X |
| 17W5 | Through-hole | 3017W5SXK99A10X |
| 21WA4 | Through-hole | 321WA4SXK99A10X |
| 25W3 | Through-hole | 3025W3SXK99A10X |
| 27W2 | Through-hole | 3027W2SXK99A10X |
| 24W7 | Through-hole | 3024W7SXK99A10X |
| 36W4 | Through-hole | 3036W4SXK99A10X |
| 43W2 | Through-hole | 3043W2SXK99A10X |
| 47W1 | Through-hole | 3047W1SXK99A10X |

| PLUG CONNECTOR | | |
|---|---|---|
| Design | Mounting style | Part Number |
| 5W1 | Through-hole | 3005W1PXK99A10X |
| 7W2 | Through-hole | 3007W2PXK99A10X |
| 11W1 | Through-hole | 3011W1PXK99A10X |
| 9W4 | Through-hole | 3009W4PXK99A10X |
| 13W3 | Through-hole | 3013W3PXK99A10X |
| 17W2 | Through-hole | 3017W2PXK99A10X |
| 21W1 | Through-hole | 3021W1PXK99A10X |
| 13W6 | Through-hole | 3013W6PXK99A10X |
| 17W5 | Through-hole | 3017W5PXK99A10X |
| 21WA4 | Through-hole | 321WA4PXK99A10X |
| 25W3 | Through-hole | 3025W3PXK99A10X |
| 27W2 | Through-hole | 3027W2PXK99A10X |
| 24W7 | Through-hole | 3024W7PXK99A10X |
| 36W4 | Through-hole | 3036W4PXK99A10X |
| 43W2 | Through-hole | 3043W2PXK99A10X |
| 47W1 | Through-hole | 3047W1PXK99A10X |

# Combination D-SUB – Mounting styles

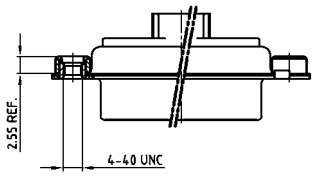
## Crimp body (without contacts) – For wire size AWG 20...24 and AWG 26...28

### Order data




| Socket connector | | |
|---|---|---|
| Design | Mounting style M3 | Part Number |
| 5W1 | Threaded insert | 3005W1SXK99A20X |
| 7W2 | Threaded insert | 3007W2SXK99A20X |
| 11W1 | Threaded insert | 3011W1SXK99A20X |
| 9W4 | Threaded insert | 3009W4SXK99A20X |
| 13W3 | Threaded insert | 3013W3SXK99A20X |
| 17W2 | Threaded insert | 3017W2SXK99A20X |
| 21W1 | Threaded insert | 3021W1SXK99A20X |
| 13W6 | Threaded insert | 3013W6SXK99A20X |
| 17W5 | Threaded insert | 3017W5SXK99A20X |
| 21WA4 | Threaded insert | 321WA4SXK99A20X |
| 25W3 | Threaded insert | 3025W3SXK99A20X |
| 27W2 | Threaded insert | 3027W2SXK99A20X |
| 24W7 | Threaded insert | 3024W7SXK99A20X |
| 36W4 | Threaded insert | 3036W4SXK99A20X |
| 43W2 | Threaded insert | 3043W2SXK99A20X |
| 47W1 | Threaded insert | 3047W1SXK99A20X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style M3 | Part Number |
| 5W1 | Threaded insert | 3005W1PXK99A20X |
| 7W2 | Threaded insert | 3007W2PXK99A20X |
| 11W1 | Threaded insert | 3011W1PXK99A20X |
| 9W4 | Threaded insert | 3009W4PXK99A20X |
| 13W3 | Threaded insert | 3013W3PXK99A20X |
| 17W2 | Threaded insert | 3017W2PXK99A20X |
| 21W1 | Threaded insert | 3021W1PXK99A20X |
| 13W6 | Threaded insert | 3013W6PXK99A20X |
| 17W5 | Threaded insert | 3017W5PXK99A20X |
| 21WA4 | Threaded insert | 321WA4PXK99A20X |
| 25W3 | Threaded insert | 3025W3PXK99A20X |
| 27W2 | Threaded insert | 3027W2PXK99A20X |
| 24W7 | Threaded insert | 3024W7PXK99A20X |
| 36W4 | Threaded insert | 3036W4PXK99A20X |
| 43W2 | Threaded insert | 3043W2PXK99A20X |
| 47W1 | Threaded insert | 3047W1PXK99A20X |

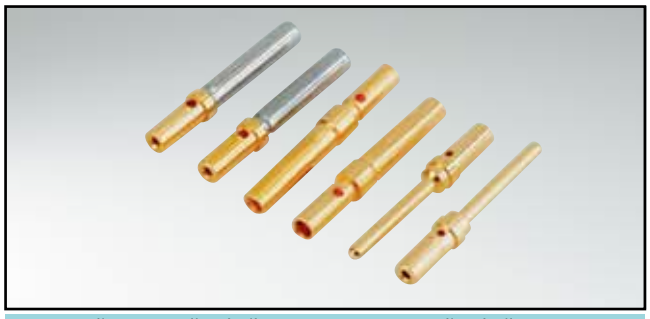



| Socket connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded insert | 3005W1SXK99A30X |
| 7W2 | Threaded insert | 3007W2SXK99A30X |
| 11W1 | Threaded insert | 3011W1SXK99A30X |
| 9W4 | Threaded insert | 3009W4SXK99A30X |
| 13W3 | Threaded insert | 3013W3SXK99A30X |
| 17W2 | Threaded insert | 3017W2SXK99A30X |
| 21W1 | Threaded insert | 3021W1SXK99A30X |
| 13W6 | Threaded insert | 3013W6SXK99A30X |
| 17W5 | Threaded insert | 3017W5SXK99A30X |
| 21WA4 | Threaded insert | 321WA4SXK99A30X |
| 25W3 | Threaded insert | 3025W3SXK99A30X |
| 27W2 | Threaded insert | 3027W2SXK99A30X |
| 24W7 | Threaded insert | 3024W7SXK99A30X |
| 36W4 | Threaded insert | 3036W4SXK99A30X |
| 43W2 | Threaded insert | 3043W2SXK99A30X |
| 47W1 | Threaded insert | 3047W1SXK99A30X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded insert | 3005W1PXK99A30X |
| 7W2 | Threaded insert | 3007W2PXK99A30X |
| 11W1 | Threaded insert | 3011W1PXK99A30X |
| 9W4 | Threaded insert | 3009W4PXK99A30X |
| 13W3 | Threaded insert | 3013W3PXK99A30X |
| 17W2 | Threaded insert | 3017W2PXK99A30X |
| 21W1 | Threaded insert | 3021W1PXK99A30X |
| 13W6 | Threaded insert | 3013W6PXK99A30X |
| 17W5 | Threaded insert | 3017W5PXK99A30X |
| 21WA4 | Threaded insert | 321WA4PXK99A30X |
| 25W3 | Threaded insert | 3025W3PXK99A30X |
| 27W2 | Threaded insert | 3027W2PXK99A30X |
| 24W7 | Threaded insert | 3024W7PXK99A30X |
| 36W4 | Threaded insert | 3036W4PXK99A30X |
| 43W2 | Threaded insert | 3043W2PXK99A30X |
| 47W1 | Threaded insert | 3047W1PXK99A30X |

# Combination D-SUB Contacts

## Crimp contacts – Precision machined – For wire size AWG 20...24 and AWG 26...28



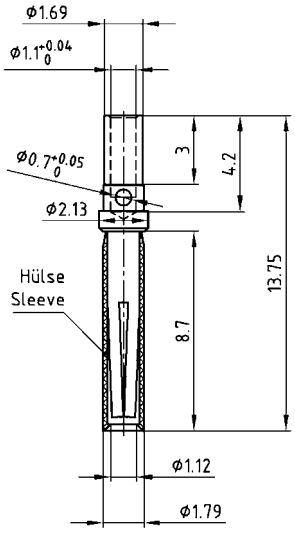
RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### Description

- For wire size **AWG 20...24** and **AWG 26–28**
- Quality class 3
- Quality class 1 and another quality classes on request

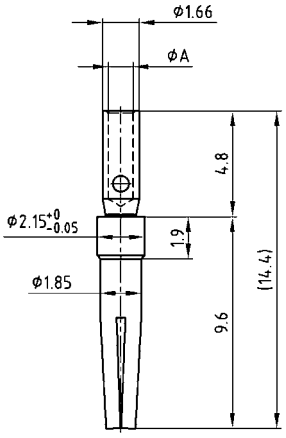
### Product drawing

Signal socket crimp contact
(Closed entry version)

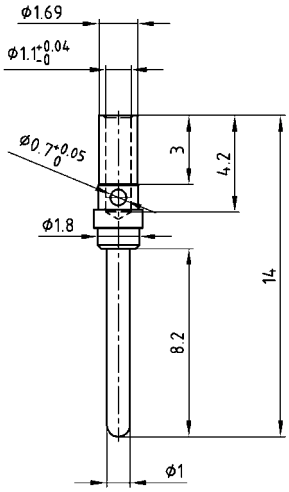



| AWG | A +0.04 |
|---|---|
| 20-24 | Ø 1.16 |
| 26-28 | Ø 0.65 |

Signal socket crimp contact
(Standard version)




Signal plug crimp contact
(Standard version)




| Designs | |
|---|---|
| Contact material Socket | Copper alloy |
| Closed entry version | Stainless steel sleeve |
| Contact material plug | Brass |
| Quality class 1 | 500 mating cycles |
| Quality class 3 | 50 mating cycles |

### Order data

**Socket contact**

| Contact type | AWG | Quality class | Part Number |
|---|---|---|---|
| Socket* / Closed entry | 20...24 | 1 | 132C15019X |
| Socket* / Closed entry | 26...28 | 1 | 132C15029X |
| Socket / Standard | 20...24 | 3 | 162A18709X |
| Socket / Standard | 26...28 | 3 | 162A18719X |

*Preferred type

**Plug contact**

| Contact type | AWG | Quality class | Part Number |
|---|---|---|---|
| Plug / Standard | 20...24 | 1 | 131C15019X |
| Plug / Standard | 26...28 | 1 | 131C15029X |
| Plug / Standard | 20...24 | 3 | 131A15019X |
| Plug / Standard | 26...28 | 3 | 131A15029X |

# Combination D-SUB Contacts

## High power contacts – Solder cup – Straight

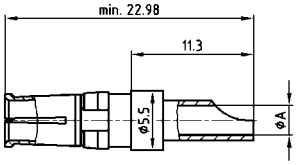
RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### Description

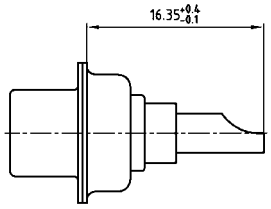
- Precision machined contacts
- Quality class 3: 50 mating cycles
- Quality class 1: 500 mating cycles
- Mating side gold plated
- Termination side gold or tin plated
- Other quality classes on request
- To order these preassembled in the connector, use the termination code shown below, in the part number creator at the front of this section

### Product drawing

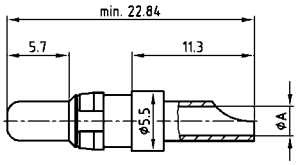
Socket contact




Installation dimension

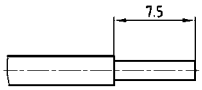



Plug contact

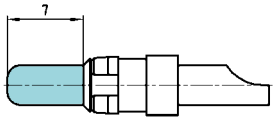



| AWG | Current rating | ØA+0.15 |
|---|---|---|
| 16-20 | 10A | 1.80 |
| 12-14 | 20A | 2.70 |
| 10-12 | 30A | 3.50 |
| 8-10 | 40A | 4.80 |

Wire stripping




Premating contact




### Order data

**Socket contact**

| AWG | Quality class | Code* tin plated | Part Number tin plated | Code* gold plated | Part Number gold plated |
|---|---|---|---|---|---|
| 16...20 | 1 | F1 | 13-003501 | 41 | 132C10019X |
| 16...20 | 3 | F2 | 13-003503 | 61 | 132A10019X |
| 12...14 | 1 | F3 | 13-003511 | 42 | 132C10029X |
| 12...14 | 3 | F4 | 13-003513 | 62 | 132A10029X |
| 10...12 | 1 | F5 | 13-003521 | 43 | 132C10039X |
| 10...12 | 3 | F6 | 13-003523 | 63 | 132A10039X |
| 8...10 | 1 | F7 | 13-003531 | 44 | 132C10049X |
| 8...10 | 3 | F8 | 13-003533 | 64 | 132A10049X |

**Plug contact**

| AWG | Quality class | Code* tin plated | Part Number tin plated | Code* gold plated | Part Number gold plated |
|---|---|---|---|---|---|
| 16...20 | 1 | F1 | 13-003541 | 41 | 131C10019X |
| 16...20 | 3 | F2 | 13-003543 | 61 | 131A10019X |
| 12...14 | 1 | F3 | 13-003551 | 42 | 131C10029X |
| 12...14 | 3 | F4 | 13-003553 | 62 | 131A10029X |
| 10...12 | 1 | F5 | 13-003561 | 43 | 131C10039X |
| 10...12 | 3 | F6 | 13-003563 | 63 | 131A10039X |
| 8...10 | 1 | F7 | 13-003571 | 44 | 131C10049X |
| 8...10 | 3 | F8 | 13-003573 | 64 | 131A10049X |

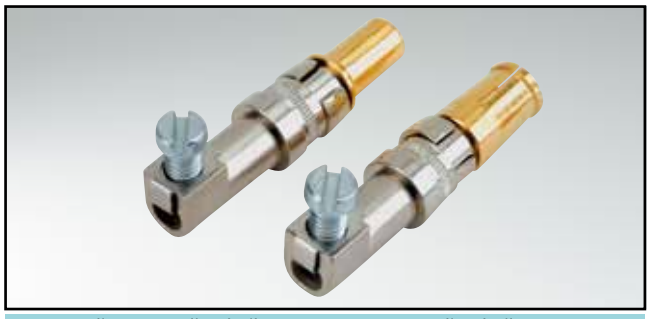
**Premating contact**

| AWG | Ampere | Quality class | Part Number tin plated | Quality class | Part Number gold plated |
|---|---|---|---|---|---|
| 16-20 | 10 A | 1 | 13-003581 | 1 | 131C10119X |
| 12-14 | 20 A | 1 | 13-003591 | 1 | 131C10129X |
| 10-12 | 30 A | 1 | 13-003601 | 1 | 131C10139X |
| 8-10 | 40 A | 1 | 13-003611 | 1 | 131C10149X |

*Code use with part number creator

# Combination D-SUB Contacts

## High power contacts – Screw termination – Straight – For wire size AWG 14



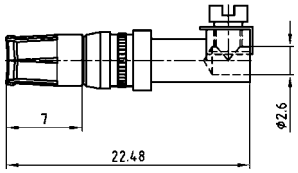
RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### Description

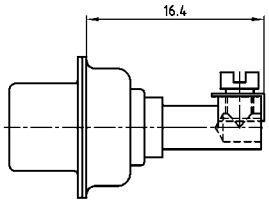
- Precision machined contacts for wire size **AWG 14**, max. 20 A
- Quality class 3: 50 mating cycles (gold plated)
- Quality class 1: 500 mating cycles (gold plated)
- Other quality classes on request
- For field attachable applications

### Product drawing

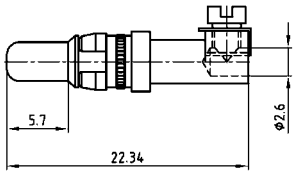
Socket contact




Installation dimension

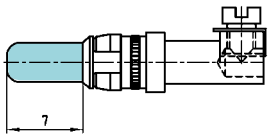



Plug contact




| AWG | Current rating | ØA+0.15 |
|---|---|---|
| 16-20 | 10A | 1.80 |
| 12-14 | 20A | 2.70 |
| 10-12 | 30A | 3.50 |
| 8-10 | 40A | 4.80 |

Premating contact




### Order data

**Socket contact**

| Contact type | AWG | Ampere | Quality class | Part Number |
|---|---|---|---|---|
| Socket | 14 | 20 A | 1 | 132C36009X |
| Socket | 14 | 20 A | 3 | 132A36009X |

**Plug contact**

| Contact type | AWG | Ampere | Quality class | Part Number |
|---|---|---|---|---|
| Plug | 14 | 20 A | 1 | 131C36009X |
| Plug | 14 | 20 A | 3 | 131A36009X |
| Plug premating | 14 | 20 A | 1 | 131C36109X |

# Combination D-SUB Contacts

## High power contacts – Crimp – Straight

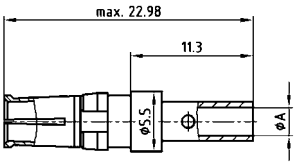
RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### Description

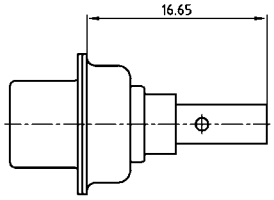
- Precision machined contacts
- Quality class 3: 50 mating cycles
- Quality class 1: 500 mating cycles
- Mating side gold plated
- Termination side gold or tin plated
- Other quality classes on request

### Product drawing

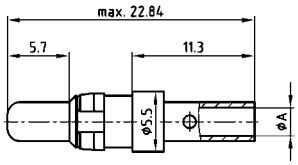
Socket contact




Installation dimension

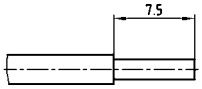



Plug contact

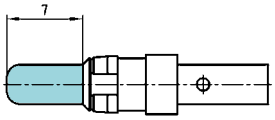



| AWG | Current rating | ØA+0.15 |
|---|---|---|
| 16-20 | 10A | 1.70 |
| 12-14 | 20A | 2.60 |
| 10-12 | 30A | 3.70 |
| 8-10 | 40A | 4.60 |

Wire stripping




Premating contact




### Order data

**Socket contact**

| AWG | Ampere | Quality class | Part Number tin plated | Quality class | Part Number gold plated |
|---|---|---|---|---|---|
| 16-20 | 10 A | 1 | 13-003621 | 1 | 132C11019X |
| 16-20 | 10 A | 3 | 13-003623 | 3 | 132A11019X |
| 12-14 | 20 A | 1 | 13-003631 | 1 | 132C11029X |
| 12-14 | 20 A | 3 | 13-003633 | 3 | 132A11029X |
| 10-12 | 30 A | 1 | 13-003641 | 1 | 132C11039X |
| 10-12 | 30 A | 3 | 13-003643 | 3 | 132A11039X |
| 8-10 | 40 A | 1 | 13-003651 | 1 | 132C11049X |
| 8-10 | 40 A | 3 | 13-003653 | 3 | 132A11049X |

**Plug contact**

| AWG | Ampere | Quality class | Part Number tin plated | Quality class | Part Number gold plated |
|---|---|---|---|---|---|
| 16-20 | 10 A | 1 | 13-003661 | 1 | 131C11019X |
| 16-20 | 10 A | 3 | 13-003663 | 3 | 131A11019X |
| 12-14 | 20 A | 1 | 13-003671 | 1 | 131C11029X |
| 12-14 | 20 A | 3 | 13-003673 | 3 | 131A11029X |
| 10-12 | 30 A | 1 | 13-003681 | 1 | 131C11039X |
| 10-12 | 30 A | 3 | 13-003683 | 3 | 131A11039X |
| 8-10 | 40 A | 1 | 13-003691 | 1 | 131C11049X |
| 8-10 | 40 A | 3 | 13-003693 | 3 | 131A11049X |

**Premating contact**

| AWG | Ampere | Quality class | Part Number tin plated | Quality class | Part Number tin plated |
|---|---|---|---|---|---|
| 16-20 | 10 A | 1 | 13-003701 | 1 | 131C11119X |
| 12-14 | 20 A | 1 | 13-003711 | 1 | 131C11129X |
| 10-12 | 30 A | 1 | 13-003721 | 1 | 131C11139X |
| 8-10 | 40 A | 1 | 13-003731 | 1 | 131C11149X |

# Combination D-SUB Contacts

## High power contacts – Solder cup or crimp – angled

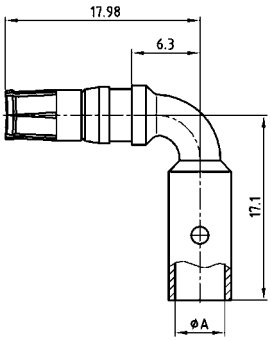
RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### Description

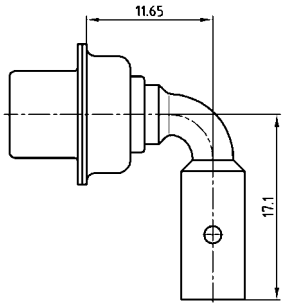
- Precision machined contacts
- Quality class 3: 50 mating cycles (gold plated)
- Quality class 1: 500 mating cycles (gold plated)
- Other quality classes on request

### Product drawing

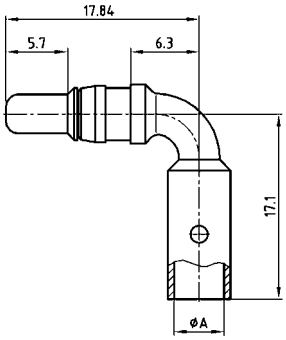
Socket contact



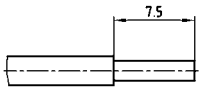

Installation dimension
Shell size 1-4




Plug contact

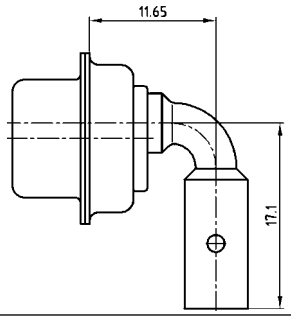



Wire stripping

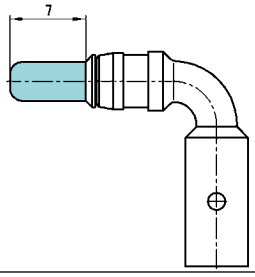



| AWG | Current rating | Ø A +0.15 | Crimp Plier Part.no. 360X12269X |
|---|---|---|---|
| 16-20 | 10A | 1.70 | 1.40/1.25 |
| 12-14 | 20A | 2.60 | 1.85/1.65 |
| 10-12 | 30A | 3.70 | 2.30/2.05 |
| 8-10 | 40A | 4.60 | 2.30/2.05 |

Installation dimension
Shell size 5




Premating contact




### Order data

**Socket contact**

| Contact type | AWG | Ampere | Quality class | Part Number |
|---|---|---|---|---|
| Socket | 16...20 | 10 A | 1 | 132C16019X |
| Socket | 16...20 | 10 A | 3 | 132A16019X |
| Socket | 12...14 | 20 A | 1 | 132C16029X |
| Socket | 12...14 | 20 A | 3 | 132A16029X |
| Socket | 10...12 | 30 A | 1 | 132C16039X |
| Socket | 10...12 | 30 A | 3 | 132A16039X |
| Socket | 8...10 | 40 A | 1 | 132C16049X |
| Socket | 8...10 | 40 A | 3 | 132A16049X |

**Plug contact**

| Contact type | AWG | Ampere | Quality class | Part Number |
|---|---|---|---|---|
| Plug | 16...20 | 10 A | 1 | 131C16019X |
| Plug | 16...20 | 10 A | 3 | 131A16019X |
| Plug | 12...14 | 20 A | 1 | 131C16029X |
| Plug | 12...14 | 20 A | 3 | 131A16029X |
| Plug | 10...12 | 30 A | 1 | 131C16039X |
| Plug | 10...12 | 30 A | 3 | 131A16039X |
| Plug | 8...10 | 40 A | 1 | 131C16049X |
| Plug | 8...10 | 40 A | 3 | 131A16049X |

**Premating contact**

| Contact type | AWG | Ampere | Quality class | Part Number |
|---|---|---|---|---|
| Plug premating | 16...20 | 10 A | 1 | 131C16119X |
| Plug premating | 12...14 | 20 A | 1 | 131C16129X |
| Plug premating | 10...12 | 30 A | 1 | 131C16139X |
| Plug premating | 8...10 | 40 A | 1 | 131C16149X |

# Combination D-SUB Contacts

## High power contacts – Solder pin – angled

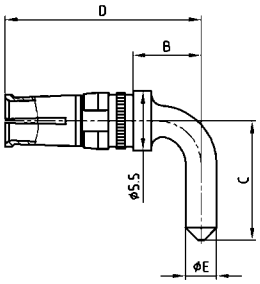
RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### Description

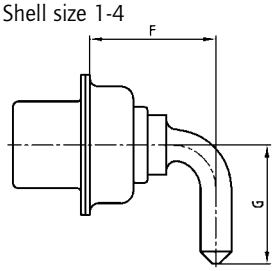
- Precision machined contacts
- Quality class 3: 50 mating cycles
- Quality class 1: 500 mating cycles
- Mating side gold plated
- Termination side tin plated
- Other quality classes on request
- To order these preassembled in the connector, use the termination code shown below, in the part number creator at the front of this section

### Product drawing

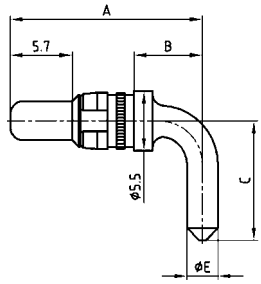
Socket contact




Installation dimension
Shell size 1-4



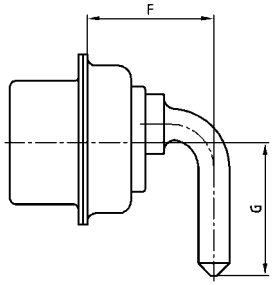

Plug contact



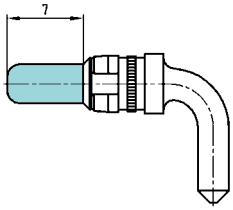

| Shellsize | Current rating | Termination | A | B | C | D | Ø E | F | G |
|---|---|---|---|---|---|---|---|---|---|
| 1-4 | 15A | 55/59 | 14.54 | 3.00 | 10.50 | 14.68 | 1.90 | 8.35 | 10.50 |
| 1-4 | 20A | 56/73 | 17.84 | 6.30 | 11.00 | 17.98 | 2.85 | 11.65 | 11.00 |
| 1-4 | 30A | 57/74 | 26.54 | 15.00 | 9.50 | 26.68 | 3.20 | 20.35 | 9.50 |
| 1-4 | 40A | 58/75 | 17.84 | 6.30 | 11.00 | 17.98 | 3.75 | 11.65 | 11.00 |
| 5 | 20A | 66/81 | 20.39 | 8.85 | 14.00 | 20.53 | 2.85 | 14.20 | 12.58 |
| 5 | 30A | 67/82 | 20.39 | 8.85 | 14.00 | 20.53 | 3.20 | 14.20 | 12.58 |
| 5 | 30A | 65/85 | 26.54 | 15.00 | 13.50 | 26.68 | 3.20 | 20.35 | 12.08 |
| 5 | 40A | 60/77 | 20.39 | 8.85 | 14.00 | 20.53 | 3.75 | 14.20 | 12.58 |

| hole diameter of PCB: |
|---|
| 1.95 = 2.30 ± 0.1 |
| 2.60 = 3.00 ± 0.1 |
| 2.85 = 3.20 ± 0.1 |
| 3.18 = 3.60 ± 0.1 |
| 3.75 = 4.10 ± 0.1 |

Installation dimension
Shell size 5




Premating contact




### Order data

**Socket contact**

| Contact type | Shell size | Quality class | Termination* | Part Number |
|---|---|---|---|---|
| Socket | 1-4 | 1 | 55 | 132C13009X |
| Socket | 1-4 | 3 | 59 | 132A13009X |
| Socket | 1-4 | 1 | 56 | 132C13019X |
| Socket | 1-4 | 3 | 73 | 132A13019X |
| Socket | 1-4 | 1 | 57 | 132C13029X |
| Socket | 1-4 | 3 | 74 | 132A13029X |
| Socket | 1-4 | 1 | 58 | 132C13039X |
| Socket | 1-4 | 3 | 75 | 132A13039X |
| Socket | 5 | 1 | 66 | 132C13060X |
| Socket | 5 | 3 | 81 | 132A13060X |
| Socket | 5 | 1 | 67 | 132C13070X |
| Socket | 5 | 3 | 82 | 132A13070X |
| Socket | 5 | 1 | 65 | 132C13059X |
| Socket | 5 | 3 | 85 | 132A13059X |
| Socket | 5 | 1 | 60 | 132C13049X |
| Socket | 5 | 3 | 77 | 132A13049X |

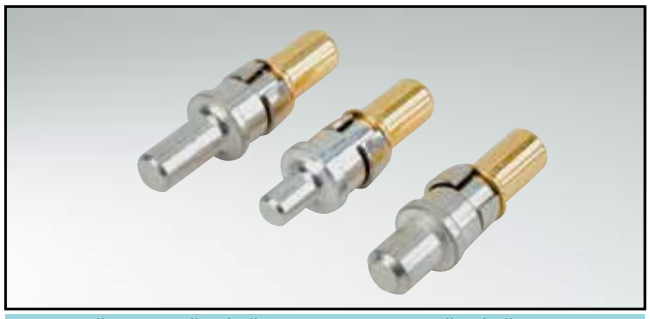
**Plug contact**

| Contact type | Shell size | Quality class | Termination* | Part Number |
|---|---|---|---|---|
| Plug | 1-4 | 1 | 55 | 131C13009X |
| Plug | 1-4 | 3 | 59 | 131A13009X |
| Plug | 1-4 | 1 | 56 | 131C13019X |
| Plug | 1-4 | 3 | 73 | 131A13019X |
| Plug | 1-4 | 1 | 57 | 131C13029X |
| Plug | 1-4 | 3 | 74 | 131A13029X |
| Plug | 1-4 | 1 | 58 | 131C13039X |
| Plug | 1-4 | 3 | 75 | 131A13039X |
| Plug | 5 | 1 | 66 | 131C13060X |
| Plug | 5 | 3 | 81 | 131A13060X |
| Plug | 5 | 1 | 67 | 131C13070X |
| Plug | 5 | 3 | 82 | 131A13070X |
| Plug | 5 | 1 | 65 | 131C13059X |
| Plug | 5 | 3 | 85 | 131A13059X |
| Plug | 5 | 1 | 60 | 131C13049X |
| Plug | 5 | 3 | 77 | 131A13049X |
| Plug premating | 1-4 | 1 | | 131C13109X |
| Plug premating | 1-4 | 1 | | 131C13119X |
| Plug premating | 1-4 | 1 | | 131C13129X |
| Plug premating | 1-4 | 1 | | 131C13139X |
| Plug premating | 5 | 1 | | 131C13160X |
| Plug premating | 5 | 1 | | 131C13170X |
| Plug premating | 5 | 1 | | 131C13159X |
| Plug premating | 5 | 1 | | 131C13149X |

*Code use with part number creator

# Combination D-SUB Contacts

## High power contacts – Solder pin – Straight



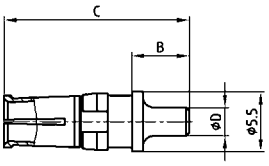
RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### Description

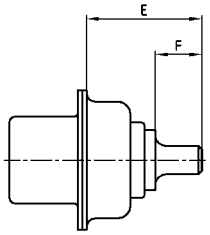
- Precision machined contacts
- Quality class 3: 50 mating cycles (gold plated)
- Quality class 1: 500 mating cycles (gold plated)
- Mating side gold plated
- Termination side tin plated
- Other quality classes on request
- To order these preassembled in the connector, use the termination code shown below, in the part number creator at the front of this section

### Product drawing

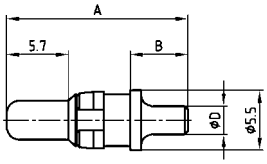
Socket contact




Installation dimension



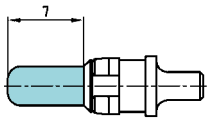

Plug contact




| Current rating | Termination | A | B | C | Ø D | E | F |
|---|---|---|---|---|---|---|---|
| 20A | 48/68** | 15.84 | 4.60 | 15.98 | 1.95 | 9.65 | 3.80 |
| 20A | 49/69 | 16.84 | 5.30 | 16.98 | 2.60 | 10.65 | 4.30 |
| 20A | 50/70** | 16.24 | 4.70 | 16.38 | 2.85 | 10.05 | 3.70 |
| 30A | 51/71 | 19.04 | 7.50 | 19.18 | 3.18 | 12.85 | 6.70 |
| 40A | 52/72 | 17.29 | 5.75 | 17.43 | 3.75 | 11.10 | 4.75 |

| PCB hole diameter at: |
|---|
| 1.95 = 2.30 ± 0.1 |
| 2.60 = 3.00 ± 0.1 |
| 2.85 = 3.20 ± 0.1 |
| 3.18 = 3.60 ± 0.1 |
| 3.75 = 4.10 ± 0.1 |

Premating contact




### Order data

**Socket contact**

| Contact type | Ampere | Quality class | Termination* | Part Number |
|---|---|---|---|---|
| Socket | 20 A | 1 | 48** | 132C12019X |
| Socket | 20 A | 3 | 68** | 132A12019X |
| Socket | 20 A | 1 | 49 | 132C12029X |
| Socket | 20 A | 3 | 69 | 132A12029X |
| Socket | 20 A | 1 | 50** | 132C12039X |
| Socket | 20 A | 3 | 70** | 132A12039X |
| Socket | 30 A | 1 | 51 | 132C12049X |
| Socket | 30 A | 3 | 71 | 132A12049X |
| Socket | 40 A | 1 | 52 | 132C12059X |
| Socket | 40 A | 3 | 72 | 132A12059X |

**Plug contact**

| Contact type | Ampere | Quality class | Termination* | Part Number |
|---|---|---|---|---|
| Plug | 20 A | 1 | 48** | 131C12019X |
| Plug | 20 A | 3 | 68** | 131A12019X |
| Plug | 20 A | 1 | 49 | 131C12029X |
| Plug | 20 A | 3 | 69 | 131A12029X |
| Plug | 20 A | 1 | 50** | 131C12039X |
| Plug | 20 A | 3 | 70** | 131A12039X |
| Plug | 30 A | 1 | 51 | 131C12049X |
| Plug | 30 A | 3 | 71 | 131A12049X |
| Plug | 40 A | 1 | 52 | 131C12059X |
| Plug | 40 A | 3 | 72 | 131A12059X |

**Premating contact**

| Contact type | Ampere | Quality class | Part Number |
|---|---|---|---|
| Plug premating | 20A/ Ø .077"/1.95 | 1 | 131C12119X |
| Plug premating | 20A/ Ø .102"/2.60 | 1 | 131C12129X |
| Plug premating | 20A/ Ø .112"/2.85 | 1 | 131C12139X |
| Plug premating | 30A/ Ø .125"/3.18 | 1 | 131C12149X |
| Plug premating | 40A/ Ø .148"/3.75 | 1 | 131C12159X |

*Code use with part number creator
**not suitable for PCB 2.3 + 3.2 mm

# Combination D-SUB Contacts

## High power contacts – Press-fit version – Straight

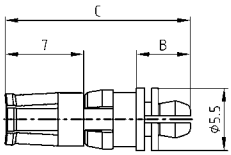
RoHS compliant

### Description

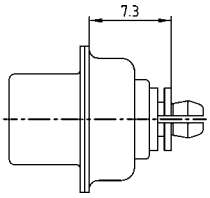
- Precision machined contacts
- Quality class 1: 500 mating cycles
- Mating area gold plated
- Press-fit area tin plated
- Other quality classes on request
- To order these preassembled in the connector, use the termination code shown below, in the part number creator at the front of this section

### Product drawing

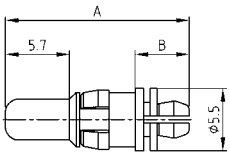
Socket contact




Installation dimension

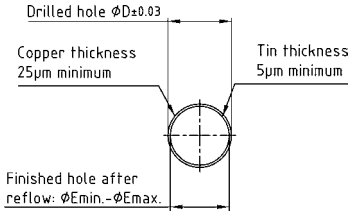



Plug contact




| Termination Type | Ampere | A | B | C | D +0.03 | E min. | E max. |
|---|---|---|---|---|---|---|---|
| P1 | 30A | 16.34 | 4.8 | 16.48 | 3.13 | 2.96 | 3.11 |
| P2 | 30A | 16.34 | 4.8 | 16.48 | 3.27 | 3.10 | 3.25 |
| P4 | 30A | 15.94 | 4.4 | 16.08 | 3.22 | 3.02 | 3.20 |

PCB hole drilling for high power pressfit contact




### Order data

**Socket contact**

| Contact type | Ampere | Quality class | Termination* | Part Number |
|---|---|---|---|---|
| Socket | 30 A | 1 | P1 | 132C00229A |
| Socket | 30 A | 1 | P2 | 132C00299A |
| Socket | 30 A | 1 | P4 | 132C19019X |

**Plug contact**

| Contact type | Ampere | Quality class | Termination* | Part Number |
|---|---|---|---|---|
| Plug | 30 A | 1 | P1 | 131C00319A |
| Plug | 30 A | 1 | P2 | 131C00389A |
| Plug | 30 A | 1 | P4 | 131C19019X |

# Combination D-SUB Contacts

## High voltage contacts – Solder termination – Straight and angled – For wire size AWG 20

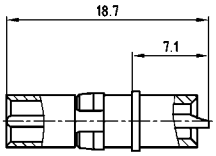
RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### Description

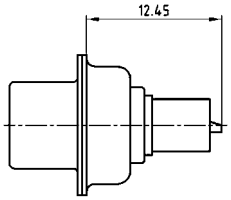
- Precision machined contacts for wire size **AWG 20**, max. 2,8 kV
- Quality class 1: 500 mating cycles (gold plated)
- Other quality classes on request

### Product drawing

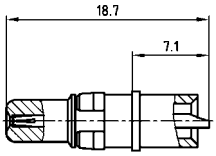
Socket contact straight



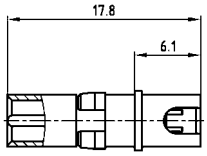

Installation dimension straight



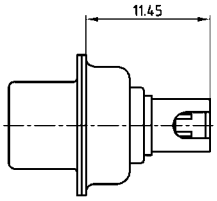

Plug contact straight



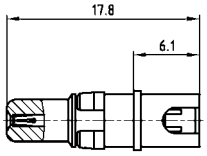

Socket contact angled



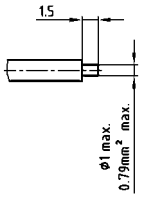

Installation dimension angled



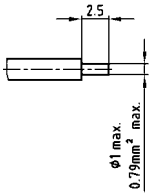

Plug contact angled




Wire stripping




Wire stripping




### Order data

**Socket contact**

| Contact type | AWG | Part Number |
|---|---|---|
| Socket/Straight | 20 | 132J14019X |
| Socket/Angled | 20 | 132J14519X |

**Plug contact**

| Contact type | AWG | Part Number |
|---|---|---|
| Plug/Straight | 20 | 131J14019X |
| Plug/Angled | 20 | 131J14519X |

# COMBINATION D-SUB CONTACTS

## Coaxial contacts – Straight – Inner conductor solder-, outer conductor crimp- / solder termination

RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

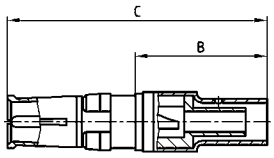
### DESCRIPTION

- 50 and 75 Ω-design
- Contact platings mating area:
  - .051 µ"/1.3 µm Au inner conductor / .032 µ"/0.8 µm Au outer conductor
  - .008µ"/0.2 µm Au inner and outer conductor
- Contact platings termination area:
  - .008 µ"/0.2 µm Au
  - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

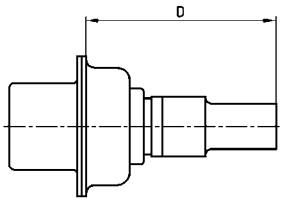
### PRODUCT DRAWING

## 50 Ω version

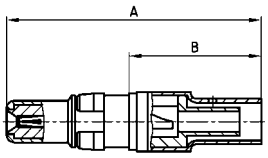
Socket contact



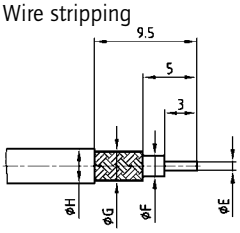

Installation dimension




Plug contact



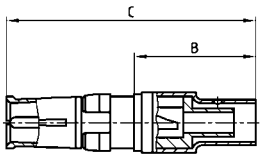

Wire stripping



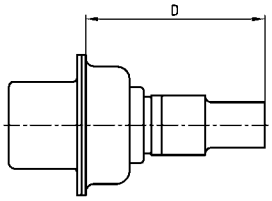

| Usable Cables RG | A | B | C | D max. | Ø E max. | Ø F max. | Ø G max. | Ø H max. |
|---|---|---|---|---|---|---|---|---|
| 178BU, 196AU,404 U | 22.50 | 11.20 | 23.00 | 17.55 | 0.85 | 1.20 | 1.40 | 2.30 |
| 174U, 188AU, 316U | 22.50 | 11.20 | 23.00 | 17.55 | 0.85 | 1.90 | 2.30 | 3.20 |
| 180BU | 22.50 | 11.20 | 23.00 | 17.55 | 0.85 | 2.80 | 3.10 | 4.50 |
| 58CU, 141AU | 26.30 | 14.80 | 26.80 | 20.15 | 1.00 | 3.00 | 3.60 | 5.20 |
| 316U double braided | 23.50 | 12.20 | 24.00 | 17.55 | 0.85 | 1.90 | 2.70 | 3.20 |

## 75 Ω version

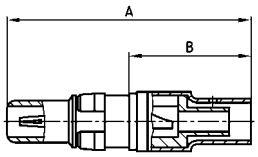
Socket contact



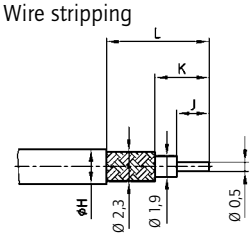

Installation dimension




Plug contact




Wire stripping




| Usable Cables RG | A | B | C | D max. | Ø H max. | J | K | L |
|---|---|---|---|---|---|---|---|---|
| 179BU, 187AU | 18.55 | 7.30 | 19.05 | 12.80 | 3.20 | 2.00 | 3.10 | 6.00 |
| 179BU, 187AU | 22.50 | 11.20 | 23.00 | 16.70 | 3.20 | 3.00 | 5.00 | 9.50 |

### ORDER DATA

**SOCKET CONTACT**

| Imp. | Cable | Part Number 1,3 µm / tin plated | Part Number 1,3 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 178BU, 196AU, 404U | 13-003004 | 132J20019X |
| 50 Ω | 174U, 188AU, 316U | 13-003014 | 132J20029X |
| 50 Ω | 180BU | 13-003024 | 132J20039X |
| 50 Ω | 58CU, 141AU | 13-003034 | 132J20049X |
| 50 Ω | 316U double braided | 13-003044 | 132J20059X |
| 75 Ω | 179BU, 187AU (B=.287"/7.3mm) | 13-003054 | 132J30019X |
| 75 Ω | 179BU, 187 AU (B=.441"/11.2 mm) | 13-003064 | 132J30029X |

**PLUG CONTACT**

| Imp. | Cable | Part Number 1,3 µm / tin plated | Part Number 1,3 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 178BU, 196AU, 404U | 13-003074 | 131J20019X |
| 50 Ω | 174U, 188AU, 316U | 13-003084 | 131J20029X |
| 50 Ω | 180BU | 13-003094 | 131J20039X |
| 50 Ω | 58CU, 141AU | 13-003104 | 131J20049X |
| 50 Ω | 316U double braided | 13-003114 | 131J20059X |
| 75 Ω | 179BU, 187AU (B=.287"/7.3mm) | 13-003124 | 131J30019X |
| 75 Ω | 179BU, 187 AU (B=.441"/11.2 mm) | 13-003134 | 131J30029X |

**SOCKET CONTACT**

| Imp. | Cable | Part Number 0,2 µm / tin plated | Part Number 0,2 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 178BU, 196AU, 404U | 13-003003 | 132A20019X |
| 50 Ω | 174U, 188AU, 316U | 13-003013 | 132A20029X |
| 50 Ω | 180BU | 13-003023 | 132A20039X |
| 50 Ω | 58CU, 141AU | 13-003033 | 132A20049X |
| 50 Ω | 316U double braided | 13-003043 | 132A20059X |
| 75 Ω | 179BU, 187AU (B=.287"/7.3mm) | 13-003053 | 132A30019X |
| 75 Ω | 179BU, 187 AU (B=.441"/11.2 mm) | 13-003063 | 132A30029X |

**PLUG CONTACT**

| Imp. | Cable | Part Number 0,2 µm / tin plated | Part Number 0,2 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 178BU, 196AU, 404U | 13-003073 | 131A20019X |
| 50 Ω | 174U, 188AU, 316U | 13-003083 | 131A20029X |
| 50 Ω | 180BU | 13-003093 | 131A20039X |
| 50 Ω | 58CU, 141AU | 13-003103 | 131A20049X |
| 50 Ω | 316U double braided | 13-003113 | 131A20059X |
| 75 Ω | 179BU, 187AU (B=.287"/7.3mm) | 13-003123 | 131A30019X |
| 75 Ω | 179BU, 187 AU (B=.441"/11.2 mm) | 13-003133 | 131A30029X |

# Combination D-SUB Contacts

## Coaxial contacts – Straight – Inner and outer conductor crimp termination

RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

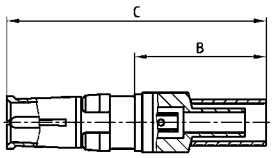
### Description

- 50 and 75 Ω-design
- Contact platings mating area:
  - .051 µ"/1.3 µm Au inner conductor / .032 µ"/0.8 µm Au outer conductor
  - .008µ"/0.2 µm Au inner and outer conductor
- Contact platings termination area:
  - .008 µ"/0.2 µm Au
  - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

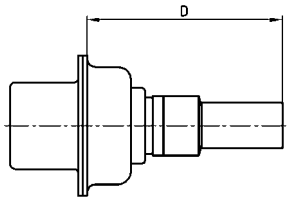
### Product drawing

## 50 Ω version

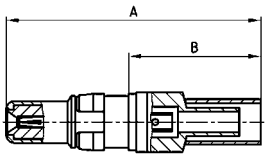
Socket contact



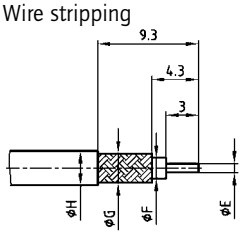

Installation dimension




Plug contact



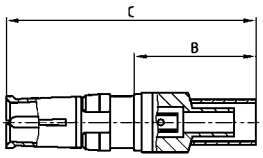

Wire stripping



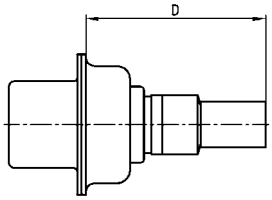

| Usable Cables RG | A | B | C | D max. | Ø E max. | Ø F max. | Ø G max. | Ø H max. |
|---|---|---|---|---|---|---|---|---|
| 174Bu, 188AU, 316U | 22.50 | 11.20 | 23.00 | 16.60 | 0.60 | 1.90 | 2.30 | 3.20 |
| 316U double braided | 22.50 | 11.20 | 23.00 | 16.60 | 0.60 | 1.90 | 3.00 | 3.80 |
| 58CU, 141AU | 22.20 | 10.90 | 22.70 | 16.30 | 1.30 | 3.70 | 4.30 | 5.20 |

## 75 Ω version

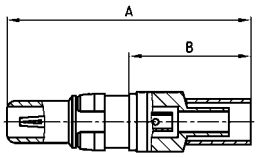
Socket contact



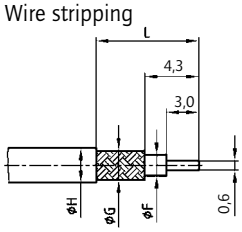

Installation dimension




Plug contact




Wire stripping




| Usable Cables RG | A | B | C | D | Ø F max. | Ø G max. | Ø H max. | L |
|---|---|---|---|---|---|---|---|---|
| 179BU, 187AU | 22.45 | 11.20 | 22.95 | 16.70 | 1.90 | 2.30 | 3.20 | 9.30 |
| 180BU | 21.65 | 10.40 | 22.15 | 15.90 | 2.80 | 3.20 | 4.50 | 8.80 |

### Order data

**Socket contact**

| Imp. | Cable | Part Number 1,3 µm / tin plated | Part Number 1,3 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 174U, 188AU, 316U | 13-003144 | 132J21019X |
| 50 Ω | 316U double braided | 13-003154 | 132J21029X |
| 50 Ω | 58CU, 141AU | 13-003164 | 132J21039X |
| 75 Ω | 179BU, 187AU | 13-003174 | 132J31019X |
| 75 Ω | 180BU | 13-003184 | 132J31029X |

**Plug contact**

| Imp. | Cable | Part Number 1,3 µm / tin plated | Part Number 1,3 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 174U, 188AU, 316U | 13-003194 | 131J21019X |
| 50 Ω | 316U double braided | 13-003204 | 131J21029X |
| 50 Ω | 58CU, 141AU | 13-003214 | 131J21039X |
| 75 Ω | 179BU, 187AU | 13-003224 | 131J31019X |
| 75 Ω | 180BU | 13-003234 | 131J31029X |

**Buchsenkontakt**

| Imp. | Cable | Part Number 0,2 µm / tin plated | Part Number 0,2 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 174U, 188AU, 316U | 13-003143 | 132A21019X |
| 50 Ω | 316U double braided | 13-003153 | 132A21029X |
| 50 Ω | 58CU, 141AU | 13-003163 | 132A21039X |
| 75 Ω | 179BU, 187AU | 13-003173 | 132A31019X |
| 75 Ω | 180BU | 13-003183 | 132A31029X |

**Plug contact**

| Imp. | Cable | Part Number 0,2 µm / tin plated | Part Number 0,2 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 174U, 188AU, 316U | 13-003193 | 131A21019X |
| 50 Ω | 316U double braided | 13-003203 | 131A21029X |
| 50 Ω | 58CU, 141AU | 13-003213 | 131A21039X |
| 75 Ω | 179BU, 187AU | 13-003223 | 131A31019X |
| 75 Ω | 180BU | 13-003233 | 131A31029X |

# Combination D-SUB Contacts

## Coaxial contacts – Angled – Inner conductor solder-, outer conductor crimp- / Solder termination

RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

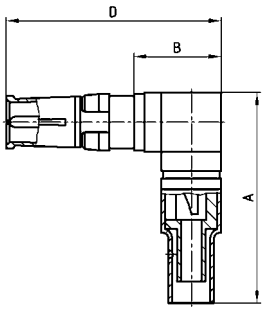
### Description

- 50 Ω design
- Contact platings mating area:
  - .051 µ"/1.3 µm Au inner conductor / .032 µ"/0.8 µm Au outer conductor
  - .008µ"/0.2 µm Au inner and outer conductor
- Contact platings termination area:
  - .008 µ"/0.2 µm Au
  - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

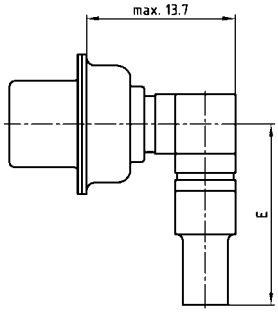
### Product drawing

### 50 Ω version

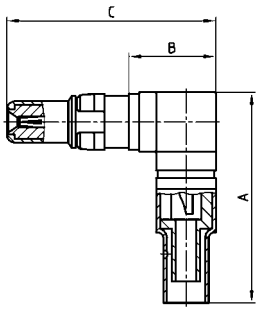
Socket contact



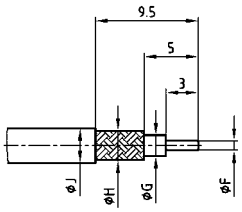

Installation dimension




Plug contact




Wire stripping




| Usable Cables RG | A | B | C | D | E | Ø F max. | Ø G max. | Ø H max. | Ø J max. |
|---|---|---|---|---|---|---|---|---|---|
| 174U, 188AU, 316U | 18.50 | 8.20 | 19.30 | 19.80 | 15.70 | 0.85 | 1.90 | 2.30 | 3.20 |
| 178BU, 196AU, 404U | 18.50 | 8.20 | 19.30 | 19.80 | 15.70 | 0.85 | 1.20 | 1.40 | 2.30 |
| 316U double braided | 19.50 | 8.20 | 19.30 | 19.80 | 16.70 | 0.85 | 1.90 | 2.70 | 3.50 |

### Order data

**Socket contact**

| Imp. | Cable | Part Number 1,3 µm / tin plated | Part Number 1,3 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 178BU, 196AU, 404U | 13-003244 | 132J22029X |
| 50 Ω | 174U, 188AU, 316U | 13-003254 | 132J22019X |
| 50 Ω | 316U double braided | 13-003264 | 132J22039X |

**Plug contact**

| Imp. | Cable | Part Number 1,3 µm / tin plated | Part Number 1,3 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 178BU, 196AU, 404U | 13-003274 | 131J22029X |
| 50 Ω | 174U, 188AU, 316U | 13-003284 | 131J22019X |
| 50 Ω | 316U double braided | 13-003294 | 131J22039X |

**Socket contact**

| Imp. | Cable | Part Number 0,2 µm / tin plated | Part Number 0,2 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 178BU, 196AU, 404U | 13-003243 | 132A22029X |
| 50 Ω | 174U, 188AU, 316U | 13-003253 | 132A22019X |
| 50 Ω | 316U double braided | 13-003263 | 132A22039X |

**Plug contact**

| Imp. | Cable | Part Number 0,2 µm / tin plated | Part Number 0,2 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 178BU, 196AU, 404U | 13-003273 | 131A22029X |
| 50 Ω | 174U, 188AU, 316U | 13-003283 | 131A22019X |
| 50 Ω | 316U double braided | 13-003293 | 131A22039X |

# COMBINATION D-SUB CONTACTS

## Coaxial contacts – Angled – Inner- and outer conductor crimp termination

RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

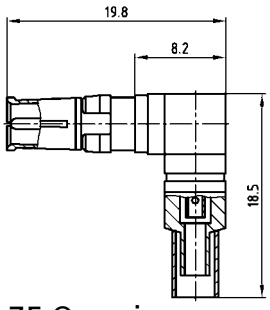
### DESCRIPTION

- 50 and 75 Ω-design
- Contact platings mating area:
  - .051 µ"/1.3 µm Au inner conductor / .032 µ"/0.8 µm Au outer conductor
  - .008µ"/0.2 µm Au inner and outer conductor
- Contact platings termination area:
  - .008 µ"/0.2 µm Au
  - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

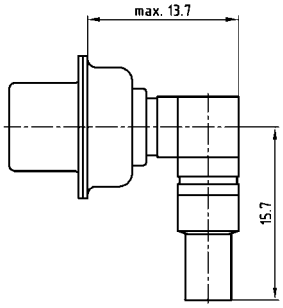
### PRODUCT DRAWING

### 50 Ω version

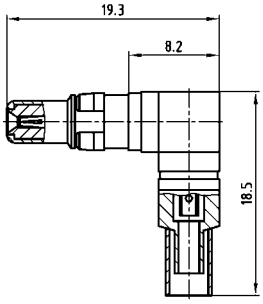
Socket contact




Installation dimension

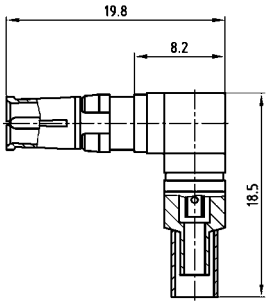



Plug contact

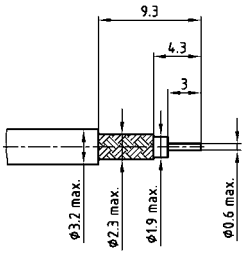



### 75 Ω version

Socket contact

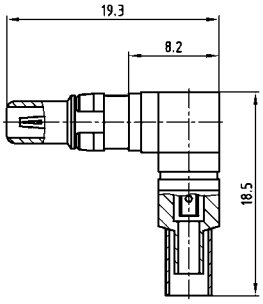



Wire stripping




verwendbare Kabel: RG- 174U, 188AU, 316U
Usable Cables

Plug contact




### ORDER DATA

**SOCKET CONTACT**

| Imp. | Cable | Part Number 1,3 µm / tin plated | Part Number 1,3 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 174U, 188AU, 316U | 13-003304 | 132J23019X |
| 75 Ω | 179BU, 187AU | 13-003314 | 132J33019X |

**PLUG CONTACT**

| Imp. | Cable | Part Number 1,3 µm / tin plated | Part Number 1,3 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 174U, 188AU, 316U | 13-003324 | 131J23019X |
| 75 Ω | 179BU, 187AU | 13-003334 | 131J33019X |

**SOCKET CONTACT**

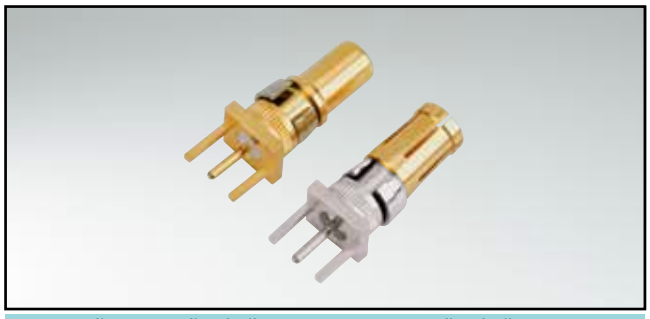
| Imp. | Cable | Part Number 0,2 µm / tin plated | Part Number 0,2 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 174U, 188AU, 316U | 13-003303 | 132A23019X |
| 75 Ω | 179BU, 187AU | 13-003313 | 132A33019X |

**PLUG CONTACT**

| Imp. | Cable | Part Number 0,2 µm / tin plated | Part Number 0,2 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 174U, 188AU, 316U | 13-003323 | 131A23019X |
| 75 Ω | 179BU, 187AU | 13-003333 | 131A33019X |

# Combination D-SUB Contacts

## Coaxial contacts – Straight – PCB termination – 3 solder pins



RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

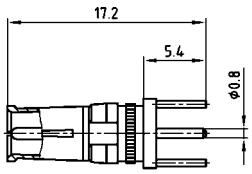
### Description

- 50 and 75 Ω-design
- Contact platings mating area:
  - .051 µ"/1.3 µm Au inner conductor / .032 µ"/0.8 µm Au outer conductor
  - .008µ"/0.2 µm Au inner and outer conductor
- Contact platings termination area:
  - .008 µ"/0.2 µm Au
  - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

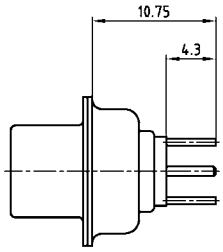
### Product drawing

#### 50 Ω version

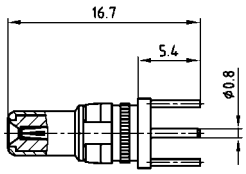
Socket contact




Installation dimension

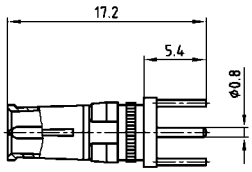


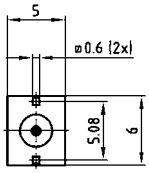

Plug contact



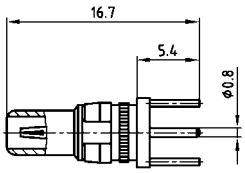

#### 75 Ω version

Socket contact




Plug contact




### Order data

**Socket contact**

| Imp. | Termination* | Part Number 1,3 µm / tin plated | Termination* | Part Number 1,3 µm / 0,2 µm |
|---|---|---|---|---|
| 50 Ω | L1 | 13-003344 | 76 | 132J24019X |
| 75 Ω | L2 | 13-003354 | 86 | 132J34019X |

**Plug contact**

| Imp. | Termination* | Part Number 1,3 µm / tin plated | Termination* | Part Number 1,3 µm / 0,2 µm |
|---|---|---|---|---|
| 50 Ω | L1 | 13-003364 | 76 | 131J24019X |
| 75 Ω | L2 | 13-003374 | 86 | 131J34019X |

**Socket contact**

| Imp. | Termination* | Part Number 0,2 µm / tin plated | Termination* | Part Number 0,2 µm / 0,2 µm |
|---|---|---|---|---|
| 50 Ω | L3 | 13-003343 | G7 | 132A24019X |
| 75 Ω | L4 | 13-003353 | G8 | 132A34019X |

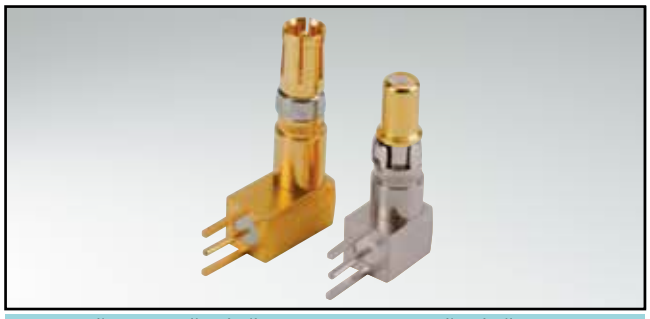
**Plug contact**

| Imp. | Termination* | Part Number 0,2 µm / tin plated | Termination* | Part Number 0,2 µm / 0,2 µm |
|---|---|---|---|---|
| 50 Ω | L3 | 13-003363 | G7 | 131A24019X |
| 75 Ω | L4 | 13-003373 | G8 | 131A34019X |

*Code use with part number creator

# COMBINATION D-SUB CONTACTS

## Coaxial contacts – Angled – PCB termination – 3 solder pins



RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

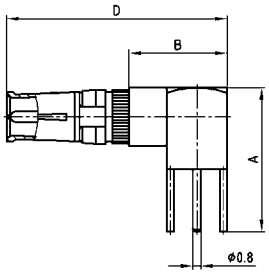
### DESCRIPTION

- 50 and 75 Ω-design
- Contact platings mating area:
  - .051 µ"/1.3 µm Au inner conductor / .032 µ"/0.8 µm Au outer conductor
  - .008µ"/0.2 µm Au inner and outer conductor
- Contact platings termination area:
  - .008 µ"/0.2 µm Au
  - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

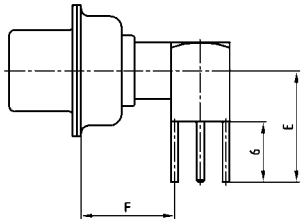
### PRODUCT DRAWING

### 50 Ω version

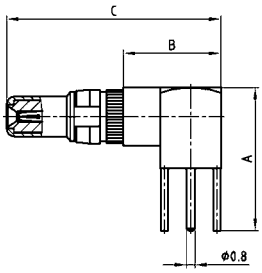
Socket contact




Installation dimension

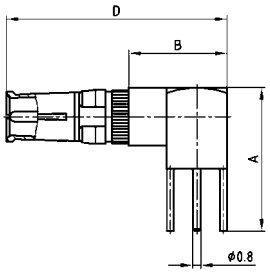


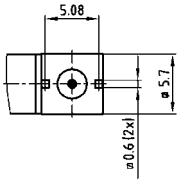

Plug contact




### 75 Ω version

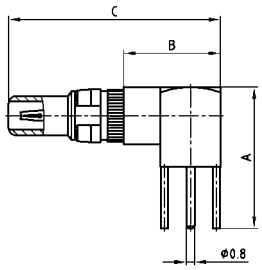
Socket contact




| Shellsize | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| 1-4 | 13.80 | 9.30 | 20.70 | 21.20 | 11.00 | 9.30 |
| 5 | 16.80 | 11.80 | 23.20 | 23.70 | 14.00 | 11.80 |

Plug contact




### ORDER DATA

**SOCKET CONTACT**

| Imp. | Shell size | Termination* | Part Number 1,3 µm / tin plated | Termination* | Part Number 1,3 µm / 0,2 µm |
|---|---|---|---|---|---|
| 50 Ω | 1-4 | L5 | 13-003384 | 78 | 132J25019X |
| 50 Ω | 5 | L6 | 13-003394 | 79 | 132J25029X |
| 75 Ω | 1-4 | L7 | 13-003404 | 88 | 132J35019X |
| 75 Ω | 5 | L8 | 13-003414 | 89 | 132J35029X |

**PLUG CONTACT**

| Imp. | Shell size | Termination* | Part Number 1,3 µm / tin plated | Termination* | Part Number 1,3 µm / 0,2 µm |
|---|---|---|---|---|---|
| 50 Ω | 1-4 | L5 | 13-003424 | 78 | 131J25019X |
| 50 Ω | 5 | L6 | 13-003434 | 79 | 131J25029X |
| 75 Ω | 1-4 | L7 | 13-003444 | 88 | 131J35019X |
| 75 Ω | 5 | L8 | 13-003454 | 89 | 131J35029X |

**SOCKET CONTACT**

| Imp. | Shell size | Termination* | Part Number 0,2 µm / tin plated | Termination* | Part Number 0,2 µm / 0,2 µm |
|---|---|---|---|---|---|
| 50 Ω | 1-4 | L9 | 13-003383 | G9 | 132A25019X |
| 50 Ω | 5 | M1 | 13-003393 | H1 | 132A25029X |
| 75 Ω | 1-4 | M2 | 13-003403 | H2 | 132A35019X |
| 75 Ω | 5 | M3 | 13-003413 | H3 | 132A35029X |

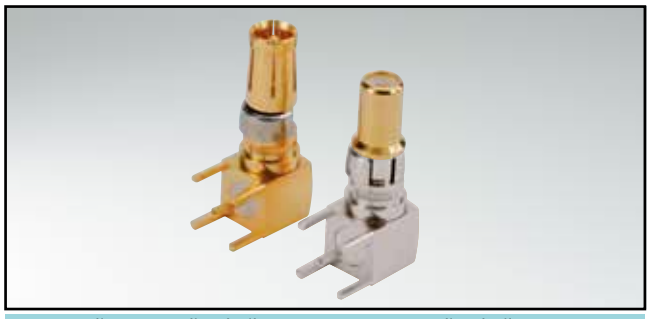
**PLUG CONTACT**

| Imp. | Shell size | Termination* | Part Number 0,2 µm / tin plated | Termination* | Part Number 0,2 µm / 0,2 µm |
|---|---|---|---|---|---|
| 50 Ω | 1-4 | L9 | 13-003423 | G9 | 131A25019X |
| 50 Ω | 5 | M1 | 13-003433 | H1 | 131A25029X |
| 75 Ω | 1-4 | M2 | 13-003443 | H2 | 131A35019X |
| 75 Ω | 5 | M3 | 13-003453 | H3 | 131A35029X |

*Code use with part number creator

# Combination D-SUB Contacts

## Coaxial contacts – Angled – PCB termination – 5 solder pins



RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

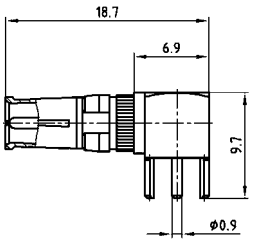
### Description

- 50 and 75 Ω-design
- Contact platings mating area:
  - .051 µ"/1.3 µm Au inner conductor / .032 µ"/0.8 µm Au outer conductor
  - .008µ"/0.2 µm Au inner and outer conductor
- Contact platings termination area:
  - .008 µ"/0.2 µm Au
  - tin plated
- Other platings on request

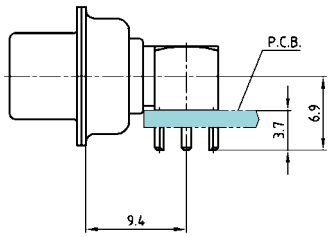
### Product drawing

#### 50 Ω version

Socket contact

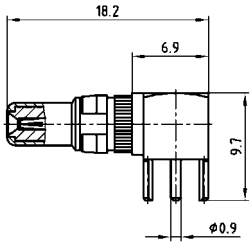



Installation dimension



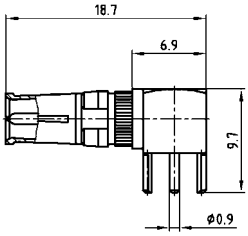

For mounting connector on edge of PCB without metal bracket

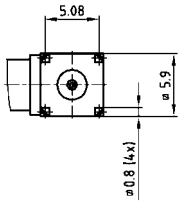
Plug contact



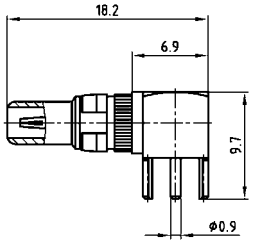

#### 75 Ω version

Socket contact




Plug contact




### Order data

**Socket contact**

| Imp. | Termination* | Part Number 1,3 µm / tin plated | Termination* | Part Number 1,3 µm / 0,2 µm |
|---|---|---|---|---|
| 50 Ω | M4 | 13-003464 | 80 | 132J25519X |
| 75 Ω | M5 | 13-003474 | 90 | 132J35519X |

**Plug contact**

| Imp. | Termination* | Part Number 1,3 µm / tin plated | Termination* | Part Number 1,3 µm / 0,2 µm |
|---|---|---|---|---|
| 50 Ω | M4 | 13-003484 | 80 | 131J25519X |
| 75 Ω | M5 | 13-003494 | 90 | 131J35519X |

**Socket contact**

| Imp. | Termination* | Part Number 0,2 µm / tin plated | Termination* | Part Number 0,2 µm / 0,2 µm |
|---|---|---|---|---|
| 50 Ω | M6 | 13-003463 | H4 | 132A25519X |
| 75 Ω | M7 | 13-003473 | H5 | 132A35519X |

**Plug contact**

| Imp. | Termination* | Part Number 0,2 µm / tin plated | Termination* | Part Number 0,2 µm / 0,2 µm |
|---|---|---|---|---|
| 50 Ω | M6 | 13-003483 | H4 | 131A25519X |
| 75 Ω | M7 | 13-003493 | H5 | 131A35519X |

*Code use with part number creator

# COMBINATION D-SUB – DUAL PORT WITH SIGNAL AND POWER CONTACTS

## Solder pin – Angled – Precision machined contacts – Connector spacing .750"/19,05 mm

RoHS compliant

### DESCRIPTION

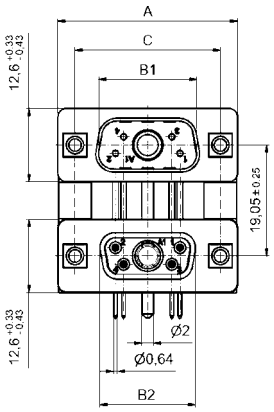
- Designs: **5W1/ 7W2/ 13W3/ 17W2/ 17W5**
- Mounting styles:
  - with mounting bracket and 4-40 UNC threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)
- Other variations on request
- **Upper connector is rotated 180 degrees**

### PRODUCT DRAWING

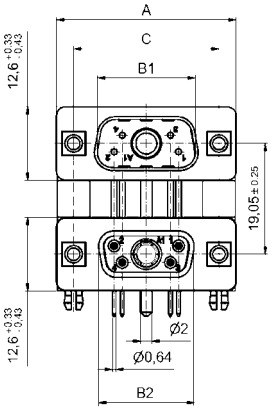
| Type | A $^{+0}_{-0.76}$ | B1 $^{+0.25}_{-0}$ | B2 $^{+0}_{-0.25}$ | C | D $^{+0}_{-0.3}$ |
|---|---|---|---|---|---|
| 5W1 | 31.19 | 16.79 | 16.46 | 25.00 $^{+0.12}_{-0.12}$ | 6.12 |
| 7W2 | 39.52 | 25.12 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 13W3 | 53.42 | 38.84 | 38.50 | 47.04 $^{+0.13}$ | 5.99 |
| 17W2 | 53.42 | 38.84 | 38.50 | 47.04 $^{+0.13}$ | 5.99 |
| 17W5 | 69.70 | 55.30 | 54.96 | 63.50 $^{+0.13}$ | 5.99 |

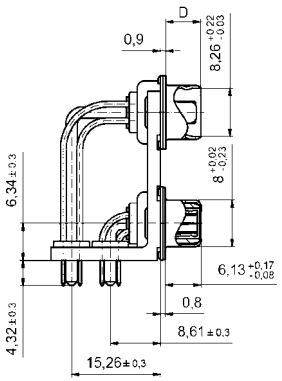
**Graphical representation of only one variant!**

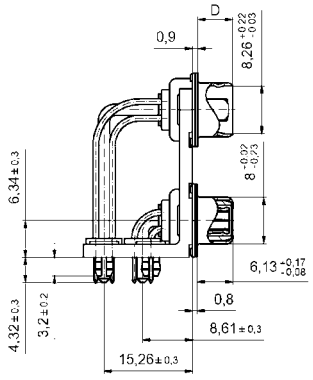
Mounting style: 4-40 UNC threaded insert

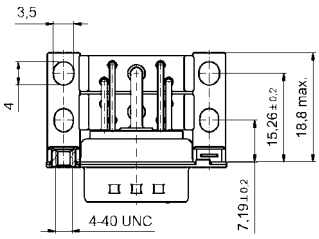


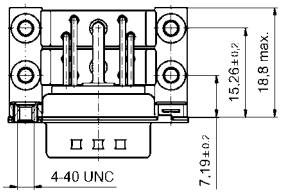

Mounting style: PCB clip and 4-40 UNC threaded insert



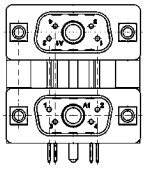



# Combination D-SUB – Dual port variations

## Solder pin – Angled – Precision machined contacts – Connector spacing .750"/19,05 mm

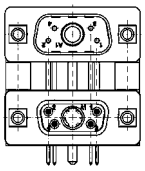
### Order data



Variation:
plug upper –
plug bottom

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 x 5W1 | Threaded insert | 13-001013 |
| 2 X 7W2 | Threaded insert | 13-001023 |
| 2 X 13W3 | Threaded insert | 13-001033 |
| 2 X 17W2 | Threaded insert | 13-001043 |
| 2 X 17W5 | Threaded insert | 13-001053 |

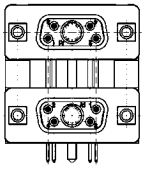
| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 x 5W1 | Threaded insert/PCB clip | 13-001213 |
| 2 X 7W2 | Threaded insert/PCB clip | 13-001223 |
| 2 X 13W3 | Threaded insert/PCB clip | 13-001233 |
| 2 X 17W2 | Threaded insert/PCB clip | 13-001243 |
| 2 X 17W5 | Threaded insert/PCB clip | 13-001253 |



Variation:
plug upper –
socket bottom

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 x 5W1 | Threaded insert | 13-001063 |
| 2 X 7W2 | Threaded insert | 13-001073 |
| 2 X 13W3 | Threaded insert | 13-001083 |
| 2 X 17W2 | Threaded insert | 13-001093 |
| 2 X 17W5 | Threaded insert | 13-001103 |

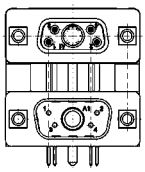
| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 x 5W1 | Threaded insert/PCB clip | 13-001263 |
| 2 X 7W2 | Threaded insert/PCB clip | 13-001273 |
| 2 X 13W3 | Threaded insert/PCB clip | 13-001283 |
| 2 X 17W2 | Threaded insert/PCB clip | 13-001293 |
| 2 X 17W5 | Threaded insert/PCB clip | 13-001303 |



Variation:
socket upper –
socket bottom

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 x 5W1 | Threaded insert | 13-001113 |
| 2 X 7W2 | Threaded insert | 13-001123 |
| 2 X 13W3 | Threaded insert | 13-001133 |
| 2 X 17W2 | Threaded insert | 13-001143 |
| 2 X 17W5 | Threaded insert | 13-001153 |

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 x 5W1 | Threaded insert/PCB clip | 13-001313 |
| 2 X 7W2 | Threaded insert/PCB clip | 13-001323 |
| 2 X 13W3 | Threaded insert/PCB clip | 13-001333 |
| 2 X 17W2 | Threaded insert/PCB clip | 13-001343 |
| 2 X 17W5 | Threaded insert/PCB clip | 13-001353 |



Variation:
socket upper –
plug bottom

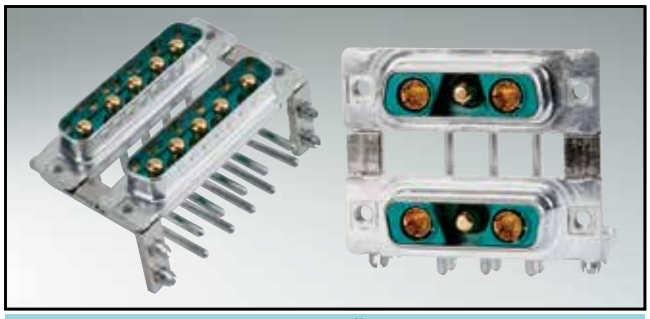
| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 x 5W1 | Threaded insert | 13-001163 |
| 2 X 7W2 | Threaded insert | 13-001173 |
| 2 X 13W3 | Threaded insert | 13-001183 |
| 2 X 17W2 | Threaded insert | 13-001193 |
| 2 X 17W5 | Threaded insert | 13-001203 |

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 x 5W1 | Threaded insert/PCB clip | 13-001363 |
| 2 X 7W2 | Threaded insert/PCB clip | 13-001373 |
| 2 X 13W3 | Threaded insert/PCB clip | 13-001383 |
| 2 X 17W2 | Threaded insert/PCB clip | 13-001393 |
| 2 X 17W5 | Threaded insert/PCB clip | 13-001403 |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# COMBINATION D-SUB – DUAL PORT WITH POWER CONTACTS

## Solder pin – Angled – Precision machined contacts – Connector spacing .750"/19,05 mm



RoHS compliant

### DESCRIPTION

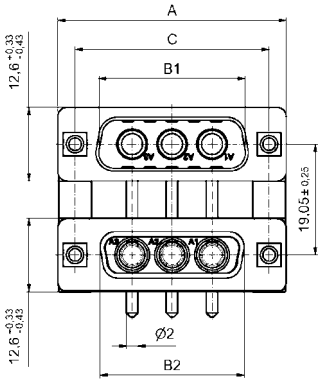
- Designs: **2W2C/ 3W3/ 3W3C/ 5W5/ 8W8**
- Mounting styles:
  - with mounting bracket and 4-40 UNC threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)
- **Upper connector is rotated 180 degrees**

### PRODUCT DRAWING

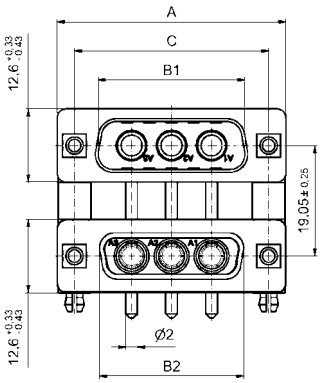
| Type | A $^{+0}_{-0.76}$ | B1 $^{+0.25}_{-0}$ | B2 $^{+0}_{-0.25}$ | C | D $^{+0}_{-0.3}$ |
|---|---|---|---|---|---|
| 2W2C | 31.19 | 16.79 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 3W3 | 39.52 | 25.12 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 3W3C | 39.52 | 25.12 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 5W5 | 53.42 | 38.84 | 38.50 | 47.04 ±0.13 | 5.99 |
| 8W8 | 69.70 | 55.30 | 54.96 | 63.50 ±0.13 | 5.99 |

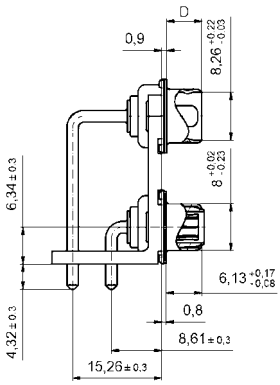
**Graphical representation of only one variant!**

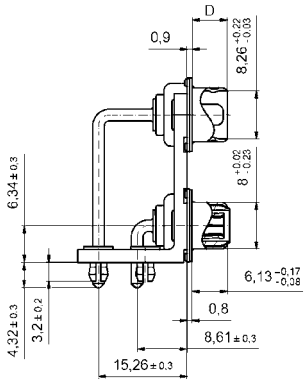
Mounting style: 4-40 UNC threaded insert

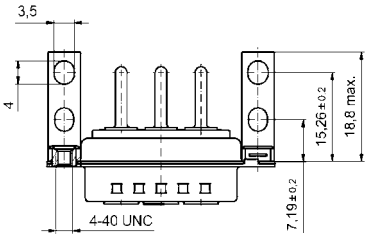


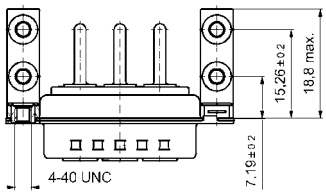

Mounting style: PCB clip and 4-40 UNC threaded insert



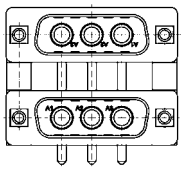



# Combination D-SUB – Dual port variations

## Solder pin – Angled – Precision machined contacts – Connector spacing .750"/19,05 mm

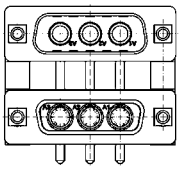
### Order data



Variation:
plug upper –
plug bottom

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 X 3W3 | Threaded insert | 13-001413 |
| 2 X 3W3 | Threaded insert | 13-001423 |
| 2 X 3W3C | Threaded insert | 13-001433 |
| 2 X 5W5 | Threaded insert | 13-001443 |
| 2 X 8W8 | Threaded insert | 13-001453 |

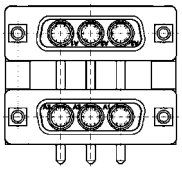
| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 X 2W2C | Threaded insert/PCB clip | 13-001613 |
| 2 X 3W3 | Threaded insert/PCB clip | 13-001623 |
| 2 X 3W3C | Threaded insert/PCB clip | 13-001633 |
| 2 X 5W5 | Threaded insert/PCB clip | 13-001643 |
| 2 X 8W8 | Threaded insert/PCB clip | 13-001653 |



Variation:
plug upper –
socket bottom

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 X 2W2C | Threaded insert | 13-001463 |
| 2 X 3W3 | Threaded insert | 13-001473 |
| 2 X 3W3C | Threaded insert | 13-001483 |
| 2 X 5W5 | Threaded insert | 13-001493 |
| 2 X 8W8 | Threaded insert | 13-001503 |

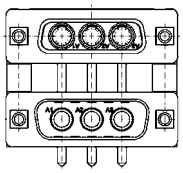
| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 X 2W2C | Threaded insert/PCB clip | 13-001663 |
| 2 X 3W3 | Threaded insert/PCB clip | 13-001673 |
| 2 X 3W3C | Threaded insert/PCB clip | 13-001683 |
| 2 X 5W5 | Threaded insert/PCB clip | 13-001693 |
| 2 X 8W8 | Threaded insert/PCB clip | 13-001703 |



Variation:
socket upper –
socket bottom

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 X 2W2C | Threaded insert | 13-001513 |
| 2 X 3W3 | Threaded insert | 13-001523 |
| 2 X 3W3C | Threaded insert | 13-001533 |
| 2 X 5W5 | Threaded insert | 13-001543 |
| 2 X 8W8 | Threaded insert | 13-001553 |

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 X 2W2C | Threaded insert/PCB clip | 13-001713 |
| 2 X 3W3 | Threaded insert/PCB clip | 13-001723 |
| 2 X 3W3C | Threaded insert/PCB clip | 13-001733 |
| 2 X 5W5 | Threaded insert/PCB clip | 13-001743 |
| 2 X 8W8 | Threaded insert/PCB clip | 13-001753 |



Variation:
socket upper –
plug bottom

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 X 2W2C | Threaded insert | 13-001563 |
| 2 X 3W3 | Threaded insert | 13-001573 |
| 2 X 3W3C | Threaded insert | 13-001583 |
| 2 X 5W5 | Threaded insert | 13-001593 |
| 2 X 8W8 | Threaded insert | 13-001603 |

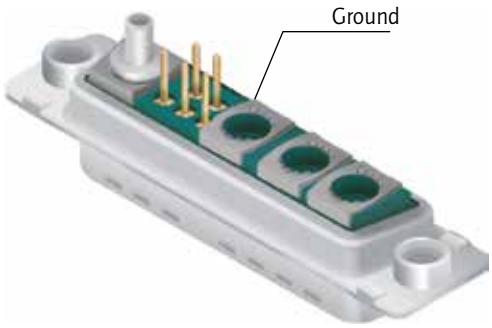
| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 X 2W2C | Threaded insert/PCB clip | 13-001763 |
| 2 X 3W3 | Threaded insert/PCB clip | 13-001773 |
| 2 X 3W3C | Threaded insert/PCB clip | 13-001783 |
| 2 X 5W5 | Threaded insert/PCB clip | 13-001793 |
| 2 X 8W8 | Threaded insert/PCB clip | 13-001803 |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# Combination D-SUB Accessories

## Grounding for coaxial contacts

To optimize a perfect ground connection from the coaxial contact (outer conductor) to the metal shell. (Factory installed)..




## Guide post

For safe mating of male and female connectors with contact loss. Guide post made for metal can be installed after connector is mounted.

**Part Number**

| | |
|---|---|
| **Guide post** | **160X11279X** |

## Hole plug

The hole plug can be used for both male and female connector. The assembly is implemented from the mating side. The hole plug is used to plug un wanted holes in the insulator.

**Material:** Polyester GF UL 94 V-O
**Colour:** black

**Part Number**

| | |
|---|---|
| **Hole plug** | **160X0939X** |

# Conversion table

| µm 1/1000 mm | µinch 1/1000 inch |
|---|---|
| 0,10 | 4 |
| 0,20 | 8 |
| 0,25 | 10 |
| 0,30 | 12 |
| 0,50 | 20 |
| 0,70 | 28 |
| 0,75 | 30 |
| 0,80 | 32 |
| 1,00 | 39 |
| 1,27 | 50 |
| 2,00 | 79 |
| 2,50 | 98 |
| 3,00 | 118 |
| 4,00 | 157 |
| 5,00 | 197 |

| mm | inch |
|---|---|
| 0,10 | .004 |
| 0,20 | .008 |
| 0,25 | .012 |
| 0,35 | .014 |
| 0,40 | .016 |
| 0,45 | .018 |
| 0,50 | .020 |
| 0,55 | .022 |
| 0,60 | .024 |
| 0,64 | .025 |
| 0,65 | .026 |
| 0,70 | .028 |
| 0,75 | .030 |
| 0,80 | .032 |
| 0,85 | .034 |
| 0,90 | .035 |
| 1,00 | .039 |
| 1,20 | .047 |
| 1,25 | .049 |
| 1,27 | .050 |
| 1,30 | .051 |
| 1,35 | .053 |
| 1,40 | .055 |
| 1,45 | .057 |
| 1,50 | .059 |
| 1,60 | .063 |
| 1,70 | .067 |
| 1,80 | .071 |
| 1,85 | .073 |
| 1,90 | .075 |
| 2,00 | .079 |
| 2,10 | .083 |
| 2,20 | .087 |
| 2,30 | .091 |
| 2,40 | .095 |
| 2,50 | .098 |
| 2,54 | .100 |
| 2,60 | .102 |
| 2,70 | .106 |
| 2,80 | .110 |
| 2,84 | .112 |
| 2,90 | .114 |
| 3,00 | .118 |
| 3,10 | .122 |
| 3,20 | .126 |

| mm | inch |
|---|---|
| 3,30 | .130 |
| 3,40 | .134 |
| 3,50 | .138 |
| 3,60 | .142 |
| 3,70 | .146 |
| 3,80 | .150 |
| 3,81 | .150 |
| 3,90 | .154 |
| 4,00 | .158 |
| 4,10 | .161 |
| 4,20 | .165 |
| 4,30 | .169 |
| 4,50 | .177 |
| 4,70 | .185 |
| 4,90 | .193 |
| 5,00 | .197 |
| 5,08 | .200 |
| 5,10 | .201 |
| 5,20 | .205 |
| 5,30 | .209 |
| 5,40 | .213 |
| 5,50 | .217 |
| 5,60 | .220 |
| 5,70 | .224 |
| 5,80 | .228 |
| 6,00 | .236 |
| 6,10 | .240 |
| 6,40 | .252 |
| 6,50 | .256 |
| 6,60 | .260 |
| 6,70 | .264 |
| 6,80 | .268 |
| 6,90 | .272 |
| 7,00 | .276 |
| 7,10 | .280 |
| 7,20 | .283 |
| 7,40 | .291 |
| 7,50 | .295 |
| 7,60 | .299 |
| 7,62 | .300 |
| 7,70 | .303 |
| 7,80 | .307 |
| 7,98 | .314 |
| 8,00 | .315 |
| 8,18 | .318 |
| 8,20 | .323 |
| 8,30 | .327 |
| 8,40 | .331 |
| 8,50 | .335 |
| 8,60 | .339 |
| 8,90 | .350 |
| 9,00 | .354 |
| 9,10 | .358 |
| 9,20 | .362 |
| 9,30 | .366 |
| 9,40 | .370 |
| 9,50 | .374 |
| 9,60 | .378 |
| 9,70 | .382 |
| 9,90 | .390 |
| 10,00 | .395 |

| mm | inch |
|---|---|
| 10,16 | .400 |
| 10,26 | .402 |
| 10,36 | .406 |
| 10,56 | .413 |
| 10,66 | .417 |
| 10,76 | .421 |
| 11,00 | .433 |
| 11,20 | .441 |
| 11,40 | .449 |
| 11,50 | .453 |
| 11,60 | .457 |
| 11,90 | .469 |
| 12,00 | .472 |
| 12,20 | .480 |
| 12,30 | .484 |
| 12,40 | .488 |
| 12,50 | .492 |
| 12,70 | .500 |
| 12,90 | .508 |
| 13,00 | .512 |
| 13,10 | .516 |
| 13,20 | .520 |
| 13,50 | .532 |
| 13,60 | .535 |
| 13,70 | .539 |
| 13,90 | .547 |
| 14,00 | .551 |
| 14,30 | .563 |
| 14,40 | .567 |
| 14,50 | .571 |
| 14,70 | .579 |
| 14,80 | .583 |
| 14,90 | .587 |
| 14,98 | .590 |
| 15,00 | .591 |
| 15,20 | .598 |
| 15,24 | .600 |
| 15,40 | .606 |
| 15,50 | .610 |
| 15,60 | .614 |
| 15,90 | .626 |
| 16,00 | .630 |
| 16,20 | .638 |
| 16,50 | .650 |
| 16,60 | .654 |
| 16,80 | .661 |
| 17,00 | .669 |
| 17,20 | .677 |
| 17,30 | .681 |
| 17,50 | .689 |
| 17,60 | .693 |
| 17,70 | .697 |
| 17,78 | .700 |
| 17,80 | .701 |
| 17,90 | .705 |
| 18,00 | .709 |
| 18,10 | .713 |
| 18,30 | .721 |
| 18,60 | .732 |
| 19,00 | .748 |
| 19,20 | .756 |

| mm | inch |
|---|---|
| 19,50 | .768 |
| 19,70 | .776 |
| 19,80 | .780 |
| 19,90 | .783 |
| 20,00 | .787 |
| 20,10 | .791 |
| 20,30 | .799 |
| 20,32 | .800 |
| 20,50 | .807 |
| 21,00 | .827 |
| 21,10 | .831 |
| 21,70 | .854 |
| 22,00 | .866 |
| 22,10 | .870 |
| 22,20 | .874 |
| 22,30 | .878 |
| 22,40 | .882 |
| 22,50 | .886 |
| 22,60 | .890 |
| 22,80 | .898 |
| 22,86 | .900 |
| 22,90 | .902 |
| 23,00 | .906 |
| 23,10 | .909 |
| 23,30 | .917 |
| 23,50 | .925 |
| 24,00 | .945 |
| 24,30 | .957 |
| 24,60 | .969 |
| 24,90 | .980 |
| 25,00 | .984 |
| 25,10 | .998 |
| 25,40 | 1.000 |
| 25,60 | 1.008 |
| 25,90 | 1.020 |
| 26,00 | 1.024 |
| 26,30 | 1.035 |
| 26,60 | 1.047 |
| 26,70 | 1.051 |
| 27,00 | 1.063 |
| 27,20 | 1.071 |
| 27,40 | 1.079 |
| 27,50 | 1.093 |
| 27,90 | 1.098 |
| 27,94 | 1.100 |
| 28,00 | 1.102 |
| 28,20 | 1.110 |
| 28,50 | 1.122 |
| 28,70 | 1.130 |
| 29,00 | 1.142 |
| 29,20 | 1.150 |
| 29,40 | 1.158 |
| 29,50 | 1.161 |
| 29,70 | 1.169 |
| 29,90 | 1.177 |
| 30,00 | 1.181 |
| 30,20 | 1.189 |
| 30,40 | 1.197 |
| 30,48 | 1.200 |
| 30,50 | 1.201 |
| 30,80 | 1.213 |

| mm | inch |
|---|---|
| 30,90 | 1.217 |
| 31,00 | 1.220 |
| 31,20 | 1.228 |
| 31,50 | 1.240 |
| 31,70 | 1.248 |
| 32,00 | 1.260 |
| 32,20 | 1.268 |
| 32,30 | 1.272 |
| 32,50 | 1.280 |
| 32,80 | 1.291 |
| 33,00 | 1.299 |
| 33,10 | 1.303 |
| 33,30 | 1.311 |
| 33,80 | 1.331 |
| 34,00 | 1.339 |
| 34,20 | 1.346 |
| 34,40 | 1.354 |
| 35,00 | 1.378 |
| 35,40 | 1.394 |
| 35,50 | 1.398 |
| 35,56 | 1.400 |
| 35,60 | 1.402 |
| 36,00 | 1.417 |
| 36,50 | 1.437 |
| 36,60 | 1.441 |
| 36,70 | 1.445 |
| 37,00 | 1.457 |
| 37,30 | 1.469 |
| 37,50 | 1.476 |
| 37,60 | 1.480 |
| 37,70 | 1.484 |
| 37,90 | 1.492 |
| 38,00 | 1.496 |
| 38,10 | 1.500 |
| 39,00 | 1.535 |
| 39,20 | 1.543 |
| 39,30 | 1.547 |
| 39,90 | 1.571 |
| 40,00 | 1.575 |
| 40,30 | 1.587 |
| 40,40 | 1.591 |
| 40,60 | 1.598 |
| 41,00 | 1.614 |
| 41,60 | 1.638 |
| 42,70 | 1.681 |
| 43,18 | 1.700 |
| 44,20 | 1.740 |
| 44,80 | 1.764 |
| 45,80 | 1.803 |
| 46,30 | 1.823 |
| 46,70 | 1.839 |
| 47,00 | 1.850 |
| 47,20 | 1.858 |
| 47,30 | 1.862 |
| 47,50 | 1.870 |
| 47,80 | 1.882 |
| 48,00 | 1.890 |
| 48,10 | 1.894 |
| 48,26 | 1.900 |
| 48,80 | 1.921 |
| 49,10 | 1.933 |

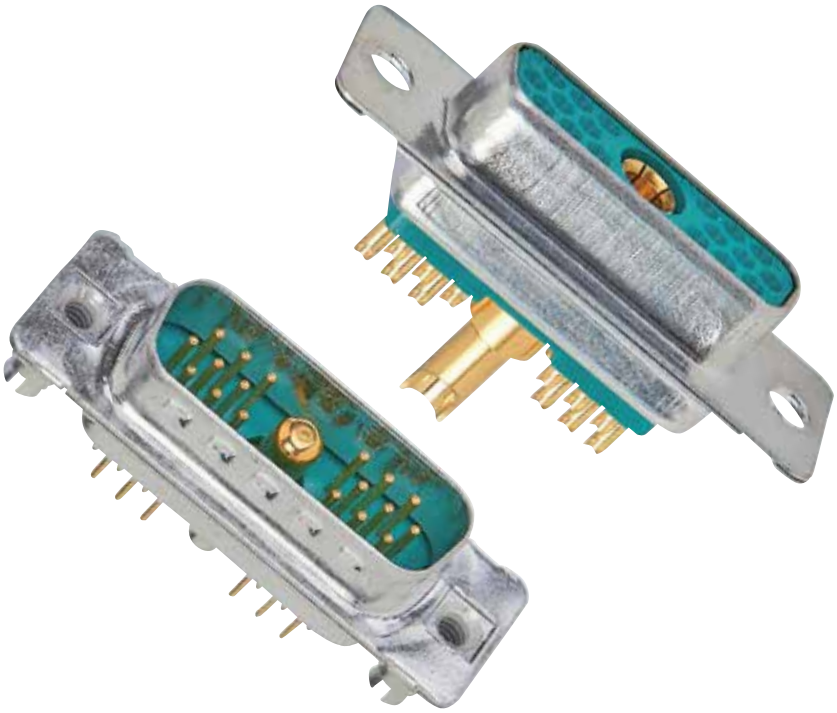
| mm | inch |
|---|---|
| 49,50 | 1.949 |
| 49,90 | 1.965 |
| 50,10 | 1.972 |
| 50,30 | 1.980 |
| 50,50 | 1.988 |
| 50,70 | 1.996 |
| 50,80 | 2.000 |
| 51,40 | 2.024 |
| 51,50 | 2.028 |
| 52,00 | 2.047 |
| 52,30 | 2.059 |
| 52,80 | 2.079 |
| 53,00 | 2.087 |
| 53,20 | 2.095 |
| 53,80 | 2.118 |
| 54,00 | 2.126 |
| 54,20 | 2.134 |
| 54,90 | 2.161 |
| 55,00 | 2.165 |
| 55,40 | 2.181 |
| 55,70 | 2.193 |
| 56,60 | 2.228 |
| 57,40 | 2.260 |
| 57,80 | 2.276 |
| 57,90 | 2.280 |
| 58,42 | 2.300 |
| 59,00 | 2.323 |
| 59,20 | 2.331 |
| 59,80 | 2.354 |
| 59,90 | 2.358 |
| 60,00 | 2.362 |
| 60,96 | 2.400 |
| 61,10 | 2.406 |
| 62,00 | 2.441 |
| 63,00 | 2.480 |
| 63,50 | 2.500 |
| 64,00 | 2.520 |
| 65,00 | 2.560 |
| 67,00 | 2.638 |
| 68,00 | 2.677 |
| 69,00 | 2.717 |
| 70,00 | 2.756 |
| 71,00 | 2.795 |
| 74,00 | 2.913 |
| 75,00 | 2.953 |
| 76,20 | 3.000 |
| 77,00 | 3.032 |
| 78,74 | 3.100 |
| 80,00 | 3.150 |
| 81,28 | 3.200 |
| 84,00 | 3.307 |
| 85,00 | 3.346 |
| 86,36 | 3.400 |
| 88,90 | 3.500 |
| 90,00 | 3.543 |
| 91,44 | 3.600 |
| 94,00 | 3.701 |
| 95,00 | 3.740 |
| 100,00 | 3.937 |
| 110,00 | 4.331 |
| 120,00 | 4.724 |

Section 2

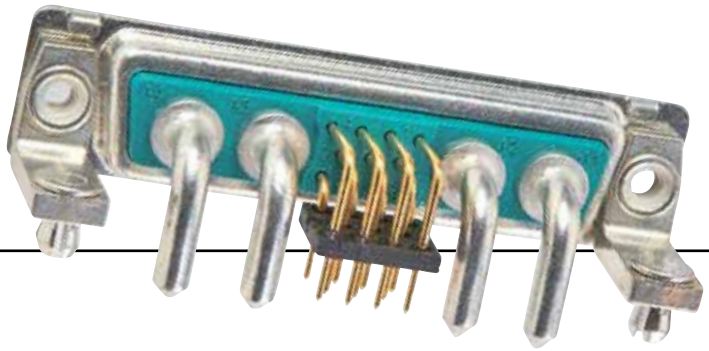
# Combination D-SUB Connectors

Combination D-SUB Connectors provide the ideal solution for applications to require power, signal and coaxial connections within one connector. This series of connectors achieves space saving on PCB's and I/O designs.

Within this product family are various pin out configurations possible. Almost endless selections can be created mixing power, signal and coaxial contacts.



Examples are coaxial contacts handling frequencies up to 2 GHz. Power contacts from 10 amp to 40 amp current handling. Signal contacts in various styles complete the product offering.



Industry standard terminations types, solder cup, PCB contacts in straight and angled pin configurations. Crimp types and wire wrap contacts.

**Here are just a few Product characteristics:**

- Space savings on the PCB
- Different wire terminations are possible in a single connector
- Cost savings - mixed layout
- Insertable and removable coaxial, power, high voltage and signal contacts
- Precision machined contacts
- Various quality classes are available
- Wide product range

A wide range of standard pin configurations fully loaded with signal contacts are available. Specially configured contacts with power, coaxial and signal contacts can be constructed. Please use the Part Number Creator on page 2|2 and 2|3 or contact technical support at your closest CONEC office.

# PART NUMBER CREATOR

## for standard version

3 003W3 S X X 6 1 A 1 O X

**Product Line**
3 = Shell steel tin plated
1 = Brass tin plated*
5 = Shell yellow chromated* (not RoHS compliant)
A = Stainless steel*
*on request

**Shell size and design**
1 = 5W1, 2W2C
2 = 3W3, 7W2, 11W1, 3W3C
3 = 5W5, 9W4, 13W3, 17W2, 21W1
4 = 8W8, 13W6, 17W5, 21WA4, 25W3, 27W2
5 = 24W7, 36W4, 43W2, 47W1
Empty positions ADD „0" = 003W3

**Contact type**
P = Plug connector
S = Socket connector

**Surface/Quality class for SIGNAL contacts**
A = Quality class 3 = 50 mating cycles
B = Quality class 2 = 200 mating cycles*
C = Quality class 1 = 500 mating cycles
J = Special application = > 500 mating cycles (on request)*
X = Crimp and 3W3, 5W5, 8W8, 2W2C, 3W3C (no contacts are supplied with the connector)
*on request

**Termination only for SIGNAL contacts**
K = Crimp without contacts
M = Solder cup
N = Wire wrap, .500"/12.7 mm
P = Press fit
R = Solder pin, straight, .220"/5.6 mm
T = Solder pin, angled, .280"/7.19 mm
U = Solder pin, angled, .370"/9.40 mm
W* = Solder pin, angled, .450"/11.43 mm
X = 3W3, 5W5, 8W8, 2W2C, 3W3C
Z* = Solder pin, angled, .540"/13.84 mm
* = please contact us

**Termination for HIGH POWER- or COAXIAL contacts**

**Quality class 3/Quality class 1**
C1 = Solder/Crimp angled 10 A
C2 = Solder/Crimp angled 20 A
C3 = Solder/Crimp angled 30 A
C4 = Solder/Crimp angled 40 A
F2,61/F1,41 = Solder cup 10 A
F4,62/F3,42 = Solder cup 20 A
F6,63/F5,43 = Solder cup 30 A
F8,64/F7,44 = Solder cup 40 A
68/48 = Solder pin, straight 20 A, D= .077"/1.95 mm
69/49 = Solder pin, straight 20 A, D= .102"/2.60 mm
70/50 = Solder pin, straight 20 A, D= .110"/2.85 mm
71/51 = Solder pin, straight 30 A, D= .130"/3.18 mm
72/52 = Solder pin, straight 40 A, D= .150"/3.75 mm

**Quality class 3/Quality class 1**
59/55 = Solder pin, angled 15 A
73/56 = Solder pin, angled 20 A
74/57 = Solder pin, angled 30 A
75/58 = Solder pin, angled 40 A
77/60 = Solder pin, angled 40 A
81/66 = Solder pin, angled 20 A
82/67 = Solder pin, angled 30 A
85/65 = Solder pin, angled 30 A
G7/76 = 3 Solder pins Straight 50 Ω
G9/78 = 3 Solder pins angled 50 Ω
H1/79 = 3 Solder pins angled 50 Ω
H4/80 = 5 Solder pins angled 50 Ω
G8/86 = 3 Solder pins Straight 75 Ω

**Quality class 3/Quality class 1**
H2/88 = 3 Solder pins angled 75 Ω
H3/89 = 3 Solder pins angled 75 Ω
H5/90 = 5 Solder pins angled 75 Ω
91 = Screw termination 20 A
/P1 = press fit 30A
/P2 = press fit 30A
/P4 = press fit 30A
99 = no high power, coax or crimp contacts loaded
Coaxial contacts with cable termination must be ordered separately.

**Mounting style**
A1 = Riveted
A2 = M3 threaded insert
A3 = 4-40 UNC threaded insert
A4 = M3 threaded rear spacer
A5 = 4-40 UNC threaded rear spacer
A6 = Float fastening
A7 = Threaded rear spacer for M3 press fit
A8 = Threaded rear spacer for 4-40 UNC press fit
C1 = M3 threaded rear spacer with PCB clip, PCB .063"/1.60 mm
C2 = 4-40 UNC threaded rear spacer with PCB clip, PCB .063"/1.60 mm
C3 = M3 threaded rear spacer with PCB clip, PCB .091"/2.30 mm
C4 = 4-40 UNC threaded rear spacer with PCB clip, PCB .091"/2.30 mm
C5 = M3 threaded rear spacer with PCB clip, PCB .126"/3.20 mm
C6 = 4-40 UNC Threaded rear spacer with PCB clip, PCB .126"/3.20 mm
D1 = M3 clip and threaded rear spacer with PCB clip, PCB .063"/1.60 mm
D2 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .063"/1.60 mm
D3 = M3 clip and threaded rear spacer with PCB clip, PCB .091"/2.30 mm
D4 = 4-40 UNC clip and threaded rear spacer clip, PCB .091"/2.30 mm
D5 = M3 clip and threaded rear spacer with PCB clip, PCB .126"/3.20 mm
D6 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .126"/3.20 mm
E1 = M3 threaded rear spacer with PCB clip, PCB .063"/1.60 mm
E2 = 4-40 UNC threaded rear spacer with PCB clip, PCB .063"/1.60 mm
E3 = M3 threaded rear spacer with PCB clip, PCB .091"/2.30 mm
E4 = 4-40 UNC threaded rear spacer with PCB clip, PCB .091"/2.30 mm
E5 = M3 threaded rear spacer with PCB clip, PCB .126"/3.20 mm
E6 = 4-40 UNC threaded rear spacer with PCB clip, PCB .126"/3.20 mm
F1 = M3 clip and threaded rear spacer with PCB clip, PCB .063"/1.60 mm
F2 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .063"/1.60 mm
F3 = M3 clip and threaded rear spacer with PCB clip, PCB .091"/2.30 mm
F4 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .091"/2.30 mm
F5 = M3 clip and threaded rear spacer with PCB clip, PCB .126"/3.20 mm
F6 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .126"/3.20 mm
G1 = Metal bracket, M3 threaded insert for .370"/9.40 mm
G2 = Metal bracket, 4-40 UNC threaded insert for .370"/9.40 mm
G3 = Metal bracket, M3 threaded insert and clip for .370"/9.40 mm
G4 = Metal bracket, 4-40 UNC threaded insert and clip for .370"/9.40 mm
H1 = Metal bracket, M3 threaded lock for .370"/9.40 mm
H2 = Metal bracket, 4-40 UNC threaded lock for .370"/9.40 mm
H3 = Metal bracket, M3 threaded lock and clip for .370"/9.40 mm
H4 = Metal bracket, 4-40 UNC threaded lock and clip for .370"/9.40 mm
N1 = Metal bracket, M3 threaded insert for .280"/7.19 mm
N2 = Metal bracket, 4-40 UNC threaded insert for .280"/7.19 mm
N3 = Metal bracket, M3 threaded insert and clip for .280"/7.19 mm
N4 = Metal bracket, 4-40 UNC threaded insert and clip for .280"/7.19 mm
P1 = Metal bracket, M3 threaded lock for .280"/7.19 mm
P2 = Metal bracket, 4-40 UNC threaded lock for .280"/7.19 mm
P3 = Metal bracket, M3 threaded lock and clip for .280"/7.19 mm
P4 = Metal bracket, 4-40 UNC threaded lock and clip for .280"/7.19 mm
W1 = Threaded rear spacer with M3 press in pin
W2 = Threaded rear spacer with 4-40 UNC press in pin

OX = Standard

# Part Number Creator

## for High Density

3 H19W1 S C M 4 1 A 1 0 X

**Product Line**
1 = Shell brass tin plated
3 = Shell tin plated*
5 = Shell yellow chromated* (not RoHS compliant)
A = Shell stainless steel*
*on request

**Shell size and design**
2 =19W1
3 =15W4
4 =45W2
H = High Density

**Contact type**
P = Plug connector
S = Socket connector

**Quality class for SIGNAL contacts**
A = Quality class 3 = 50 mating cycles
B = Quality class 2 = 200 mating cycles*
C = Quality class 1 = 500 mating cycles
J = Special application = > 500 mating cycles*
*on request

**Termination only for SIGNAL contacts**
M = Solder cup
P = Press-fit*
R = Solder pin, straight
W = Solder pin, angled .450" / 11,43 mm*
T = Solder pin, angled .350" / 7,98 mm
*on request

**Termination for HIGH POWER- or COAXIAL contacts**

**Quality class 3 / Quality class 1**
F2,61/F1,41 = Solder cup 10 A
F4,62/F3,42 = Solder cup 20 A
F6,63/F5,43 = Solder cup 30 A
F8,64/F7,44 = Solder cup 40 A
68/48 = Solder pin, straight 20 A, D= .077"/1.95 mm
69/49 = Solder pin, straight 20 A, D= .102"/2.60 mm
70/50 = Solder pin, straight 20 A, D= .110"/2.85 mm
71/51 = Solder pin, straight 30 A, D= .130"/3.18 mm
72/52 = Solder pin, straight 40 A, D= .150"/3.75 mm
59/55 = Solder pin, angled 15 A
73/56 = Solder pin, angled 20 A
74/57 = Solder pin, angled 30 A
75/58 = Solder pin, angled 40 A

**Quality class 3 / Quality class 1**
77/60 = Solder pin, angled 40 A
81/66 = Solder pin, angled 20 A
82/67 = Solder pin, angled 30 A
85/65 = Solder pin, angled 30 A
G7/76 = 3 Solder pins Straight 50 Ω
G9/78 = 3 Solder pins angled 50 Ω
H1/79 = 3 Solder pins angled 50 Ω
H4/80 = 5 Solder pins angled 50 Ω
G8/86 = 3 Solder pins Straight 75 Ω
H2/88 = 3 Solder pins angled 75 Ω
H3/89 = 3 Solder pins angled 75 Ω
H5/90 = 5 Solder pins angled 75 Ω
91 = Screw termination 20 A

**Quality class 1**
P1 = press fit 30A
P2 = press fit 30A
P4 = press fit 30A
99 = no high power, coax or crimp contacts loaded
Coaxial contacts with cable termination must be ordered separately.

**Mounting style**
A1 = Riveted
A2 = M3 threaded insert
A3 = 4-40 UNC threaded insert
A4 = M3 threaded rear spacer
A5 = 4-40 UNC threaded rear spacer
A6 = Float fastening
A7 = Threaded rear spacer for M3 press fit
A8 = Threaded rear spacer for 4-40 UNC press fit
E1 = M3 threaded rear spacer with PCB clip, PCB .063"/1.60 mm
E2 = 4-40 UNC threaded rear spacer with PCB clip, PCB .063"/1.60 mm
E3 = M3 threaded rear spacer with PCB clip, PCB .091"/2.30 mm
E4 = 4-40 UNC threaded rear spacer with PCB clip, PCB .091"/2.30 mm
E5 = M3 threaded rear spacer with PCB clip, PCB .126"/3.20 mm
E6 = 4-40 UNC threaded rear spacer with PCB clip, PCB .126"/3.20 mm
F1 = M3 clip and threaded rear spacer with PCB clip, PCB .063"/1.60 mm
F2 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .063"/1.60 mm
F3 = M3 clip and threaded rear spacer with PCB clip, PCB .091"/2.30 mm
F4 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .091"/2.30 mm
F5 = M3 clip and threaded rear spacer with PCB clip, PCB .126"/3.20 mm
F6 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .126"/3.20 mm
G5 = Metal bracket, M3 threaded insert for .350"/7,98 mm
G6 = Metal bracket, 4-40 UNC threaded insert for .350" /7,98 mm
G7 = Metal bracket, M3 threaded insert and Clip for .350"/7,98 mm
G8 = Metal bracket, 4-40 UNC threaded insert and Clip for .350"/7,98 mm
H5 = Metal bracket, M3 threaded lock for .350"/7,98 mm
H6 = Metal bracket, 4-40 UNC threaded lock for .350"/7,98 mm
H7 = Metal bracket, M3 threaded lock and Clip for .350"/7,98 mm
H8 = Metal bracket, 4-40 UNC threaded lock and Clip for .350"/7,98 mm
W1 = Threaded rear spacer with M3 press in pin
W2 = Threaded rear spacer with 4-40 UNC press in pin

0X = Standard

# Technical Data

## Standard version

| Materials | Connector with signal contacts | Coaxial contacts | High power contacts | High voltage contacts |
|---|---|---|---|---|
| Insulator<br>Green standard / black crimp | PBTP, GV<br>(UL94 V-0) | | | |
| Shell | steel tin plated<br>brass tin / stainless steel on request | | | |
| Contact plating | Gold plated over nickel | | | |
| Contact material | CU alloy | | | |
| Retaining clip | | CU alloy | | |
| Insulator | | PTFE/PBTP/PI | | PTFE |
| **Mechanical and electrical characteristics** | | | | |
| Current rating | 7,5A (UL) / 5A (CSA, VDE) | | | |
| Test voltage between 2 contacts<br>contact and shell | 1000 V, 50Hz<br>1 min. | | 1000 V, 50Hz<br>1 min. | |
| Resistance between mated contacts | max. 8 mΩ | max. 2.7 mΩ | max. 1 mΩ | max. 2.7 mΩ |
| Insulation resistance | ≥5 GΩ | ≥ 10 GΩ | ≥ 5 GΩ | ≥ $2x10^7$ MΩ |
| Volume resistivity | $10^{16}$ Ωcm | | | |
| Dielectric impedance | 50KV/mm | | | |
| Characteristic impedance | | 50/75 Ω | | |
| VSWR-value at according MIL-C-39012 1.2GHz<br>1.5GHz<br>2.0GHz | | ≤1,2<br>≤1,3<br>≤1,5 | | |
| Dielectric voltage | | 750V 50Hz | | 3.8kV |
| Frequency range | | 0-2GHz | | |
| Working voltage | 250 V | 250 V | 250 V | max. 2.8kV |
| Temperature range | -55°C to +125°C | | | |
| Insertion force per contact | 3.4N | 7N | 7N | 5N |
| Extraction force per contact | 0.2N | 7N | approx. 5N | approx. 2.5N |
| Mating cycles | A = Quality class 3 = 50 mating cycles, B = Quality class 2 = 200 mating cycles, C = Quality class 1 = 500 mating cycles | | | |

Technical specifications are subject to change without notice.

# Technical Data

## High Density

| Materials | Connector with signal contacts | Coaxial contacts | High power contacts | High voltage contacts |
|---|---|---|---|---|
| Insulator<br>Green standard / black crimp | PBTP, GV<br>(UL94 V-0) | | | |
| Shell | steel tin plated<br>brass tin / stainless steel on request | | | |
| Contact plating | Gold plated over nickel | | | |
| Contact material | CU alloy | | | |
| Retaining clip | | CU alloy | | |
| Insulator | | PTFE/PBTP/PI | | PTFE |
| **Mechanical and electrical characteristics** | | | | |
| Current rating | 3 A (UL,VDE) / 2,5 A (CSA) | | | |
| Test voltage between 2 contacts<br>contact and shell | 1000 V, 50Hz<br>1 min. | | 1000 V, 50Hz<br>1 min. | |
| Resistance between mated contacts | max. 10mΩ | max. 2.7mΩ | max. 1mΩ | max. 2.7mΩ |
| Insulation resistance | ≥5GΩ | ≥10 GΩ | ≥ 5GΩ | $2x10^7$ MΩ |
| Volume resistivity | $10^{16}$ Ωcm | | | |
| Dielectric impedance | 50kV/mm | | | |
| Characteristic impedance | | 50/75 Ω | | |
| VSWR-value at according<br>MIL-C-39012 1.2GHz<br>1.5GHz<br>2.0GHz | | ≤ 1.2<br>≤ 1.3<br>≤ 1.5 | | |
| Dielectric voltage | | 750V 50Hz | | 3.8kV |
| Frequency range | | 0-2GHz | | |
| Working voltage | 60V | 250 V | 250 V | max. 2.8kV |
| Temperature range | -55°C to +125°C | | | |
| Insertion force per contact | 3,4N | 7N | 7N | 5N |
| Extraction force per contact | 0,2N | 7N | approx. 5N | approx. 2.5N |
| Mating cycles | A =Quality class 3 = 50 mating cycles, B =Quality class 2 = 200 mating cycles, C = Quality class 1 = 500 mating cycles | | | |

Technical specifications are subject to change without notice.

# Pin configuration – Mating side of socket connector

## Shell size 1

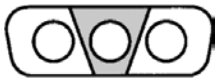
5W1

2W2C

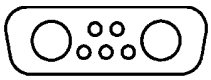
## Shell size 2

3W3

3W3C

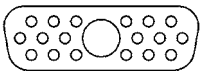


7W2



11W1

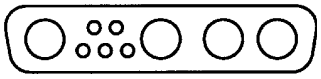
HD 19W1



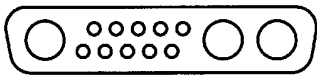
## Shell size 3

5W5

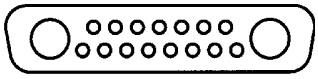
9W4



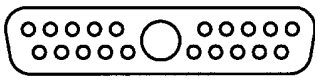
13W3



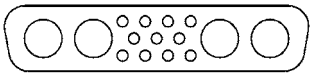
17W2



21W1



HD 15W4

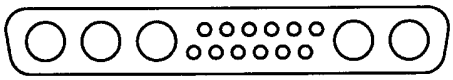


## Shell size 4

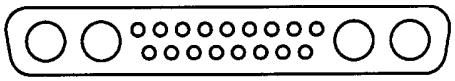
8W8

13W6

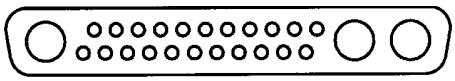
17W5



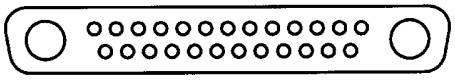
21WA4



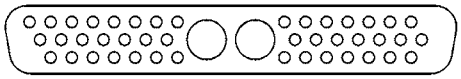
25W3



27W2

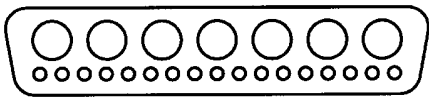


HD 45W2

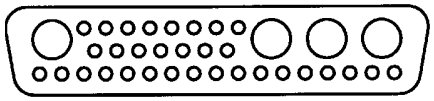


## Shell size 5

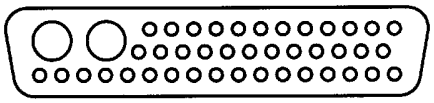
24W7



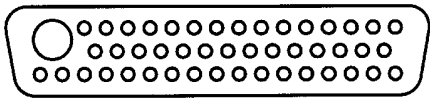
36W4



43W2



47W1



Connectors 3W3, 5W5 and 8W8 with female insulators: Socket contacts are fingerprobe safe according to UL 1950 and CSA 22.2.950.

# Technical information

## Skin effect

Alternating currents do not uniformly occupy the entire cross section of the conductor, rather inductance effect in the conductor deflects the current towards the surface of the conductor, whereby this deflection increases with the frequency.
The resistive attenuation of a transmission line increases with the frequency as a result of this skin effect.
The skin depth (equivalent thickness of the layer in which current flows) can be determined using

$$\delta = \frac{1}{\sqrt{f \pi \sigma \mu_0 \mu_r}}$$

f = frequency
$\sigma$ = conductivity of the conductor material
$\sigma_{Ag}$ = 62 x $10^6$ S/m
$\sigma_{Cu}$ = 58 x $10^6$ S/m
$\mu_0$ = 1,256 $10^6$ Vs / Am
$\mu_r$ ... relative permeability constant for the employed material

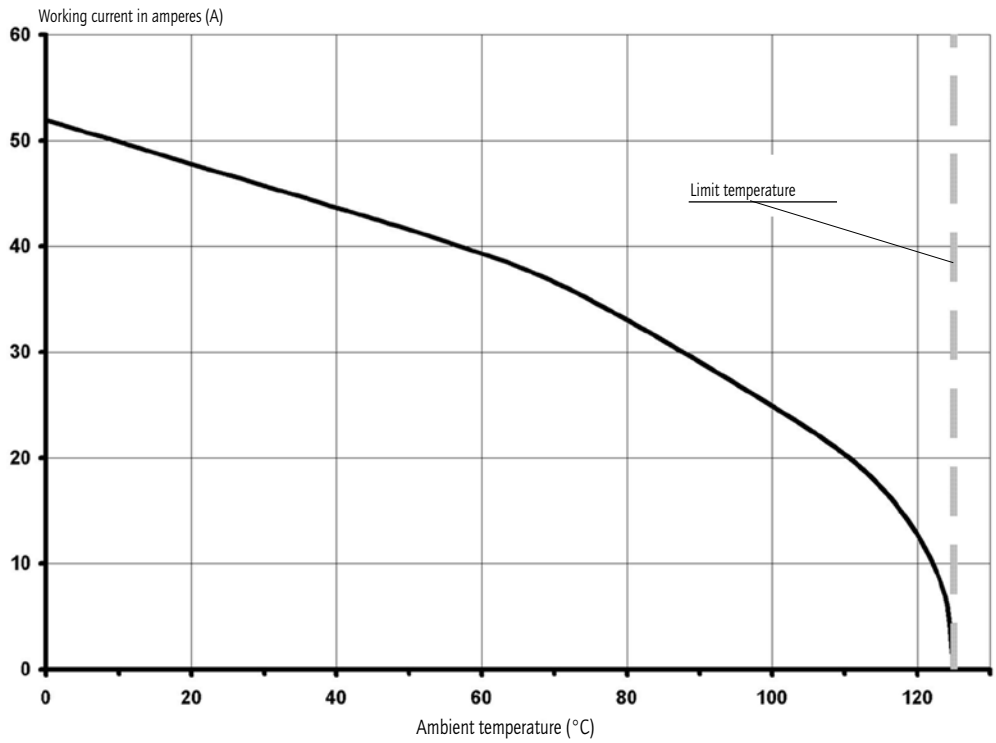
## VSWR-Value

The ratio between the value of the largest and the smallest voltages on a loss-free line is known as the ripple or voltage standing wave ratio s (where 1 m 1 ∞). The reciprocal value of the VSWR is known as the inverse voltage standing wave ratio m (where 0 m 1).
(VSWR = Voltage standing ware ratio)
The value of is linked with the → reflection coefficient r on s transmission line according to the equation

$$s = \frac{(1 + |r|)}{(1 - |r|)}$$

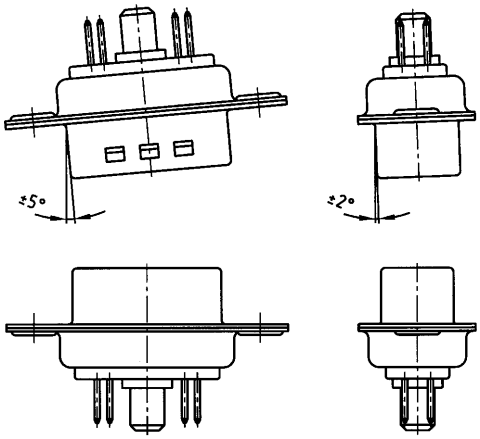
## DeRating Curve

Measurement is according to DIN 41640 part 3 whereas all power contacts are connected in series.
For test procedure – product-no. 3008W8SXX99A has been equipped with 132C11049X and 3008W8PXX99AA10X with 131C11049X.

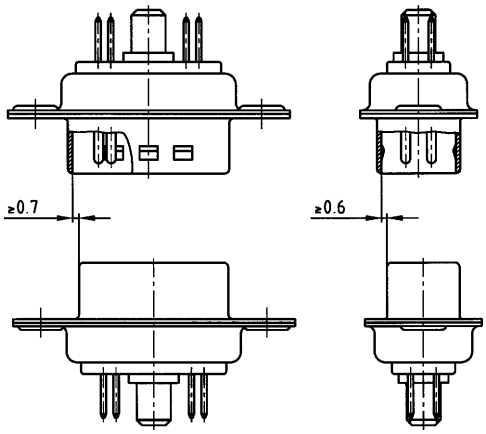


# Mating conditions

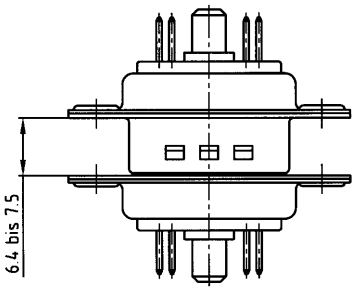
Float mount tolerance guide




Rigid mount tolerance guide

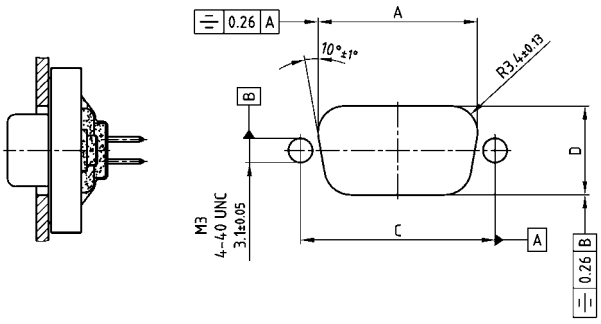



Rigid mount vertical to tolerance guide

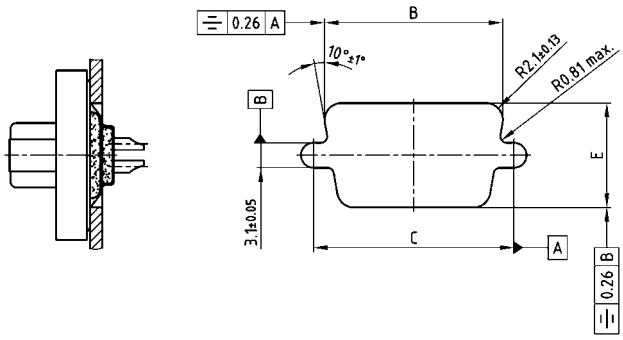



## Panel cut-out

Rear panel mounting

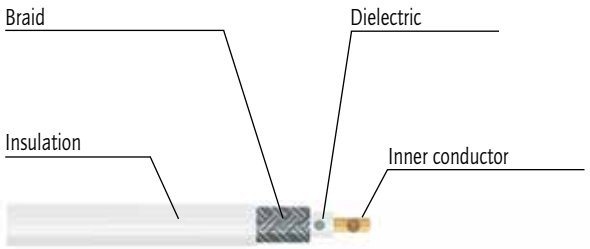



Front panel mounting




| Shell size | A ± 0,13 | B ± 0,13 | C ± 0,13 | D ± 0,13 | E ± 0,13 |
|---|---|---|---|---|---|
| 1 | 20.50 | 22.20 | 25.00 | 11.40 | 13.00 |
| 2 | 28.80 | 30.50 | 33.30 | 11.40 | 13.00 |
| 3 | 42.50 | 44.30 | 47.04 | 11.40 | 13.00 |
| 4 | 59.10 | 60.70 | 63.50 | 11.40 | 13.00 |
| 5 | 56.30 | 58.30 | 61.10 | 14.10 | 15.80 |

# Crimping instructions for coax contacts




Strip the wire
Using dimensions shown on the individual product drawings

Slide sleeve over coax cable

Crimp the inner contact on the inner conductor

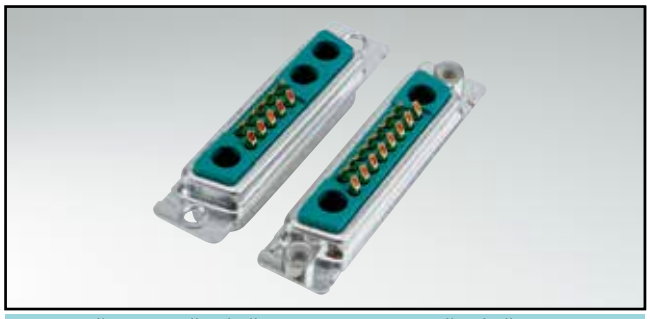
Snap the inner contact into the outer contact

Slide braid over outer contact

Crimp the sleeve on to outer contact

# COMBINATION D-SUB WITH SIGNAL CONTACTS

## Solder cup – Precision machined contacts – For wire size AWG 20

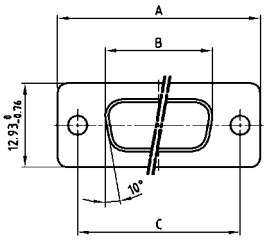


RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### DESCRIPTION

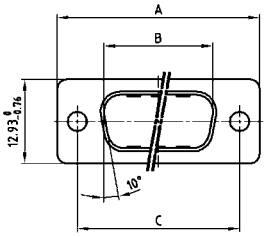
- Suitable for wire size **AWG 20**
- Mounting styles:
  - with through-hole, Ø .118" / 3 mm
  - with 4-40 UNC or M3 threaded insert
  - with floating mount
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
  (brass tin plated or stainless steel available on request)
- recommended plastic hoods look at page 7 | 16, 7 | 17

### SOCKET CONNECTOR



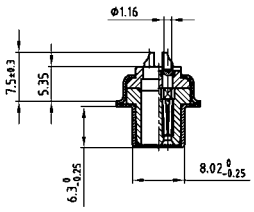

| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 1 | 31.19 | 16.46 | 25.00 +0.12 -0.13 |
| 2 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |
| 5 | 67.31 | 52.55 | 61.10 +0.14 -0.11 |

### PLUG CONNECTOR

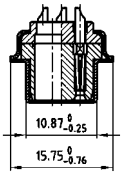



| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 1 | 31.19 | 16.79 | 25.00 +0.12 -0.13 | 6.12 |
| 2 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 5 | 67.31 | 52.68 | 61.10 +0.14 -0.11 | 5.99 |

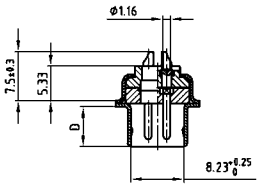
Shell size 1-4



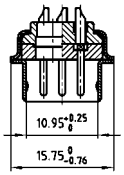

Shell size 5



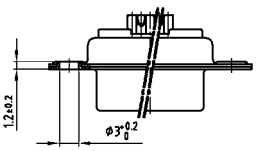

Shell size 1-4




Shell size 5




### ORDER DATA



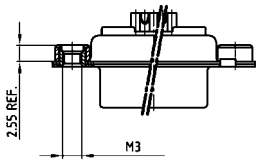

| SOCKET CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style** | **Part Number** |
| 5W1 | Through-hole | 3005W1SAM99A10X |
| 7W2 | Through-hole | 3007W2SAM99A10X |
| 11W1 | Through-hole | 3011W1SAM99A10X |
| 9W4 | Through-hole | 3009W4SAM99A10X |
| 13W3 | Through-hole | 3013W3SAM99A10X |
| 17W2 | Through-hole | 3017W2SAM99A10X |
| 21W1 | Through-hole | 3021W1SAM99A10X |
| 13W6 | Through-hole | 3013W6SAM99A10X |
| 17W5 | Through-hole | 3017W5SAM99A10X |
| 21WA4 | Through-hole | 321WA4SAM99A10X |
| 25W3 | Through-hole | 3025W3SAM99A10X |
| 27W2 | Through-hole | 3027W2SAM99A10X |
| 24W7 | Through-hole | 3024W7SAM99A10X |
| 36W4 | Through-hole | 3036W4SAM99A10X |
| 43W2 | Through-hole | 3043W2SAM99A10X |
| 47W1 | Through-hole | 3047W1SAM99A10X |

| PLUG CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style** | **Part Number** |
| 5W1 | Through-hole | 3005W1PAM99A10X |
| 7W2 | Through-hole | 3007W2PAM99A10X |
| 11W1 | Through-hole | 3011W1PAM99A10X |
| 9W4 | Through-hole | 3009W4PAM99A10X |
| 13W3 | Through-hole | 3013W3PAM99A10X |
| 17W2 | Through-hole | 3017W2PAM99A10X |
| 21W1 | Through-hole | 3021W1PAM99A10X |
| 13W6 | Through-hole | 3013W6PAM99A10X |
| 17W5 | Through-hole | 3017W5PAM99A10X |
| 21WA4 | Through-hole | 321WA4PAM99A10X |
| 25W3 | Through-hole | 3025W3PAM99A10X |
| 27W2 | Through-hole | 3027W2PAM99A10X |
| 24W7 | Through-hole | 3024W7PAM99A10X |
| 36W4 | Through-hole | 3036W4PAM99A10X |
| 43W2 | Through-hole | 3043W2PAM99A10X |
| 47W1 | Through-hole | 3047W1PAM99A10X |

# Combination D-SUB – Mounting styles

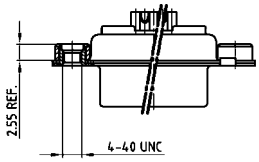
## Solder cup – Precision machined contacts – For wire size AWG 20

### Order data



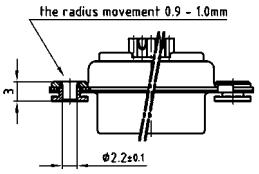

| Socket connector | | |
|---|---|---|
| Design | Mounting style M3 | Part Number |
| 5W1 | Threaded insert | 3005W1SAM99A20X |
| 7W2 | Threaded insert | 3007W2SAM99A20X |
| 11W1 | Threaded insert | 3011W1SAM99A20X |
| 9W4 | Threaded insert | 3009W4SAM99A20X |
| 13W3 | Threaded insert | 3013W3SAM99A20X |
| 17W2 | Threaded insert | 3017W2SAM99A20X |
| 21W1 | Threaded insert | 3021W1SAM99A20X |
| 13W6 | Threaded insert | 3013W6SAM99A20X |
| 17W5 | Threaded insert | 3017W5SAM99A20X |
| 21WA4 | Threaded insert | 321WA4SAM99A20X |
| 25W3 | Threaded insert | 3025W3SAM99A20X |
| 27W2 | Threaded insert | 3027W2SAM99A20X |
| 24W7 | Threaded insert | 3024W7SAM99A20X |
| 36W4 | Threaded insert | 3036W4SAM99A20X |
| 43W2 | Threaded insert | 3043W2SAM99A20X |
| 47W1 | Threaded insert | 3047W1SAM99A20X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style M3 | Part Number |
| 5W1 | Threaded insert | 3005W1PAM99A20X |
| 7W2 | Threaded insert | 3007W2PAM99A20X |
| 11W1 | Threaded insert | 3011W1PAM99A20X |
| 9W4 | Threaded insert | 3009W4PAM99A20X |
| 13W3 | Threaded insert | 3013W3PAM99A20X |
| 17W2 | Threaded insert | 3017W2PAM99A20X |
| 21W1 | Threaded insert | 3021W1PAM99A20X |
| 13W6 | Threaded insert | 3013W6PAM99A20X |
| 17W5 | Threaded insert | 3017W5PAM99A20X |
| 21WA4 | Threaded insert | 321WA4PAM99A20X |
| 25W3 | Threaded insert | 3025W3PAM99A20X |
| 27W2 | Threaded insert | 3027W2PAM99A20X |
| 24W7 | Threaded insert | 3024W7PAM99A20X |
| 36W4 | Threaded insert | 3036W4PAM99A20X |
| 43W2 | Threaded insert | 3043W2PAM99A20X |
| 47W1 | Threaded insert | 3047W1PAM99A20X |




| Socket connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded insert | 3005W1SAM99A30X |
| 7W2 | Threaded insert | 3007W2SAM99A30X |
| 11W1 | Threaded insert | 3011W1SAM99A30X |
| 9W4 | Threaded insert | 3009W4SAM99A30X |
| 13W3 | Threaded insert | 3013W3SAM99A30X |
| 17W2 | Threaded insert | 3017W2SAM99A30X |
| 21W1 | Threaded insert | 3021W1SAM99A30X |
| 13W6 | Threaded insert | 3013W6SAM99A30X |
| 17W5 | Threaded insert | 3017W5SAM99A30X |
| 21WA4 | Threaded insert | 321WA4SAM99A30X |
| 25W3 | Threaded insert | 3025W3SAM99A30X |
| 27W2 | Threaded insert | 3027W2SAM99A30X |
| 24W7 | Threaded insert | 3024W7SAM99A30X |
| 36W4 | Threaded insert | 3036W4SAM99A30X |
| 43W2 | Threaded insert | 3043W2SAM99A30X |
| 47W1 | Threaded insert | 3047W1SAM99A30X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded insert | 3005W1PAM99A30X |
| 7W2 | Threaded insert | 3007W2PAM99A30X |
| 11W1 | Threaded insert | 3011W1PAM99A30X |
| 9W4 | Threaded insert | 3009W4PAM99A30X |
| 13W3 | Threaded insert | 3013W3PAM99A30X |
| 17W2 | Threaded insert | 3017W2PAM99A30X |
| 21W1 | Threaded insert | 3021W1PAM99A30X |
| 13W6 | Threaded insert | 3013W6PAM99A30X |
| 17W5 | Threaded insert | 3017W5PAM99A30X |
| 21WA4 | Threaded insert | 321WA4PAM99A30X |
| 25W3 | Threaded insert | 3025W3PAM99A30X |
| 27W2 | Threaded insert | 3027W2PAM99A30X |
| 24W7 | Threaded insert | 3024W7PAM99A30X |
| 36W4 | Threaded insert | 3036W4PAM99A30X |
| 43W2 | Threaded insert | 3043W2PAM99A30X |
| 47W1 | Threaded insert | 3047W1PAM99A30X |

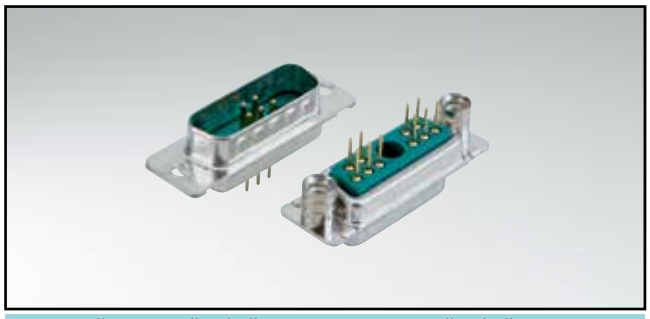



| Socket connector | | |
|---|---|---|
| Design | Mounting style | Part Number |
| 5W1 | Floating mount | 3005W1SAM99A60X |
| 7W2 | Floating mount | 3007W2SAM99A60X |
| 11W1 | Floating mount | 3011W1SAM99A60X |
| 9W4 | Floating mount | 3009W4SAM99A60X |
| 13W3 | Floating mount | 3013W3SAM99A60X |
| 17W2 | Floating mount | 3017W2SAM99A60X |
| 21W1 | Floating mount | 3021W1SAM99A60X |
| 13W6 | Floating mount | 3013W6SAM99A60X |
| 17W5 | Floating mount | 3017W5SAM99A60X |
| 21WA4 | Floating mount | 321WA4SAM99A60X |
| 25W3 | Floating mount | 3025W3SAM99A60X |
| 27W2 | Floating mount | 3027W2SAM99A60X |
| 24W7 | Floating mount | 3024W7SAM99A60X |
| 36W4 | Floating mount | 3036W4SAM99A60X |
| 43W2 | Floating mount | 3043W2SAM99A60X |
| 47W1 | Floating mount | 3047W1SAM99A60X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style | Part Number |
| 5W1 | Floating mount | 3005W1PAM99A60X |
| 7W2 | Floating mount | 3007W2PAM99A60X |
| 11W1 | Floating mount | 3011W1PAM99A60X |
| 9W4 | Floating mount | 3009W4PAM99A60X |
| 13W3 | Floating mount | 3013W3PAM99A60X |
| 17W2 | Floating mount | 3017W2PAM99A60X |
| 21W1 | Floating mount | 3021W1PAM99A60X |
| 13W6 | Floating mount | 3013W6PAM99A60X |
| 17W5 | Floating mount | 3017W5PAM99A60X |
| 21WA4 | Floating mount | 321WA4PAM99A60X |
| 25W3 | Floating mount | 3025W3PAM99A60X |
| 27W2 | Floating mount | 3027W2PAM99A60X |
| 24W7 | Floating mount | 3024W7PAM99A60X |
| 36W4 | Floating mount | 3036W4PAM99A60X |
| 43W2 | Floating mount | 3043W2PAM99A60X |
| 47W1 | Floating mount | 3047W1PAM99A60X |

# COMBINATION D-SUB WITH SIGNAL CONTACTS

## Solder pin – Straight – Precision machined contacts

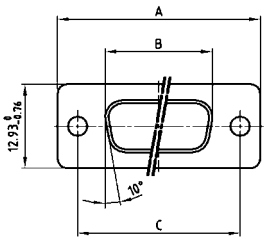


RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### DESCRIPTION

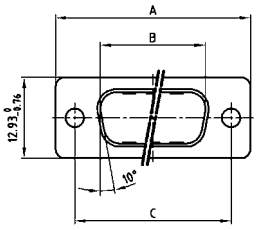
- Mounting styles:
  - with through-hole, Ø .118"/3 mm
  - with 4-40 UNC or M3 threaded insert
  - with 4-40 UNC or M3 threaded rear spacer
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
  (brass tin plated or stainless steel available on request)

### SOCKET CONNECTOR



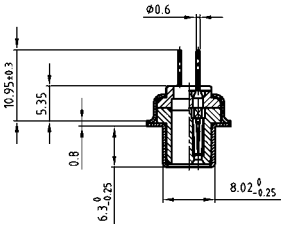

| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 1 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 2 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |
| 5 | 67.31 | 52.55 | 61.10 $^{+0.14}_{-0.11}$ |

### PLUG CONNECTOR

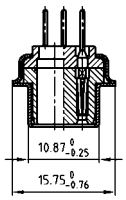



| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 1 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 2 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 5 | 67.31 | 52.68 | 61.10 $^{+0.14}_{-0.11}$ | 5.99 |

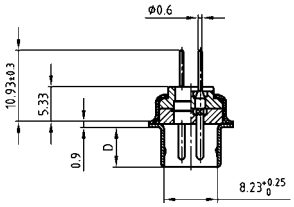
Shell size 1-4



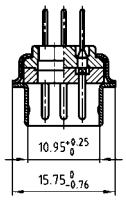

Shell size 5



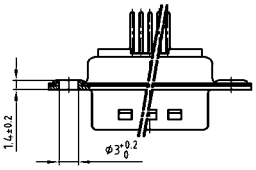

Shell size 1-4




Shell size 5




### ORDER DATA



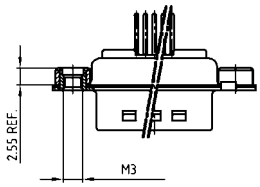

| SOCKET CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style** | **Part Number** |
| 5W1 | Through-hole | 3005W1SAR99A10X |
| 7W2 | Through-hole | 3007W2SAR99A10X |
| 11W1 | Through-hole | 3011W1SAR99A10X |
| 9W4 | Through-hole | 3009W4SAR99A10X |
| 13W3 | Through-hole | 3013W3SAR99A10X |
| 17W2 | Through-hole | 3017W2SAR99A10X |
| 21W1 | Through-hole | 3021W1SAR99A10X |
| 13W6 | Through-hole | 3013W6SAR99A10X |
| 17W5 | Through-hole | 3017W5SAR99A10X |
| 21WA4 | Through-hole | 321WA4SAR99A10X |
| 25W3 | Through-hole | 3025W3SAR99A10X |
| 27W2 | Through-hole | 3027W2SAR99A10X |
| 24W7 | Through-hole | 3024W7SAR99A10X |
| 36W4 | Through-hole | 3036W4SAR99A10X |
| 43W2 | Through-hole | 3043W2SAR99A10X |
| 47W1 | Through-hole | 3047W1SAR99A10X |

| PLUG CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style** | **Part Number** |
| 5W1 | Through-hole | 3005W1PAR99A10X |
| 7W2 | Through-hole | 3007W2PAR99A10X |
| 11W1 | Through-hole | 3011W1PAR99A10X |
| 9W4 | Through-hole | 3009W4PAR99A10X |
| 13W3 | Through-hole | 3013W3PAR99A10X |
| 17W2 | Through-hole | 3017W2PAR99A10X |
| 21W1 | Through-hole | 3021W1PAR99A10X |
| 13W6 | Through-hole | 3013W6PAR99A10X |
| 17W5 | Through-hole | 3017W5PAR99A10X |
| 21WA4 | Through-hole | 321WA4PAR99A10X |
| 25W3 | Through-hole | 3025W3PAR99A10X |
| 27W2 | Through-hole | 3027W2PAR99A10X |
| 24W7 | Through-hole | 3024W7PAR99A10X |
| 36W4 | Through-hole | 3036W4PAR99A10X |
| 43W2 | Through-hole | 3043W2PAR99A10X |
| 47W1 | Through-hole | 3047W1PAR99A10X |

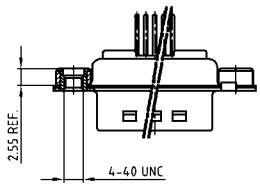
# Combination D-SUB – Mounting styles

## Solder pin – Straight – Precision machined contacts

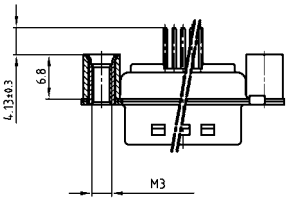
### Order data



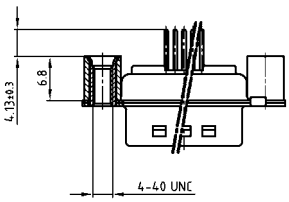

| Socket connector | | | Plug connector | | |
|---|---|---|---|---|---|
| Design | Mounting style M3 | Part Number | Design | Mounting style M3 | Part Number |
| 5W1 | Threaded insert | 3005W1SAR99A20X | 5W1 | Threaded insert | 3005W1PAR99A20X |
| 7W2 | Threaded insert | 3007W2SAR99A20X | 7W2 | Threaded insert | 3007W2PAR99A20X |
| 11W1 | Threaded insert | 3011W1SAR99A20X | 11W1 | Threaded insert | 3011W1PAR99A20X |
| 9W4 | Threaded insert | 3009W4SAR99A20X | 9W4 | Threaded insert | 3009W4PAR99A20X |
| 13W3 | Threaded insert | 3013W3SAR99A20X | 13W3 | Threaded insert | 3013W3PAR99A20X |
| 17W2 | Threaded insert | 3017W2SAR99A20X | 17W2 | Threaded insert | 3017W2PAR99A20X |
| 21W1 | Threaded insert | 3021W1SAR99A20X | 21W1 | Threaded insert | 3021W1PAR99A20X |
| 13W6 | Threaded insert | 3013W6SAR99A20X | 13W6 | Threaded insert | 3013W6PAR99A20X |
| 17W5 | Threaded insert | 3017W5SAR99A20X | 17W5 | Threaded insert | 3017W5PAR99A20X |
| 21WA4 | Threaded insert | 321WA4SAR99A20X | 21WA4 | Threaded insert | 321WA4PAR99A20X |
| 25W3 | Threaded insert | 3025W3SAR99A20X | 25W3 | Threaded insert | 3025W3PAR99A20X |
| 27W2 | Threaded insert | 3027W2SAR99A20X | 27W2 | Threaded insert | 3027W2PAR99A20X |
| 24W7 | Threaded insert | 3024W7SAR99A20X | 24W7 | Threaded insert | 3024W7PAR99A20X |
| 36W4 | Threaded insert | 3036W4SAR99A20X | 36W4 | Threaded insert | 3036W4PAR99A20X |
| 43W2 | Threaded insert | 3043W2SAR99A20X | 43W2 | Threaded insert | 3043W2PAR99A20X |
| 47W1 | Threaded insert | 3047W1SAR99A20X | 47W1 | Threaded insert | 3047W1PAR99A20X |




| Socket connector | | | Plug connector | | |
|---|---|---|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number | Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded insert | 3005W1SAR99A30X | 5W1 | Threaded insert | 3005W1PAR99A30X |
| 7W2 | Threaded insert | 3007W2SAR99A30X | 7W2 | Threaded insert | 3007W2PAR99A30X |
| 11W1 | Threaded insert | 3011W1SAR99A30X | 11W1 | Threaded insert | 3011W1PAR99A30X |
| 9W4 | Threaded insert | 3009W4SAR99A30X | 9W4 | Threaded insert | 3009W4PAR99A30X |
| 13W3 | Threaded insert | 3013W3SAR99A30X | 13W3 | Threaded insert | 3013W3PAR99A30X |
| 17W2 | Threaded insert | 3017W2SAR99A30X | 17W2 | Threaded insert | 3017W2PAR99A30X |
| 21W1 | Threaded insert | 3021W1SAR99A30X | 21W1 | Threaded insert | 3021W1PAR99A30X |
| 13W6 | Threaded insert | 3013W6SAR99A30X | 13W6 | Threaded insert | 3013W6PAR99A30X |
| 17W5 | Threaded insert | 3017W5SAR99A30X | 17W5 | Threaded insert | 3017W5PAR99A30X |
| 21WA4 | Threaded insert | 321WA4SAR99A30X | 21WA4 | Threaded insert | 321WA4PAR99A30X |
| 25W3 | Threaded insert | 3025W3SAR99A30X | 25W3 | Threaded insert | 3025W3PAR99A30X |
| 27W2 | Threaded insert | 3027W2SAR99A30X | 27W2 | Threaded insert | 3027W2PAR99A30X |
| 24W7 | Threaded insert | 3024W7SAR99A30X | 24W7 | Threaded insert | 3024W7PAR99A30X |
| 36W4 | Threaded insert | 3036W4SAR99A30X | 36W4 | Threaded insert | 3036W4PAR99A30X |
| 43W2 | Threaded insert | 3043W2SAR99A30X | 43W2 | Threaded insert | 3043W2PAR99A30X |
| 47W1 | Threaded insert | 3047W1SAR99A30X | 47W1 | Threaded insert | 3047W1PAR99A30X |



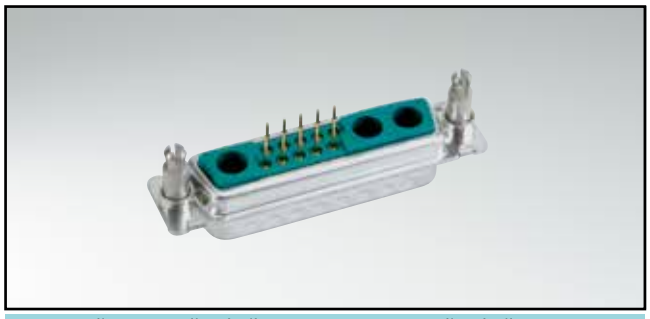

| Socket connector | | | Plug connector | | |
|---|---|---|---|---|---|
| Design | Mounting style M3 | Part Number | Design | Mounting style M3 | Part Number |
| 5W1 | Threaded rear spacer | 3005W1SAR99A40X | 5W1 | Threaded rear spacer | 3005W1PAR99A40X |
| 7W2 | Threaded rear spacer | 3007W2SAR99A40X | 7W2 | Threaded rear spacer | 3007W2PAR99A40X |
| 11W1 | Threaded rear spacer | 3011W1SAR99A40X | 11W1 | Threaded rear spacer | 3011W1PAR99A40X |
| 9W4 | Threaded rear spacer | 3009W4SAR99A40X | 9W4 | Threaded rear spacer | 3009W4PAR99A40X |
| 13W3 | Threaded rear spacer | 3013W3SAR99A40X | 13W3 | Threaded rear spacer | 3013W3PAR99A40X |
| 17W2 | Threaded rear spacer | 3017W2SAR99A40X | 17W2 | Threaded rear spacer | 3017W2PAR99A40X |
| 21W1 | Threaded rear spacer | 3021W1SAR99A40X | 21W1 | Threaded rear spacer | 3021W1PAR99A40X |
| 13W6 | Threaded rear spacer | 3013W6SAR99A40X | 13W6 | Threaded rear spacer | 3013W6PAR99A40X |
| 17W5 | Threaded rear spacer | 3017W5SAR99A40X | 17W5 | Threaded rear spacer | 3017W5PAR99A40X |
| 21WA4 | Threaded rear spacer | 321WA4SAR99A40X | 21WA4 | Threaded rear spacer | 321WA4PAR99A40X |
| 25W3 | Threaded rear spacer | 3025W3SAR99A40X | 25W3 | Threaded rear spacer | 3025W3PAR99A40X |
| 27W2 | Threaded rear spacer | 3027W2SAR99A40X | 27W2 | Threaded rear spacer | 3027W2PAR99A40X |
| 24W7 | Threaded rear spacer | 3024W7SAR99A40X | 24W7 | Threaded rear spacer | 3024W7PAR99A40X |
| 36W4 | Threaded rear spacer | 3036W4SAR99A40X | 36W4 | Threaded rear spacer | 3036W4PAR99A40X |
| 43W2 | Threaded rear spacer | 3043W2SAR99A40X | 43W2 | Threaded rear spacer | 3043W2PAR99A40X |
| 47W1 | Threaded rear spacer | 3047W1SAR99A40X | 47W1 | Threaded rear spacer | 3047W1PAR99A40X |




| Socket connector | | | Plug connector | | |
|---|---|---|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number | Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded rear spacer | 3005W1SAR99A50X | 5W1 | Threaded rear spacer | 3005W1PAR99A50X |
| 7W2 | Threaded rear spacer | 3007W2SAR99A50X | 7W2 | Threaded rear spacer | 3007W2PAR99A50X |
| 11W1 | Threaded rear spacer | 3011W1SAR99A50X | 11W1 | Threaded rear spacer | 3011W1PAR99A50X |
| 9W4 | Threaded rear spacer | 3009W4SAR99A50X | 9W4 | Threaded rear spacer | 3009W4PAR99A50X |
| 13W3 | Threaded rear spacer | 3013W3SAR99A50X | 13W3 | Threaded rear spacer | 3013W3PAR99A50X |
| 17W2 | Threaded rear spacer | 3017W2SAR99A50X | 17W2 | Threaded rear spacer | 3017W2PAR99A50X |
| 21W1 | Threaded rear spacer | 3021W1SAR99A50X | 21W1 | Threaded rear spacer | 3021W1PAR99A50X |
| 13W6 | Threaded rear spacer | 3013W6SAR99A50X | 13W6 | Threaded rear spacer | 3013W6PAR99A50X |
| 17W5 | Threaded rear spacer | 3017W5SAR99A50X | 17W5 | Threaded rear spacer | 3017W5PAR99A50X |
| 21WA4 | Threaded rear spacer | 321WA4SAR99A50X | 21WA4 | Threaded rear spacer | 321WA4PAR99A50X |
| 25W3 | Threaded rear spacer | 3025W3SAR99A50X | 25W3 | Threaded rear spacer | 3025W3PAR99A50X |
| 27W2 | Threaded rear spacer | 3027W2SAR99A50X | 27W2 | Threaded rear spacer | 3027W2PAR99A50X |
| 24W7 | Threaded rear spacer | 3024W7SAR99A50X | 24W7 | Threaded rear spacer | 3024W7PAR99A50X |
| 36W4 | Threaded rear spacer | 3036W4SAR99A50X | 36W4 | Threaded rear spacer | 3036W4PAR99A50X |
| 43W2 | Threaded rear spacer | 3043W2SAR99A50X | 43W2 | Threaded rear spacer | 3043W2PAR99A50X |
| 47W1 | Threaded rear spacer | 3047W1SAR99A50X | 47W1 | Threaded rear spacer | 3047W1PAR99A50X |

# COMBINATION D-SUB WITH SIGNAL CONTACTS

## Solder pin – Straight – Precision machined contacts

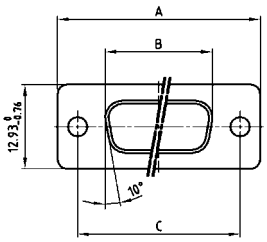


RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### DESCRIPTION

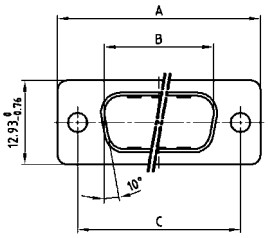
- **Threaded rear spacer .291"/7.4 mm**
  (the same installation high as D-SUB Standard on PCB)
- Mounting styles:
  - with 4-40 UNC threaded rear spacer with PCB clip (M3 on request)
  - with 4-40 UNC front and threaded rear spacer with PCB clip (M3 on request)
    for PCB thickness .063"/1.6 mm and .091"/2.3 mm
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
  (brass tin plated or stainless steel available on request)

### SOCKET CONNECTOR



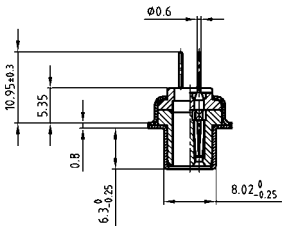

| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 1 | 31.19 | 16.46 | 25.00 +0.12 -0.13 |
| 2 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |
| 5 | 67.31 | 52.55 | 61.10 +0.14 -0.11 |

### PLUG CONNECTOR

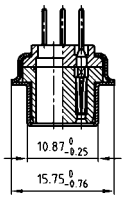



| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 1 | 31.19 | 16.79 | 25.00 +0.12 -0.13 | 6.12 |
| 2 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 5 | 67.31 | 52.68 | 61.10 +0.14 -0.11 | 5.99 |

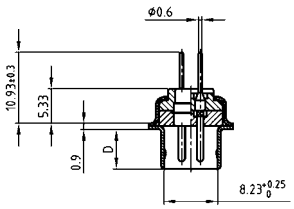
Shell size 1-4



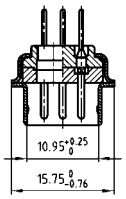

Shell size 5




Shell size 1-4

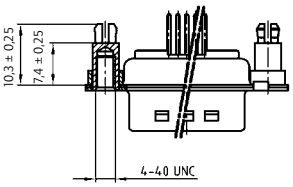



Shell size 5




### ORDER DATA

PCB thickness .063"/1.6 mm




**SOCKET CONNECTOR**

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 5W1 | Threaded rear spacer PCB clip | 3005W1SAR99E20X |
| 7W2 | Threaded rear spacer PCB clip | 3007W2SAR99E20X |
| 11W1 | Threaded rear spacer PCB clip | 3011W1SAR99E20X |
| 9W4 | Threaded rear spacer PCB clip | 3009W4SAR99E20X |
| 13W3 | Threaded rear spacer PCB clip | 3013W3SAR99E20X |
| 17W2 | Threaded rear spacer PCB clip | 3017W2SAR99E20X |
| 21W1 | Threaded rear spacer PCB clip | 3021W1SAR99E20X |
| 13W6 | Threaded rear spacer PCB clip | 3013W6SAR99E20X |
| 17W5 | Threaded rear spacer PCB clip | 3017W5SAR99E20X |
| 21WA4 | Threaded rear spacer PCB clip | 321WA4SAR99E20X |
| 25W3 | Threaded rear spacer PCB clip | 3025W3SAR99E20X |
| 27W2 | Threaded rear spacer PCB clip | 3027W2SAR99E20X |
| 24W7 | Threaded rear spacer PCB clip | 3024W7SAR99E20X |
| 36W4 | Threaded rear spacer PCB clip | 3036W4SAR99E20X |
| 43W2 | Threaded rear spacer PCB clip | 3043W2SAR99E20X |
| 47W1 | Threaded rear spacer PCB clip | 3047W1SAR99E20X |

**PLUG CONNECTOR**

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 5W1 | Threaded rear spacer PCB clip | 3005W1PAR99E20X |
| 7W2 | Threaded rear spacer PCB clip | 3007W2PAR99E20X |
| 11W1 | Threaded rear spacer PCB clip | 3011W1PAR99E20X |
| 9W4 | Threaded rear spacer PCB clip | 3009W4PAR99E20X |
| 13W3 | Threaded rear spacer PCB clip | 3013W3PAR99E20X |
| 17W2 | Threaded rear spacer PCB clip | 3017W2PAR99E20X |
| 21W1 | Threaded rear spacer PCB clip | 3021W1PAR99E20X |
| 13W6 | Threaded rear spacer PCB clip | 3013W6PAR99E20X |
| 17W5 | Threaded rear spacer PCB clip | 3017W5PAR99E20X |
| 21WA4 | Threaded rear spacer PCB clip | 321WA4PAR99E20X |
| 25W3 | Threaded rear spacer PCB clip | 3025W3PAR99E20X |
| 27W2 | Threaded rear spacer PCB clip | 3027W2PAR99E20X |
| 24W7 | Threaded rear spacer PCB clip | 3024W7PAR99E20X |
| 36W4 | Threaded rear spacer PCB clip | 3036W4PAR99E20X |
| 43W2 | Threaded rear spacer PCB clip | 3043W2PAR99E20X |
| 47W1 | Threaded rear spacer PCB clip | 3047W1PAR99E20X |

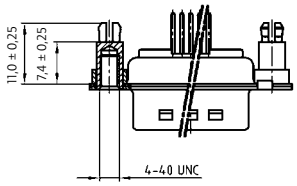
PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter

# Combination D-SUB – Mounting styles

## Solder pin – Straight – Precision machined contacts

### Order data

PCB thickness .091"/2.3 mm



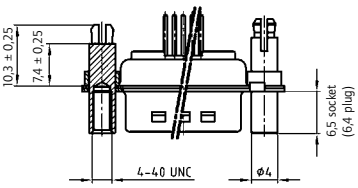

**Socket connector**

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 5W1 | Threaded rear spacer PCB clip | 3005W1SAR99E40X |
| 7W2 | Threaded rear spacer PCB clip | 3007W2SAR99E40X |
| 11W1 | Threaded rear spacer PCB clip | 3011W1SAR99E40X |
| 9W4 | Threaded rear spacer PCB clip | 3009W4SAR99E40X |
| 13W3 | Threaded rear spacer PCB clip | 3013W3SAR99E40X |
| 17W2 | Threaded rear spacer PCB clip | 3017W2SAR99E40X |
| 21W1 | Threaded rear spacer PCB clip | 3021W1SAR99E40X |
| 13W6 | Threaded rear spacer PCB clip | 3013W6SAR99E40X |
| 17W5 | Threaded rear spacer PCB clip | 3017W5SAR99E40X |
| 21WA4 | Threaded rear spacer PCB clip | 321WA4SAR99E40X |
| 25W3 | Threaded rear spacer PCB clip | 3025W3SAR99E40X |
| 27W2 | Threaded rear spacer PCB clip | 3027W2SAR99E40X |
| 24W7 | Threaded rear spacer PCB clip | 3024W7SAR99E40X |
| 36W4 | Threaded rear spacer PCB clip | 3036W4SAR99E40X |
| 43W2 | Threaded rear spacer PCB clip | 3043W2SAR99E40X |
| 47W1 | Threaded rear spacer PCB clip | 3047W1SAR99E40X |

**Plug connector**

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 5W1 | Threaded rear spacer PCB clip | 3005W1PAR99E40X |
| 7W2 | Threaded rear spacer PCB clip | 3007W2PAR99E40X |
| 11W1 | Threaded rear spacer PCB clip | 3011W1PAR99E40X |
| 9W4 | Threaded rear spacer PCB clip | 3009W4PAR99E40X |
| 13W3 | Threaded rear spacer PCB clip | 3013W3PAR99E40X |
| 17W2 | Threaded rear spacer PCB clip | 3017W2PAR99E40X |
| 21W1 | Threaded rear spacer PCB clip | 3021W1PAR99E40X |
| 13W6 | Threaded rear spacer PCB clip | 3013W6PAR99E40X |
| 17W5 | Threaded rear spacer PCB clip | 3017W5PAR99E40X |
| 21WA4 | Threaded rear spacer PCB clip | 321WA4PAR99E40X |
| 25W3 | Threaded rear spacer PCB clip | 3025W3PAR99E40X |
| 27W2 | Threaded rear spacer PCB clip | 3027W2PAR99E40X |
| 24W7 | Threaded rear spacer PCB clip | 3024W7PAR99E40X |
| 36W4 | Threaded rear spacer PCB clip | 3036W4PAR99E40X |
| 43W2 | Threaded rear spacer PCB clip | 3043W2PAR99E40X |
| 47W1 | Threaded rear spacer PCB clip | 3047W1PAR99E40X |

PCB thickness .063"/1.6 mm



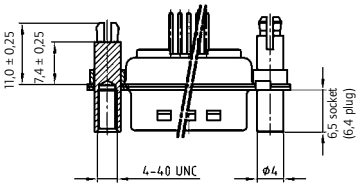

**Socket connector**

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 5W1 | Front/Threaded rear spacer PCB clip | 3005W1SAR99F20X |
| 7W2 | Front/Threaded rear spacer PCB clip | 3007W2SAR99F20X |
| 11W1 | Front/Threaded rear spacer PCB clip | 3011W1SAR99F20X |
| 9W4 | Front/Threaded rear spacer PCB clip | 3009W4SAR99F20X |
| 13W3 | Front/Threaded rear spacer PCB clip | 3013W3SAR99F20X |
| 17W2 | Front/Threaded rear spacer PCB clip | 3017W2SAR99F20X |
| 21W1 | Front/Threaded rear spacer PCB clip | 3021W1SAR99F20X |
| 13W6 | Front/Threaded rear spacer PCB clip | 3013W6SAR99F20X |
| 17W5 | Front/Threaded rear spacer PCB clip | 3017W5SAR99F20X |
| 21WA4 | Front/Threaded rear spacer PCB clip | 321WA4SAR99F20X |
| 25W3 | Front/Threaded rear spacer PCB clip | 3025W3SAR99F20X |
| 27W2 | Front/Threaded rear spacer PCB clip | 3027W2SAR99F20X |
| 24W7 | Front/Threaded rear spacer PCB clip | 3024W7SAR99F20X |
| 36W4 | Front/Threaded rear spacer PCB clip | 3036W4SAR99F20X |
| 43W2 | Front/Threaded rear spacer PCB clip | 3043W2SAR99F20X |
| 47W1 | Front/Threaded rear spacer PCB clip | 3047W1SAR99F20X |

**Plug connector**

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 5W1 | Front/Threaded rear spacer PCB clip | 3005W1PAR99F20X |
| 7W2 | Front/Threaded rear spacer PCB clip | 3007W2PAR99F20X |
| 11W1 | Front/Threaded rear spacer PCB clip | 3011W1PAR99F20X |
| 9W4 | Front/Threaded rear spacer PCB clip | 3009W4PAR99F20X |
| 13W3 | Front/Threaded rear spacer PCB clip | 3013W3PAR99F20X |
| 17W2 | Front/Threaded rear spacer PCB clip | 3017W2PAR99F20X |
| 21W1 | Front/Threaded rear spacer PCB clip | 3021W1PAR99F20X |
| 13W6 | Front/Threaded rear spacer PCB clip | 3013W6PAR99F20X |
| 17W5 | Front/Threaded rear spacer PCB clip | 3017W5PAR99F20X |
| 21WA4 | Front/Threaded rear spacer PCB clip | 321WA4PAR99F20X |
| 25W3 | Front/Threaded rear spacer PCB clip | 3025W3PAR99F20X |
| 27W2 | Front/Threaded rear spacer PCB clip | 3027W2PAR99F20X |
| 24W7 | Front/Threaded rear spacer PCB clip | 3024W7PAR99F20X |
| 36W4 | Front/Threaded rear spacer PCB clip | 3036W4PAR99F20X |
| 43W2 | Front/Threaded rear spacer PCB clip | 3043W2PAR99F20X |
| 47W1 | Front/Threaded rear spacer PCB clip | 3047W1PAR99F20X |

PCB thickness .091"/2.3 mm




**Socket connector**

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 5W1 | Front/Threaded rear spacer PCB clip | 3005W1SAR99F40X |
| 7W2 | Front/Threaded rear spacer PCB clip | 3007W2SAR99F40X |
| 11W1 | Front/Threaded rear spacer PCB clip | 3011W1SAR99F40X |
| 9W4 | Front/Threaded rear spacer PCB clip | 3009W4SAR99F40X |
| 13W3 | Front/Threaded rear spacer PCB clip | 3013W3SAR99F40X |
| 17W2 | Front/Threaded rear spacer PCB clip | 3017W2SAR99F40X |
| 21W1 | Front/Threaded rear spacer PCB clip | 3021W1SAR99F40X |
| 13W6 | Front/Threaded rear spacer PCB clip | 3013W6SAR99F40X |
| 17W5 | Front/Threaded rear spacer PCB clip | 3017W5SAR99F40X |
| 21WA4 | Front/Threaded rear spacer PCB clip | 321WA4SAR99F40X |
| 25W3 | Front/Threaded rear spacer PCB clip | 3025W3SAR99F40X |
| 27W2 | Front/Threaded rear spacer PCB clip | 3027W2SAR99F40X |
| 24W7 | Front/Threaded rear spacer PCB clip | 3024W7SAR99F40X |
| 36W4 | Front/Threaded rear spacer PCB clip | 3036W4SAR99F40X |
| 43W2 | Front/Threaded rear spacer PCB clip | 3043W2SAR99F40X |
| 47W1 | Front/Threaded rear spacer PCB clip | 3047W1SAR99F40X |

**Plug connector**

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 5W1 | Front/Threaded rear spacer PCB clip | 3005W1PAR99F40X |
| 7W2 | Front/Threaded rear spacer PCB clip | 3007W2PAR99F40X |
| 11W1 | Front/Threaded rear spacer PCB clip | 3011W1PAR99F40X |
| 9W4 | Front/Threaded rear spacer PCB clip | 3009W4PAR99F40X |
| 13W3 | Front/Threaded rear spacer PCB clip | 3013W3PAR99F40X |
| 17W2 | Front/Threaded rear spacer PCB clip | 3017W2PAR99F40X |
| 21W1 | Front/Threaded rear spacer PCB clip | 3021W1PAR99F40X |
| 13W6 | Front/Threaded rear spacer PCB clip | 3013W6PAR99F40X |
| 17W5 | Front/Threaded rear spacer PCB clip | 3017W5PAR99F40X |
| 21WA4 | Front/Threaded rear spacer PCB clip | 321WA4PAR99F40X |
| 25W3 | Front/Threaded rear spacer PCB clip | 3025W3PAR99F40X |
| 27W2 | Front/Threaded rear spacer PCB clip | 3027W2PAR99F40X |
| 24W7 | Front/Threaded rear spacer PCB clip | 3024W7PAR99F40X |
| 36W4 | Front/Threaded rear spacer PCB clip | 3036W4PAR99F40X |
| 43W2 | Front/Threaded rear spacer PCB clip | 3043W2PAR99F40X |
| 47W1 | Front/Threaded rear spacer PCB clip | 3047W1PAR99F40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter

# COMBINATION D-SUB WITH SIGNAL CONTACTS

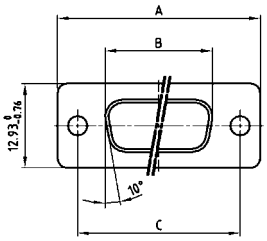
## Solder pin – Straight – Precision machined contacts

RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### DESCRIPTION

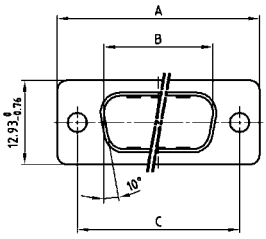
- **Threaded rear spacer .256"/6.5 mm**
- Mounting style:
  with 4-40 UNC threaded rear spacer with PCB clip
  for PCB thickness .063"/1.6 mm
  for PCB thickness .091"/2.3 mm
  for PCB thickness .126"/3.2 mm
- M3 and PCB clip with front spacer available on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
  (brass tin plated or stainless steel available on request)

### SOCKET CONNECTOR



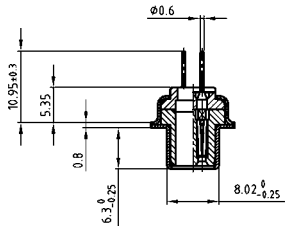

| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 1 | 31.19 | 16.46 | 25.00 +0.12 -0.13 |
| 2 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |
| 5 | 67.31 | 52.55 | 61.10 +0.14 -0.11 |

### PLUG CONNECTOR

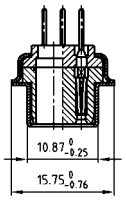



| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 1 | 31.19 | 16.79 | 25.00 +0.12 -0.13 | 6.12 |
| 2 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 5 | 67.31 | 52.68 | 61.10 +0.14 -0.11 | 5.99 |

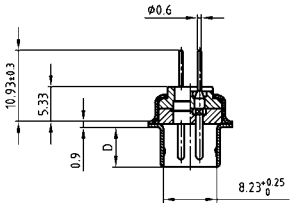
Shell size 1-4



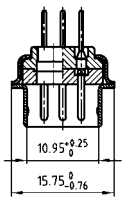

Shell size 5




Shell size 1-4

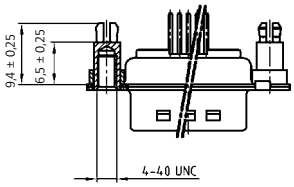



Shell size 5




### ORDER DATA

PCB thickness .063"/1.6 mm




| SOCKET CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 5W1 | Threaded rear spacer PCB clip | 3005W1SAR99C20X |
| 7W2 | Threaded rear spacer PCB clip | 3007W2SAR99C20X |
| 11W1 | Threaded rear spacer PCB clip | 3011W1SAR99C20X |
| 9W4 | Threaded rear spacer PCB clip | 3009W4SAR99C20X |
| 13W3 | Threaded rear spacer PCB clip | 3013W3SAR99C20X |
| 17W2 | Threaded rear spacer PCB clip | 3017W2SAR99C20X |
| 21W1 | Threaded rear spacer PCB clip | 3021W1SAR99C20X |
| 13W6 | Threaded rear spacer PCB clip | 3013W6SAR99C20X |
| 17W5 | Threaded rear spacer PCB clip | 3017W5SAR99C20X |
| 21WA4 | Threaded rear spacer PCB clip | 321WA4SAR99C20X |
| 25W3 | Threaded rear spacer PCB clip | 3025W3SAR99C20X |
| 27W2 | Threaded rear spacer PCB clip | 3027W2SAR99C20X |
| 24W7 | Threaded rear spacer PCB clip | 3024W7SAR99C20X |
| 36W4 | Threaded rear spacer PCB clip | 3036W4SAR99C20X |
| 43W2 | Threaded rear spacer PCB clip | 3043W2SAR99C20X |
| 47W1 | Threaded rear spacer PCB clip | 3047W1SAR99C20X |

| PLUG CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 5W1 | Threaded rear spacer PCB clip | 3005W1PAR99C20X |
| 7W2 | Threaded rear spacer PCB clip | 3007W2PAR99C20X |
| 11W1 | Threaded rear spacer PCB clip | 3011W1PAR99C20X |
| 9W4 | Threaded rear spacer PCB clip | 3009W4PAR99C20X |
| 13W3 | Threaded rear spacer PCB clip | 3013W3PAR99C20X |
| 17W2 | Threaded rear spacer PCB clip | 3017W2PAR99C20X |
| 21W1 | Threaded rear spacer PCB clip | 3021W1PAR99C20X |
| 13W6 | Threaded rear spacer PCB clip | 3013W6PAR99C20X |
| 17W5 | Threaded rear spacer PCB clip | 3017W5PAR99C20X |
| 21WA4 | Threaded rear spacer PCB clip | 321WA4PAR99C20X |
| 25W3 | Threaded rear spacer PCB clip | 3025W3PAR99C20X |
| 27W2 | Threaded rear spacer PCB clip | 3027W2PAR99C20X |
| 24W7 | Threaded rear spacer PCB clip | 3024W7PAR99C20X |
| 36W4 | Threaded rear spacer PCB clip | 3036W4PAR99C20X |
| 43W2 | Threaded rear spacer PCB clip | 3043W2PAR99C20X |
| 47W1 | Threaded rear spacer PCB clip | 3047W1PAR99C20X |

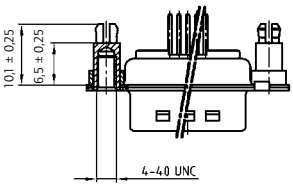
PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter

# Combination D-SUB – Mounting styles

## Solder pin – Straight – Precision machined contacts

### Order data

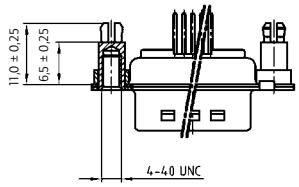
PCB thickness .091"/2.3 mm




| Socket connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded rear spacer PCB clip | 3005W1SAR99C40X |
| 7W2 | Threaded rear spacer PCB clip | 3007W2SAR99C40X |
| 11W1 | Threaded rear spacer PCB clip | 3011W1SAR99C40X |
| 9W4 | Threaded rear spacer PCB clip | 3009W4SAR99C40X |
| 13W3 | Threaded rear spacer PCB clip | 3013W3SAR99C40X |
| 17W2 | Threaded rear spacer PCB clip | 3017W2SAR99C40X |
| 21W1 | Threaded rear spacer PCB clip | 3021W1SAR99C40X |
| 13W6 | Threaded rear spacer PCB clip | 3013W6SAR99C40X |
| 17W5 | Threaded rear spacer PCB clip | 3017W5SAR99C40X |
| 21WA4 | Threaded rear spacer PCB clip | 321WA4SAR99C40X |
| 25W3 | Threaded rear spacer PCB clip | 3025W3SAR99C40X |
| 27W2 | Threaded rear spacer PCB clip | 3027W2SAR99C40X |
| 24W7 | Threaded rear spacer PCB clip | 3024W7SAR99C40X |
| 36W4 | Threaded rear spacer PCB clip | 3036W4SAR99C40X |
| 43W2 | Threaded rear spacer PCB clip | 3043W2SAR99C40X |
| 47W1 | Threaded rear spacer PCB clip | 3047W1SAR99C40X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded rear spacer PCB clip | 3005W1PAR99C40X |
| 7W2 | Threaded rear spacer PCB clip | 3007W2PAR99C40X |
| 11W1 | Threaded rear spacer PCB clip | 3011W1PAR99C40X |
| 9W4 | Threaded rear spacer PCB clip | 3009W4PAR99C40X |
| 13W3 | Threaded rear spacer PCB clip | 3013W3PAR99C40X |
| 17W2 | Threaded rear spacer PCB clip | 3017W2PAR99C40X |
| 21W1 | Threaded rear spacer PCB clip | 3021W1PAR99C40X |
| 13W6 | Threaded rear spacer PCB clip | 3013W6PAR99C40X |
| 17W5 | Threaded rear spacer PCB clip | 3017W5PAR99C40X |
| 21WA4 | Threaded rear spacer PCB clip | 321WA4PAR99C40X |
| 25W3 | Threaded rear spacer PCB clip | 3025W3PAR99C40X |
| 27W2 | Threaded rear spacer PCB clip | 3027W2PAR99C40X |
| 24W7 | Threaded rear spacer PCB clip | 3024W7PAR99C40X |
| 36W4 | Threaded rear spacer PCB clip | 3036W4PAR99C40X |
| 43W2 | Threaded rear spacer PCB clip | 3043W2PAR99C40X |
| 47W1 | Threaded rear spacer PCB clip | 3047W1PAR99C40X |

PCB thickness .126"/3.2 mm




| Socket connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded rear spacer PCB clip | 3005W1SAR99C60X |
| 7W2 | Threaded rear spacer PCB clip | 3007W2SAR99C60X |
| 11W1 | Threaded rear spacer PCB clip | 3011W1SAR99C60X |
| 9W4 | Threaded rear spacer PCB clip | 3009W4SAR99C60X |
| 13W3 | Threaded rear spacer PCB clip | 3013W3SAR99C60X |
| 17W2 | Threaded rear spacer PCB clip | 3017W2SAR99C60X |
| 21W1 | Threaded rear spacer PCB clip | 3021W1SAR99C60X |
| 13W6 | Threaded rear spacer PCB clip | 3013W6SAR99C60X |
| 17W5 | Threaded rear spacer PCB clip | 3017W5SAR99C60X |
| 21WA4 | Threaded rear spacer PCB clip | 321WA4SAR99C60X |
| 25W3 | Threaded rear spacer PCB clip | 3025W3SAR99C60X |
| 27W2 | Threaded rear spacer PCB clip | 3027W2SAR99C60X |
| 24W7 | Threaded rear spacer PCB clip | 3024W7SAR99C60X |
| 36W4 | Threaded rear spacer PCB clip | 3036W4SAR99C60X |
| 43W2 | Threaded rear spacer PCB clip | 3043W2SAR99C60X |
| 47W1 | Threaded rear spacer PCB clip | 3047W1SAR99C60X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded rear spacer PCB clip | 3005W1PAR99C60X |
| 7W2 | Threaded rear spacer PCB clip | 3007W2PAR99C60X |
| 11W1 | Threaded rear spacer PCB clip | 3011W1PAR99C60X |
| 9W4 | Threaded rear spacer PCB clip | 3009W4PAR99C60X |
| 13W3 | Threaded rear spacer PCB clip | 3013W3PAR99C60X |
| 17W2 | Threaded rear spacer PCB clip | 3017W2PAR99C60X |
| 21W1 | Threaded rear spacer PCB clip | 3021W1PAR99C60X |
| 13W6 | Threaded rear spacer PCB clip | 3013W6PAR99C60X |
| 17W5 | Threaded rear spacer PCB clip | 3017W5PAR99C60X |
| 21WA4 | Threaded rear spacer PCB clip | 321WA4PAR99C60X |
| 25W3 | Threaded rear spacer PCB clip | 3025W3PAR99C60X |
| 27W2 | Threaded rear spacer PCB clip | 3027W2PAR99C60X |
| 24W7 | Threaded rear spacer PCB clip | 3024W7PAR99C60X |
| 36W4 | Threaded rear spacer PCB clip | 3036W4PAR99C60X |
| 43W2 | Threaded rear spacer PCB clip | 3043W2PAR99C60X |
| 47W1 | Threaded rear spacer PCB clip | 3047W1PAR99C60X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter

# COMBINATION D-SUB WITH SIGNAL CONTACTS

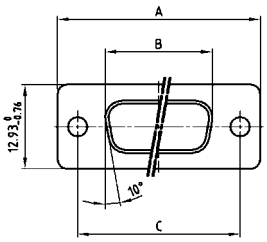
## Press-fit – Straight – Precision machined contacts

RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### DESCRIPTION

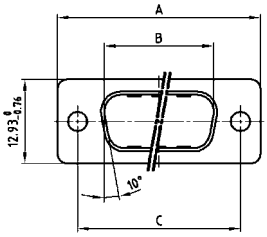
- Mounting styles:
  - with 4-40 UNC or M3 threaded rear spacer
  - with M3 or 4-40 UNC rear press-fit spacer
- For .040" / 1.0 mm $^{+.003"/0.09\ mm}_{-.002"/0.06\ mm}$ finished through-hole diameter
  Refer to product drawing for details
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
  (brass tin plated or stainless steel available on request)
- For power contacts please contact factory

### SOCKET CONNECTOR



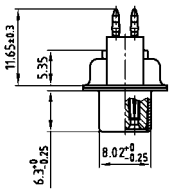

| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 1 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 2 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |
| 5 | 67.31 | 52.55 | 61.10 $^{+0.14}_{-0.11}$ |

### PLUG CONNECTOR

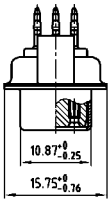



| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 1 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 2 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 5 | 67.31 | 52.68 | 61.10 $^{+0.14}_{-0.11}$ | 5.99 |

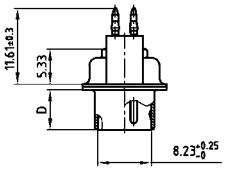
Shell size 1-4



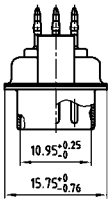

Shell size 5



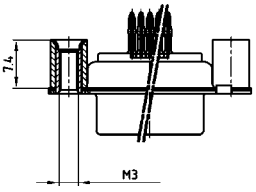

Shell size 1-4




Shell size 5




### ORDER DATA




**SOCKET CONNECTOR**

| Design | Mounting style M3 | Part Number |
|---|---|---|
| 5W1 | Threaded rear spacer | 3005W1SAP99A70X |
| 7W2 | Threaded rear spacer | 3007W2SAP99A70X |
| 11W1 | Threaded rear spacer | 3011W1SAP99A70X |
| 9W4 | Threaded rear spacer | 3009W4SAP99A70X |
| 13W3 | Threaded rear spacer | 3013W3SAP99A70X |
| 17W2 | Threaded rear spacer | 3017W2SAP99A70X |
| 21W1 | Threaded rear spacer | 3021W1SAP99A70X |
| 13W6 | Threaded rear spacer | 3013W6SAP99A70X |
| 17W5 | Threaded rear spacer | 3017W5SAP99A70X |
| 21WA4 | Threaded rear spacer | 321WA4SAP99A70X |
| 25W3 | Threaded rear spacer | 3025W3SAP99A70X |
| 27W2 | Threaded rear spacer | 3027W2SAP99A70X |
| 24W7 | Threaded rear spacer | 3024W7SAP99A70X |
| 36W4 | Threaded rear spacer | 3036W4SAP99A70X |
| 43W2 | Threaded rear spacer | 3043W2SAP99A70X |
| 47W1 | Threaded rear spacer | 3047W1SAP99A70X |

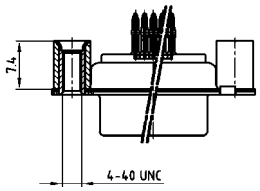
**PLUG CONNECTOR**

| Design | Mounting style M3 | Part Number |
|---|---|---|
| 5W1 | Threaded rear spacer | 3005W1PAP99A70X |
| 7W2 | Threaded rear spacer | 3007W2PAP99A70X |
| 11W1 | Threaded rear spacer | 3011W1PAP99A70X |
| 9W4 | Threaded rear spacer | 3009W4PAP99A70X |
| 13W3 | Threaded rear spacer | 3013W3PAP99A70X |
| 17W2 | Threaded rear spacer | 3017W2PAP99A70X |
| 21W1 | Threaded rear spacer | 3021W1PAP99A70X |
| 13W6 | Threaded rear spacer | 3013W6PAP99A70X |
| 17W5 | Threaded rear spacer | 3017W5PAP99A70X |
| 21WA4 | Threaded rear spacer | 321WA4PAP99A70X |
| 25W3 | Threaded rear spacer | 3025W3PAP99A70X |
| 27W2 | Threaded rear spacer | 3027W2PAP99A70X |
| 24W7 | Threaded rear spacer | 3024W7PAP99A70X |
| 36W4 | Threaded rear spacer | 3036W4PAP99A70X |
| 43W2 | Threaded rear spacer | 3043W2PAP99A70X |
| 47W1 | Threaded rear spacer | 3047W1PAP99A70X |

# Combination D-SUB – Mounting styles

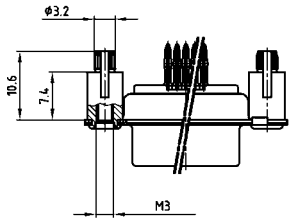
## Press-fit – Straight – Precision machined contacts

### Order data



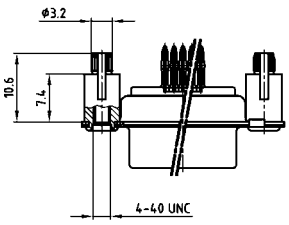

| Socket connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded rear spacer | 3005W1SAP99A80X |
| 7W2 | Threaded rear spacer | 3007W2SAP99A80X |
| 11W1 | Threaded rear spacer | 3011W1SAP99A80X |
| 9W4 | Threaded rear spacer | 3009W4SAP99A80X |
| 13W3 | Threaded rear spacer | 3013W3SAP99A80X |
| 17W2 | Threaded rear spacer | 3017W2SAP99A80X |
| 21W1 | Threaded rear spacer | 3021W1SAP99A80X |
| 13W6 | Threaded rear spacer | 3013W6SAP99A80X |
| 17W5 | Threaded rear spacer | 3017W5SAP99A80X |
| 21WA4 | Threaded rear spacer | 321WA4SAP99A80X |
| 25W3 | Threaded rear spacer | 3025W3SAP99A80X |
| 27W2 | Threaded rear spacer | 3027W2SAP99A80X |
| 24W7 | Threaded rear spacer | 3024W7SAP99A80X |
| 36W4 | Threaded rear spacer | 3036W4SAP99A80X |
| 43W2 | Threaded rear spacer | 3043W2SAP99A80X |
| 47W1 | Threaded rear spacer | 3047W1SAP99A80X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded rear spacer | 3005W1PAP99A80X |
| 7W2 | Threaded rear spacer | 3007W2PAP99A80X |
| 11W1 | Threaded rear spacer | 3011W1PAP99A80X |
| 9W4 | Threaded rear spacer | 3009W4PAP99A80X |
| 13W3 | Threaded rear spacer | 3013W3PAP99A80X |
| 17W2 | Threaded rear spacer | 3017W2PAP99A80X |
| 21W1 | Threaded rear spacer | 3021W1PAP99A80X |
| 13W6 | Threaded rear spacer | 3013W6PAP99A80X |
| 17W5 | Threaded rear spacer | 3017W5PAP99A80X |
| 21WA4 | Threaded rear spacer | 321WA4PAP99A80X |
| 25W3 | Threaded rear spacer | 3025W3PAP99A80X |
| 27W2 | Threaded rear spacer | 3027W2PAP99A80X |
| 24W7 | Threaded rear spacer | 3024W7PAP99A80X |
| 36W4 | Threaded rear spacer | 3036W4PAP99A80X |
| 43W2 | Threaded rear spacer | 3043W2PAP99A80X |
| 47W1 | Threaded rear spacer | 3047W1PAP99A80X |




| Socket connector | | |
|---|---|---|
| Design | Mounting style M3 | Part Number |
| 5W1 | Rear press-fit spacer | 3005W1SAP99W10X |
| 7W2 | Rear press-fit spacer | 3007W2SAP99W10X |
| 11W1 | Rear press-fit spacer | 3011W1SAP99W10X |
| 9W4 | Rear press-fit spacer | 3009W4SAP99W10X |
| 13W3 | Rear press-fit spacer | 3013W3SAP99W10X |
| 17W2 | Rear press-fit spacer | 3017W2SAP99W10X |
| 21W1 | Rear press-fit spacer | 3021W1SAP99W10X |
| 13W6 | Rear press-fit spacer | 3013W6SAP99W10X |
| 17W5 | Rear press-fit spacer | 3017W5SAP99W10X |
| 21WA4 | Rear press-fit spacer | 321WA4SAP99W10X |
| 25W3 | Rear press-fit spacer | 3025W3SAP99W10X |
| 27W2 | Rear press-fit spacer | 3027W2SAP99W10X |
| 24W7 | Rear press-fit spacer | 3024W7SAP99W10X |
| 36W4 | Rear press-fit spacer | 3036W4SAP99W10X |
| 43W2 | Rear press-fit spacer | 3043W2SAP99W10X |
| 47W1 | Rear press-fit spacer | 3047W1SAP99W10X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style M3 | Part Number |
| 5W1 | Rear press-fit spacer | 3005W1PAP99W10X |
| 7W2 | Rear press-fit spacer | 3007W2PAP99W10X |
| 11W1 | Rear press-fit spacer | 3011W1PAP99W10X |
| 9W4 | Rear press-fit spacer | 3009W4PAP99W10X |
| 13W3 | Rear press-fit spacer | 3013W3PAP99W10X |
| 17W2 | Rear press-fit spacer | 3017W2PAP99W10X |
| 21W1 | Rear press-fit spacer | 3021W1PAP99W10X |
| 13W6 | Rear press-fit spacer | 3013W6PAP99W10X |
| 17W5 | Rear press-fit spacer | 3017W5PAP99W10X |
| 21WA4 | Rear press-fit spacer | 321WA4PAP99W10X |
| 25W3 | Rear press-fit spacer | 3025W3PAP99W10X |
| 27W2 | Rear press-fit spacer | 3027W2PAP99W10X |
| 24W7 | Rear press-fit spacer | 3024W7PAP99W10X |
| 36W4 | Rear press-fit spacer | 3036W4PAP99W10X |
| 43W2 | Rear press-fit spacer | 3043W2PAP99W10X |
| 47W1 | Rear press-fit spacer | 3047W1PAP99W10X |



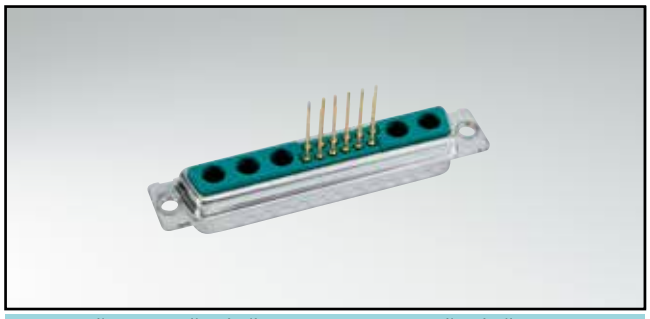

| Socket connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Rear press-fit spacer | 3005W1SAP99W20X |
| 7W2 | Rear press-fit spacer | 3007W2SAP99W20X |
| 11W1 | Rear press-fit spacer | 3011W1SAP99W20X |
| 9W4 | Rear press-fit spacer | 3009W4SAP99W20X |
| 13W3 | Rear press-fit spacer | 3013W3SAP99W20X |
| 17W2 | Rear press-fit spacer | 3017W2SAP99W20X |
| 21W1 | Rear press-fit spacer | 3021W1SAP99W20X |
| 13W6 | Rear press-fit spacer | 3013W6SAP99W20X |
| 17W5 | Rear press-fit spacer | 3017W5SAP99W20X |
| 21WA4 | Rear press-fit spacer | 321WA4SAP99W20X |
| 25W3 | Rear press-fit spacer | 3025W3SAP99W20X |
| 27W2 | Rear press-fit spacer | 3027W2SAP99W20X |
| 24W7 | Rear press-fit spacer | 3024W7SAP99W20X |
| 36W4 | Rear press-fit spacer | 3036W4SAP99W20X |
| 43W2 | Rear press-fit spacer | 3043W2SAP99W20X |
| 47W1 | Rear press-fit spacer | 3047W1SAP99W20X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Rear press-fit spacer | 3005W1PAP99W20X |
| 7W2 | Rear press-fit spacer | 3007W2PAP99W20X |
| 11W1 | Rear press-fit spacer | 3011W1PAP99W20X |
| 9W4 | Rear press-fit spacer | 3009W4PAP99W20X |
| 13W3 | Rear press-fit spacer | 3013W3PAP99W20X |
| 17W2 | Rear press-fit spacer | 3017W2PAP99W20X |
| 21W1 | Rear press-fit spacer | 3021W1PAP99W20X |
| 13W6 | Rear press-fit spacer | 3013W6PAP99W20X |
| 17W5 | Rear press-fit spacer | 3017W5PAP99W20X |
| 21WA4 | Rear press-fit spacer | 321WA4PAP99W20X |
| 25W3 | Rear press-fit spacer | 3025W3PAP99W20X |
| 27W2 | Rear press-fit spacer | 3027W2PAP99W20X |
| 24W7 | Rear press-fit spacer | 3024W7PAP99W20X |
| 36W4 | Rear press-fit spacer | 3036W4PAP99W20X |
| 43W2 | Rear press-fit spacer | 3043W2PAP99W20X |
| 47W1 | Rear press-fit spacer | 3047W1PAP99W20X |

Rear press-fit spacer (snap in) .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# Combination D-SUB with signal contacts

## Wire wrap – Precision machined contacts

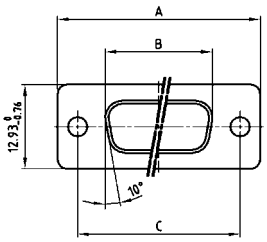


RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### Description

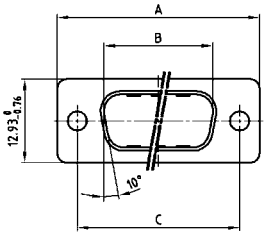
- Mounting styles:
  - with through-hole, Ø .118"/3 mm
  - with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
  (brass tin plated or stainless steel available on request)

### Socket connector



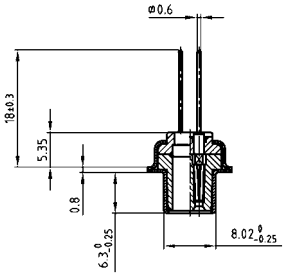

| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 1 | 31.19 | 16.46 | 25.00 +0.12 -0.13 |
| 2 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |
| 5 | 67.31 | 52.55 | 61.10 +0.14 -0.11 |

### Plug connector

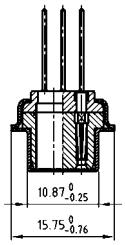



| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 1 | 31.19 | 16.79 | 25.00 +0.12 -0.13 | 6.12 |
| 2 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 5 | 67.31 | 52.68 | 61.10 +0.14 -0.11 | 5.99 |

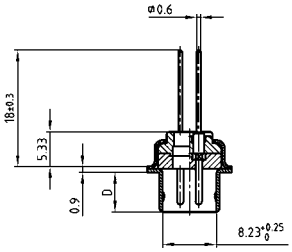
Shell size 1-4



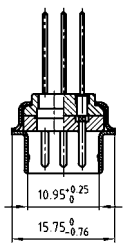

Shell size 5



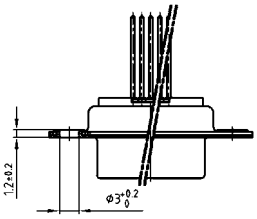

Shell size 1-4




Shell size 5




### Order data




**Socket connector**

| Design | Mounting style | Part Number |
|---|---|---|
| 5W1 | Through-hole | 3005W1SAN99A10X |
| 7W2 | Through-hole | 3007W2SAN99A10X |
| 11W1 | Through-hole | 3011W1SAN99A10X |
| 9W4 | Through-hole | 3009W4SAN99A10X |
| 13W3 | Through-hole | 3013W3SAN99A10X |
| 17W2 | Through-hole | 3017W2SAN99A10X |
| 21W1 | Through-hole | 3021W1SAN99A10X |
| 13W6 | Through-hole | 3013W6SAN99A10X |
| 17W5 | Through-hole | 3017W5SAN99A10X |
| 21WA4 | Through-hole | 321WA4SAN99A10X |
| 25W3 | Through-hole | 3025W3SAN99A10X |
| 27W2 | Through-hole | 3027W2SAN99A10X |
| 24W7 | Through-hole | 3024W7SAN99A10X |
| 36W4 | Through-hole | 3036W4SAN99A10X |
| 43W2 | Through-hole | 3043W2SAN99A10X |
| 47W1 | Through-hole | 3047W1SAN99A10X |

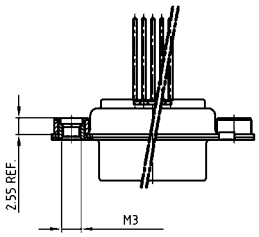
**Plug connector**

| Design | Mounting style | Part Number |
|---|---|---|
| 5W1 | Through-hole | 3005W1PAN99A10X |
| 7W2 | Through-hole | 3007W2PAN99A10X |
| 11W1 | Through-hole | 3011W1PAN99A10X |
| 9W4 | Through-hole | 3009W4PAN99A10X |
| 13W3 | Through-hole | 3013W3PAN99A10X |
| 17W2 | Through-hole | 3017W2PAN99A10X |
| 21W1 | Through-hole | 3021W1PAN99A10X |
| 13W6 | Through-hole | 3013W6PAN99A10X |
| 17W5 | Through-hole | 3017W5PAN99A10X |
| 21WA4 | Through-hole | 321WA4PAN99A10X |
| 25W3 | Through-hole | 3025W3PAN99A10X |
| 27W2 | Through-hole | 3027W2PAN99A10X |
| 24W7 | Through-hole | 3024W7PAN99A10X |
| 36W4 | Through-hole | 3036W4PAN99A10X |
| 43W2 | Through-hole | 3043W2PAN99A10X |
| 47W1 | Through-hole | 3047W1PAN99A10X |

# Combination D-SUB – Mounting styles

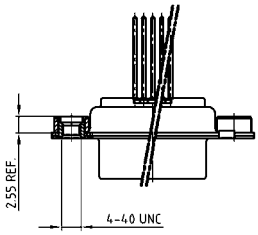
## Wire wrap – Precision machined contacts

### Order data




| Socket connector | | |
|---|---|---|
| Design | Mounting style M3 | Part Number |
| 5W1 | Threaded insert | 3005W1SAN99A20X |
| 7W2 | Threaded insert | 3007W2SAN99A20X |
| 11W1 | Threaded insert | 3011W1SAN99A20X |
| 9W4 | Threaded insert | 3009W4SAN99A20X |
| 13W3 | Threaded insert | 3013W3SAN99A20X |
| 17W2 | Threaded insert | 3017W2SAN99A20X |
| 21W1 | Threaded insert | 3021W1SAN99A20X |
| 13W6 | Threaded insert | 3013W6SAN99A20X |
| 17W5 | Threaded insert | 3017W5SAN99A20X |
| 21WA4 | Threaded insert | 321WA4SAN99A20X |
| 25W3 | Threaded insert | 3025W3SAN99A20X |
| 27W2 | Threaded insert | 3027W2SAN99A20X |
| 24W7 | Threaded insert | 3024W7SAN99A20X |
| 36W4 | Threaded insert | 3036W4SAN99A20X |
| 43W2 | Threaded insert | 3043W2SAN99A20X |
| 47W1 | Threaded insert | 3047W1SAN99A20X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style M3 | Part Number |
| 5W1 | Threaded insert | 3005W1PAN99A20X |
| 7W2 | Threaded insert | 3007W2PAN99A20X |
| 11W1 | Threaded insert | 3011W1PAN99A20X |
| 9W4 | Threaded insert | 3009W4PAN99A20X |
| 13W3 | Threaded insert | 3013W3PAN99A20X |
| 17W2 | Threaded insert | 3017W2PAN99A20X |
| 21W1 | Threaded insert | 3021W1PAN99A20X |
| 13W6 | Threaded insert | 3013W6PAN99A20X |
| 17W5 | Threaded insert | 3017W5PAN99A20X |
| 21WA4 | Threaded insert | 321WA4PAN99A20X |
| 25W3 | Threaded insert | 3025W3PAN99A20X |
| 27W2 | Threaded insert | 3027W2PAN99A20X |
| 24W7 | Threaded insert | 3024W7PAN99A20X |
| 36W4 | Threaded insert | 3036W4PAN99A20X |
| 43W2 | Threaded insert | 3043W2PAN99A20X |
| 47W1 | Threaded insert | 3047W1PAN99A20X |

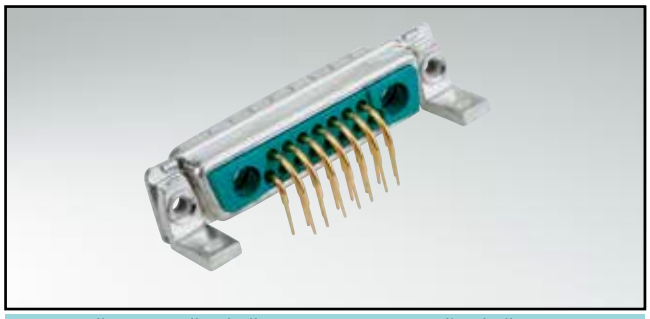



| Socket connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded insert | 3005W1SAN99A30X |
| 7W2 | Threaded insert | 3007W2SAN99A30X |
| 11W1 | Threaded insert | 3011W1SAN99A30X |
| 9W4 | Threaded insert | 3009W4SAN99A30X |
| 13W3 | Threaded insert | 3013W3SAN99A30X |
| 17W2 | Threaded insert | 3017W2SAN99A30X |
| 21W1 | Threaded insert | 3021W1SAN99A30X |
| 13W6 | Threaded insert | 3013W6SAN99A30X |
| 17W5 | Threaded insert | 3017W5SAN99A30X |
| 21WA4 | Threaded insert | 321WA4SAN99A30X |
| 25W3 | Threaded insert | 3025W3SAN99A30X |
| 27W2 | Threaded insert | 3027W2SAN99A30X |
| 24W7 | Threaded insert | 3024W7SAN99A30X |
| 36W4 | Threaded insert | 3036W4SAN99A30X |
| 43W2 | Threaded insert | 3043W2SAN99A30X |
| 47W1 | Threaded insert | 3047W1SAN99A30X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded insert | 3005W1PAN99A30X |
| 7W2 | Threaded insert | 3007W2PAN99A30X |
| 11W1 | Threaded insert | 3011W1PAN99A30X |
| 9W4 | Threaded insert | 3009W4PAN99A30X |
| 13W3 | Threaded insert | 3013W3PAN99A30X |
| 17W2 | Threaded insert | 3017W2PAN99A30X |
| 21W1 | Threaded insert | 3021W1PAN99A30X |
| 13W6 | Threaded insert | 3013W6PAN99A30X |
| 17W5 | Threaded insert | 3017W5PAN99A30X |
| 21WA4 | Threaded insert | 321WA4PAN99A30X |
| 25W3 | Threaded insert | 3025W3PAN99A30X |
| 27W2 | Threaded insert | 3027W2PAN99A30X |
| 24W7 | Threaded insert | 3024W7PAN99A30X |
| 36W4 | Threaded insert | 3036W4PAN99A30X |
| 43W2 | Threaded insert | 3043W2PAN99A30X |
| 47W1 | Threaded insert | 3047W1PAN99A30X |

# COMBINATION D-SUB WITH SIGNAL CONTACTS

## Solder pin – Angled – .318"/7.19 mm – Precision machined contacts – Metal bracket

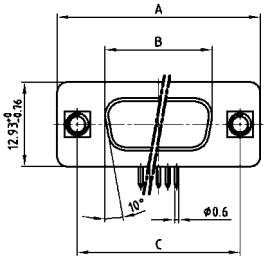


RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

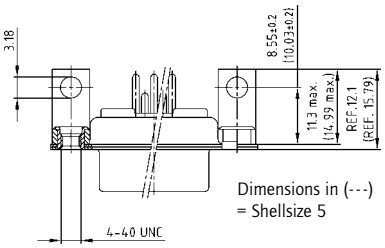
### DESCRIPTION

- Mounting styles:
  - with mounting bracket and 4-40 UNC threaded insert
  - with mounting bracket and 4-40 UNC front spacer
  - with mounting bracket, PCB clip and 4-40 UNC threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC front spacer
- M3 thread design available on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
  (brass tin plated or stainless steel available on request)

### SOCKET CONNECTOR

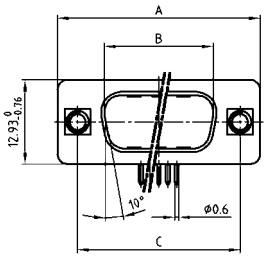



| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 1 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 2 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |
| 5 | 67.31 | 52.55 | 61.10 $^{+0.14}_{-0.11}$ |

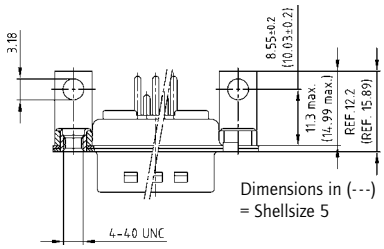



Dimensions in (---)
= Shellsize 5

### PLUG CONNECTOR

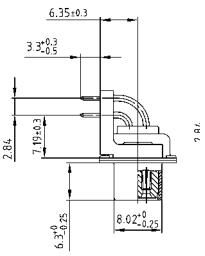



| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 1 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 2 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 5 | 67.31 | 52.68 | 61.10 $^{+0.14}_{-0.11}$ | 5.99 |

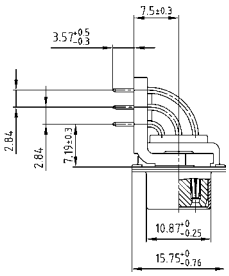



Dimensions in (---)
= Shellsize 5

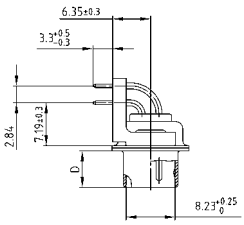
Shell size 1-4



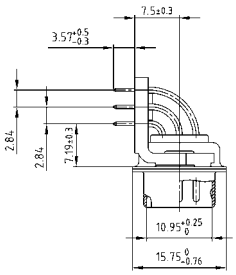

Shell size 5



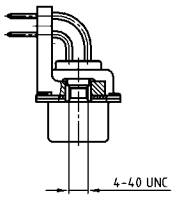

Shell size 1-4




Shell size 5




### ORDER DATA



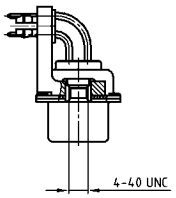

| SOCKET CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 5W1 | Threaded insert | 3005W1SAT99N20X |
| 7W2 | Threaded insert | 3007W2SAT99N20X |
| 11W1 | Threaded insert | 3011W1SAT99N20X |
| 9W4 | Threaded insert | 3009W4SAT99N20X |
| 13W3 | Threaded insert | 3013W3SAT99N20X |
| 17W2 | Threaded insert | 3017W2SAT99N20X |
| 21W1 | Threaded insert | 3021W1SAT99N20X |
| 13W6 | Threaded insert | 3013W6SAT99N20X |
| 17W5 | Threaded insert | 3017W5SAT99N20X |
| 21WA4 | Threaded insert | 321WA4SAT99N20X |
| 25W3 | Threaded insert | 3025W3SAT99N20X |
| 27W2 | Threaded insert | 3027W2SAT99N20X |
| 24W7 | Threaded insert | 3024W7SAT99N20X |
| 36W4 | Threaded insert | 3036W4SAT99N20X |
| 43W2 | Threaded insert | 3043W2SAT99N20X |
| 47W1 | Threaded insert | 3047W1SAT99N20X |

| PLUG CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 5W1 | Threaded insert | 3005W1PAT99N20X |
| 7W2 | Threaded insert | 3007W2PAT99N20X |
| 11W1 | Threaded insert | 3011W1PAT99N20X |
| 9W4 | Threaded insert | 3009W4PAT99N20X |
| 13W3 | Threaded insert | 3013W3PAT99N20X |
| 17W2 | Threaded insert | 3017W2PAT99N20X |
| 21W1 | Threaded insert | 3021W1PAT99N20X |
| 13W6 | Threaded insert | 3013W6PAT99N20X |
| 17W5 | Threaded insert | 3017W5PAT99N20X |
| 21WA4 | Threaded insert | 321WA4PAT99N20X |
| 25W3 | Threaded insert | 3025W3PAT99N20X |
| 27W2 | Threaded insert | 3027W2PAT99N20X |
| 24W7 | Threaded insert | 3024W7PAT99N20X |
| 36W4 | Threaded insert | 3036W4PAT99N20X |
| 43W2 | Threaded insert | 3043W2PAT99N20X |
| 47W1 | Threaded insert | 3047W1PAT99N20X |

# Combination D-SUB – Mounting styles

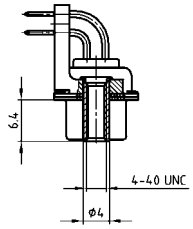
## Solder pin – Angled – .318"/7.19 mm – Precision machined contacts – Metal bracket

### Order data



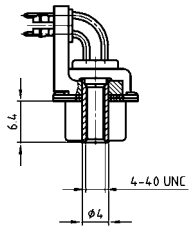

| Socket connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded insert/PCB clip | 3005W1SAT99N40X |
| 7W2 | Threaded insert/PCB clip | 3007W2SAT99N40X |
| 11W1 | Threaded insert/PCB clip | 3011W1SAT99N40X |
| 9W4 | Threaded insert/PCB clip | 3009W4SAT99N40X |
| 13W3 | Threaded insert/PCB clip | 3013W3SAT99N40X |
| 17W2 | Threaded insert/PCB clip | 3017W2SAT99N40X |
| 21W1 | Threaded insert/PCB clip | 3021W1SAT99N40X |
| 13W6 | Threaded insert/PCB clip | 3013W6SAT99N40X |
| 17W5 | Threaded insert/PCB clip | 3017W5SAT99N40X |
| 21WA4 | Threaded insert/PCB clip | 321WA4SAT99N40X |
| 25W3 | Threaded insert/PCB clip | 3025W3SAT99N40X |
| 27W2 | Threaded insert/PCB clip | 3027W2SAT99N40X |
| 24W7 | Threaded insert/PCB clip | 3024W7SAT99N40X |
| 36W4 | Threaded insert/PCB clip | 3036W4SAT99N40X |
| 43W2 | Threaded insert/PCB clip | 3043W2SAT99N40X |
| 47W1 | Threaded insert/PCB clip | 3047W1SAT99N40X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded insert/PCB clip | 3005W1PAT99N40X |
| 7W2 | Threaded insert/PCB clip | 3007W2PAT99N40X |
| 11W1 | Threaded insert/PCB clip | 3011W1PAT99N40X |
| 9W4 | Threaded insert/PCB clip | 3009W4PAT99N40X |
| 13W3 | Threaded insert/PCB clip | 3013W3PAT99N40X |
| 17W2 | Threaded insert/PCB clip | 3017W2PAT99N40X |
| 21W1 | Threaded insert/PCB clip | 3021W1PAT99N40X |
| 13W6 | Threaded insert/PCB clip | 3013W6PAT99N40X |
| 17W5 | Threaded insert/PCB clip | 3017W5PAT99N40X |
| 21WA4 | Threaded insert/PCB clip | 321WA4PAT99N40X |
| 25W3 | Threaded insert/PCB clip | 3025W3PAT99N40X |
| 27W2 | Threaded insert/PCB clip | 3027W2PAT99N40X |
| 24W7 | Threaded insert/PCB clip | 3024W7PAT99N40X |
| 36W4 | Threaded insert/PCB clip | 3036W4PAT99N40X |
| 43W2 | Threaded insert/PCB clip | 3043W2PAT99N40X |
| 47W1 | Threaded insert/PCB clip | 3047W1PAT99N40X |




| Socket connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Front spacer | 3005W1SAT99P20X |
| 7W2 | Front spacer | 3007W2SAT99P20X |
| 11W1 | Front spacer | 3011W1SAT99P20X |
| 9W4 | Front spacer | 3009W4SAT99P20X |
| 13W3 | Front spacer | 3013W3SAT99P20X |
| 17W2 | Front spacer | 3017W2SAT99P20X |
| 21W1 | Front spacer | 3021W1SAT99P20X |
| 13W6 | Front spacer | 3013W6SAT99P20X |
| 17W5 | Front spacer | 3017W5SAT99P20X |
| 21WA4 | Front spacer | 321WA4SAT99P20X |
| 25W3 | Front spacer | 3025W3SAT99P20X |
| 27W2 | Front spacer | 3027W2SAT99P20X |
| 24W7 | Front spacer | 3024W7SAT99P20X |
| 36W4 | Front spacer | 3036W4SAT99P20X |
| 43W2 | Front spacer | 3043W2SAT99P20X |
| 47W1 | Front spacer | 3047W1SAT99P20X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Front spacer | 3005W1PAT99P20X |
| 7W2 | Front spacer | 3007W2PAT99P20X |
| 11W1 | Front spacer | 3011W1PAT99P20X |
| 9W4 | Front spacer | 3009W4PAT99P20X |
| 13W3 | Front spacer | 3013W3PAT99P20X |
| 17W2 | Front spacer | 3017W2PAT99P20X |
| 21W1 | Front spacer | 3021W1PAT99P20X |
| 13W6 | Front spacer | 3013W6PAT99P20X |
| 17W5 | Front spacer | 3017W5PAT99P20X |
| 21WA4 | Front spacer | 321WA4PAT99P20X |
| 25W3 | Front spacer | 3025W3PAT99P20X |
| 27W2 | Front spacer | 3027W2PAT99P20X |
| 24W7 | Front spacer | 3024W7PAT99P20X |
| 36W4 | Front spacer | 3036W4PAT99P20X |
| 43W2 | Front spacer | 3043W2PAT99P20X |
| 47W1 | Front spacer | 3047W1PAT99P20X |



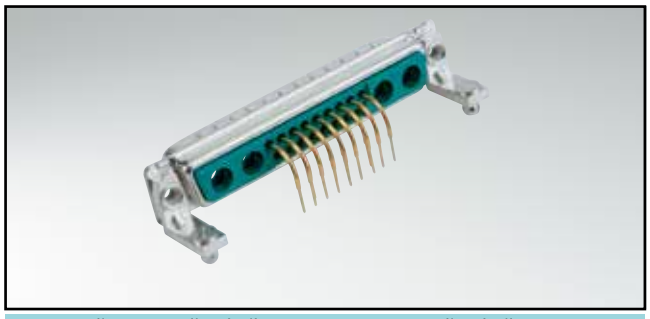

| Socket connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Front spacer/PCB clip | 3005W1SAT99P40X |
| 7W2 | Front spacer/PCB clip | 3007W2SAT99P40X |
| 11W1 | Front spacer/PCB clip | 3011W1SAT99P40X |
| 9W4 | Front spacer/PCB clip | 3009W4SAT99P40X |
| 13W3 | Front spacer/PCB clip | 3013W3SAT99P40X |
| 17W2 | Front spacer/PCB clip | 3017W2SAT99P40X |
| 21W1 | Front spacer/PCB clip | 3021W1SAT99P40X |
| 13W6 | Front spacer/PCB clip | 3013W6SAT99P40X |
| 17W5 | Front spacer/PCB clip | 3017W5SAT99P40X |
| 21WA4 | Front spacer/PCB clip | 321WA4SAT99P40X |
| 25W3 | Front spacer/PCB clip | 3025W3SAT99P40X |
| 27W2 | Front spacer/PCB clip | 3027W2SAT99P40X |
| 24W7 | Front spacer/PCB clip | 3024W7SAT99P40X |
| 36W4 | Front spacer/PCB clip | 3036W4SAT99P40X |
| 43W2 | Front spacer/PCB clip | 3043W2SAT99P40X |
| 47W1 | Front spacer/PCB clip | 3047W1SAT99P40X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Front spacer/PCB clip | 3005W1PAT99P40X |
| 7W2 | Front spacer/PCB clip | 3007W2PAT99P40X |
| 11W1 | Front spacer/PCB clip | 3011W1PAT99P40X |
| 9W4 | Front spacer/PCB clip | 3009W4PAT99P40X |
| 13W3 | Front spacer/PCB clip | 3013W3PAT99P40X |
| 17W2 | Front spacer/PCB clip | 3017W2PAT99P40X |
| 21W1 | Front spacer/PCB clip | 3021W1PAT99P40X |
| 13W6 | Front spacer/PCB clip | 3013W6PAT99P40X |
| 17W5 | Front spacer/PCB clip | 3017W5PAT99P40X |
| 21WA4 | Front spacer/PCB clip | 321WA4PAT99P40X |
| 25W3 | Front spacer/PCB clip | 3025W3PAT99P40X |
| 27W2 | Front spacer/PCB clip | 3027W2PAT99P40X |
| 24W7 | Front spacer/PCB clip | 3024W7PAT99P40X |
| 36W4 | Front spacer/PCB clip | 3036W4PAT99P40X |
| 43W2 | Front spacer/PCB clip | 3043W2PAT99P40X |
| 47W1 | Front spacer/PCB clip | 3047W1PAT99P40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# COMBINATION D-SUB WITH SIGNAL CONTACTS

## Solder pin – Angled – .370"/9.4 mm – Precision machined contacts – Metal bracket

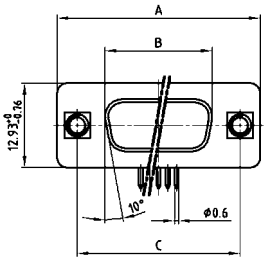


RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

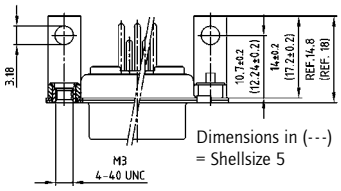
### DESCRIPTION

- Mounting styles:
  - with mounting bracket and threaded insert
  - with mounting bracket with 4-40 UNC front spacer
  - with mounting bracket, PCB clip and threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC front spacer
- M3 thread design available on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
  (brass tin plated or stainless steel available on request)

### SOCKET CONNECTOR

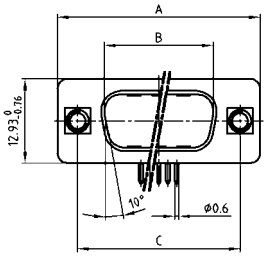



| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 1 | 31.19 | 16.46 | 25.00 +0.12 −0.13 |
| 2 | 39.52 | 24.79 | 33.30 +0.15 −0.10 |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |
| 5 | 67.31 | 52.55 | 61.10 +0.14 −0.11 |

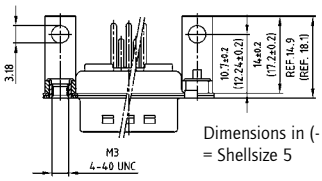



Dimensions in (---)
= Shellsize 5

### PLUG CONNECTOR

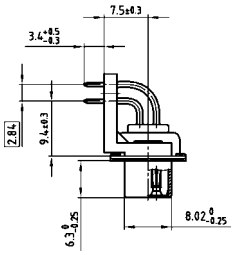



| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 1 | 31.19 | 16.79 | 25.00 +0.12 −0.13 | 6.12 |
| 2 | 39.52 | 25.12 | 33.30 +0.15 −0.10 | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 5 | 67.31 | 52.68 | 61.10 +0.14 −0.11 | 5.99 |

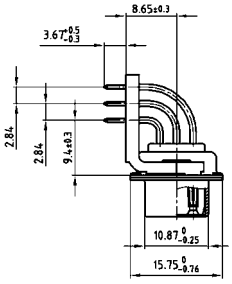



Dimensions in (---)
= Shellsize 5

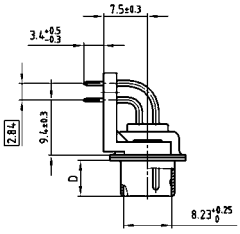
Shell size 1-4



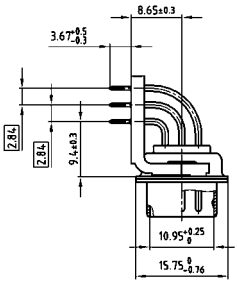

Shell size 5



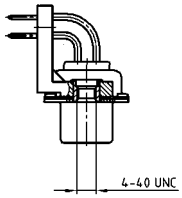

Shell size 1-4




Shell size 5




### ORDER DATA




**SOCKET CONNECTOR**

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 5W1 | Threaded insert | 3005W1SAU99G20X |
| 7W2 | Threaded insert | 3007W2SAU99G20X |
| 11W1 | Threaded insert | 3011W1SAU99G20X |
| 9W4 | Threaded insert | 3009W4SAU99G20X |
| 13W3 | Threaded insert | 3013W3SAU99G20X |
| 17W2 | Threaded insert | 3017W2SAU99G20X |
| 21W1 | Threaded insert | 3021W1SAU99G20X |
| 13W6 | Threaded insert | 3013W6SAU99G20X |
| 17W5 | Threaded insert | 3017W5SAU99G20X |
| 21WA4 | Threaded insert | 321WA4SAU99G20X |
| 25W3 | Threaded insert | 3025W3SAU99G20X |
| 27W2 | Threaded insert | 3027W2SAU99G20X |
| 24W7 | Threaded insert | 3024W7SAU99G20X |
| 36W4 | Threaded insert | 3036W4SAU99G20X |
| 43W2 | Threaded insert | 3043W2SAU99G20X |
| 47W1 | Threaded insert | 3047W1SAU99G20X |

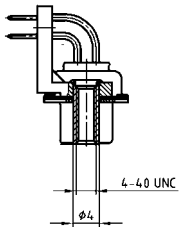
**PLUG CONNECTOR**

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 5W1 | Threaded insert | 3005W1PAU99G20X |
| 7W2 | Threaded insert | 3007W2PAU99G20X |
| 11W1 | Threaded insert | 3011W1PAU99G20X |
| 9W4 | Threaded insert | 3009W4PAU99G20X |
| 13W3 | Threaded insert | 3013W3PAU99G20X |
| 17W2 | Threaded insert | 3017W2PAU99G20X |
| 21W1 | Threaded insert | 3021W1PAU99G20X |
| 13W6 | Threaded insert | 3013W6PAU99G20X |
| 17W5 | Threaded insert | 3017W5PAU99G20X |
| 21WA4 | Threaded insert | 321WA4PAU99G20X |
| 25W3 | Threaded insert | 3025W3PAU99G20X |
| 27W2 | Threaded insert | 3027W2PAU99G20X |
| 24W7 | Threaded insert | 3024W7PAU99G20X |
| 36W4 | Threaded insert | 3036W4PAU99G20X |
| 43W2 | Threaded insert | 3043W2PAU99G20X |
| 47W1 | Threaded insert | 3047W1PAU99G20X |

# Combination D-SUB – Mounting styles

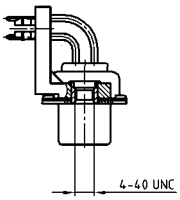
## Solder pin – Angled – .370"/9.4 mm – Precision machined contacts – Metal bracket

### Order data



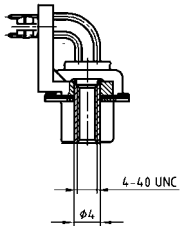

| Socket connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Front spacer | 3005W1SAU99H20X |
| 7W2 | Front spacer | 3007W2SAU99H20X |
| 11W1 | Front spacer | 3011W1SAU99H20X |
| 9W4 | Front spacer | 3009W4SAU99H20X |
| 13W3 | Front spacer | 3013W3SAU99H20X |
| 17W2 | Front spacer | 3017W2SAU99H20X |
| 21W1 | Front spacer | 3021W1SAU99H20X |
| 13W6 | Front spacer | 3013W6SAU99H20X |
| 17W5 | Front spacer | 3017W5SAU99H20X |
| 21WA4 | Front spacer | 321WA4SAU99H20X |
| 25W3 | Front spacer | 3025W3SAU99H20X |
| 27W2 | Front spacer | 3027W2SAU99H20X |
| 24W7 | Front spacer | 3024W7SAU99H20X |
| 36W4 | Front spacer | 3036W4SAU99H20X |
| 43W2 | Front spacer | 3043W2SAU99H20X |
| 47W1 | Front spacer | 3047W1SAU99H20X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Front spacer | 3005W1PAU99H20X |
| 7W2 | Front spacer | 3007W2PAU99H20X |
| 11W1 | Front spacer | 3011W1PAU99H20X |
| 9W4 | Front spacer | 3009W4PAU99H20X |
| 13W3 | Front spacer | 3013W3PAU99H20X |
| 17W2 | Front spacer | 3017W2PAU99H20X |
| 21W1 | Front spacer | 3021W1PAU99H20X |
| 13W6 | Front spacer | 3013W6PAU99H20X |
| 17W5 | Front spacer | 3017W5PAU99H20X |
| 21WA4 | Front spacer | 321WA4PAU99H20X |
| 25W3 | Front spacer | 3025W3PAU99H20X |
| 27W2 | Front spacer | 3027W2PAU99H20X |
| 24W7 | Front spacer | 3024W7PAU99H20X |
| 36W4 | Front spacer | 3036W4PAU99H20X |
| 43W2 | Front spacer | 3043W2PAU99H20X |
| 47W1 | Front spacer | 3047W1PAU99H20X |




| Socket connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded insert/PCB clip | 3005W1SAU99G40X |
| 7W2 | Threaded insert/PCB clip | 3007W2SAU99G40X |
| 11W1 | Threaded insert/PCB clip | 3011W1SAU99G40X |
| 9W4 | Threaded insert/PCB clip | 3009W4SAU99G40X |
| 13W3 | Threaded insert/PCB clip | 3013W3SAU99G40X |
| 17W2 | Threaded insert/PCB clip | 3017W2SAU99G40X |
| 21W1 | Threaded insert/PCB clip | 3021W1SAU99G40X |
| 13W6 | Threaded insert/PCB clip | 3013W6SAU99G40X |
| 17W5 | Threaded insert/PCB clip | 3017W5SAU99G40X |
| 21WA4 | Threaded insert/PCB clip | 321WA4SAU99G40X |
| 25W3 | Threaded insert/PCB clip | 3025W3SAU99G40X |
| 27W2 | Threaded insert/PCB clip | 3027W2SAU99G40X |
| 24W7 | Threaded insert/PCB clip | 3024W7SAU99G40X |
| 36W4 | Threaded insert/PCB clip | 3036W4SAU99G40X |
| 43W2 | Threaded insert/PCB clip | 3043W2SAU99G40X |
| 47W1 | Threaded insert/PCB clip | 3047W1SAU99G40X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded insert/PCB clip | 3005W1PAU99G40X |
| 7W2 | Threaded insert/PCB clip | 3007W2PAU99G40X |
| 11W1 | Threaded insert/PCB clip | 3011W1PAU99G40X |
| 9W4 | Threaded insert/PCB clip | 3009W4PAU99G40X |
| 13W3 | Threaded insert/PCB clip | 3013W3PAU99G40X |
| 17W2 | Threaded insert/PCB clip | 3017W2PAU99G40X |
| 21W1 | Threaded insert/PCB clip | 3021W1PAU99G40X |
| 13W6 | Threaded insert/PCB clip | 3013W6PAU99G40X |
| 17W5 | Threaded insert/PCB clip | 3017W5PAU99G40X |
| 21WA4 | Threaded insert/PCB clip | 321WA4PAU99G40X |
| 25W3 | Threaded insert/PCB clip | 3025W3PAU99G40X |
| 27W2 | Threaded insert/PCB clip | 3027W2PAU99G40X |
| 24W7 | Threaded insert/PCB clip | 3024W7PAU99G40X |
| 36W4 | Threaded insert/PCB clip | 3036W4PAU99G40X |
| 43W2 | Threaded insert/PCB clip | 3043W2PAU99G40X |
| 47W1 | Threaded insert/PCB clip | 3047W1PAU99G40X |



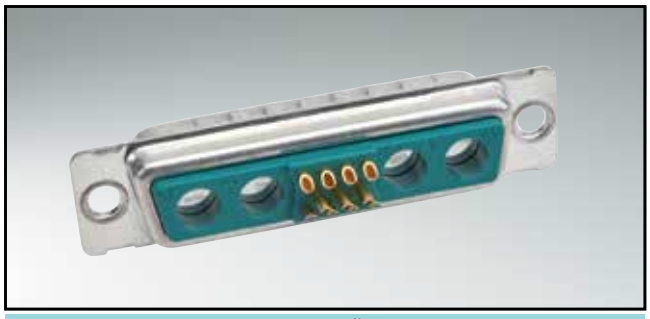

| Socket connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Front spacer/PCB clip | 3005W1SAU99H40X |
| 7W2 | Front spacer/PCB clip | 3007W2SAU99H40X |
| 11W1 | Front spacer/PCB clip | 3011W1SAU99H40X |
| 9W4 | Front spacer/PCB clip | 3009W4SAU99H40X |
| 13W3 | Front spacer/PCB clip | 3013W3SAU99H40X |
| 17W2 | Front spacer/PCB clip | 3017W2SAU99H40X |
| 21W1 | Front spacer/PCB clip | 3021W1SAU99H40X |
| 13W6 | Front spacer/PCB clip | 3013W6SAU99H40X |
| 17W5 | Front spacer/PCB clip | 3017W5SAU99H40X |
| 21WA4 | Front spacer/PCB clip | 321WA4SAU99H40X |
| 25W3 | Front spacer/PCB clip | 3025W3SAU99H40X |
| 27W2 | Front spacer/PCB clip | 3027W2SAU99H40X |
| 24W7 | Front spacer/PCB clip | 3024W7SAU99H40X |
| 36W4 | Front spacer/PCB clip | 3036W4SAU99H40X |
| 43W2 | Front spacer/PCB clip | 3043W2SAU99H40X |
| 47W1 | Front spacer/PCB clip | 3047W1SAU99H40X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Front spacer/PCB clip | 3005W1PAU99H40X |
| 7W2 | Front spacer/PCB clip | 3007W2PAU99H40X |
| 11W1 | Front spacer/PCB clip | 3011W1PAU99H40X |
| 9W4 | Front spacer/PCB clip | 3009W4PAU99H40X |
| 13W3 | Front spacer/PCB clip | 3013W3PAU99H40X |
| 17W2 | Front spacer/PCB clip | 3017W2PAU99H40X |
| 21W1 | Front spacer/PCB clip | 3021W1PAU99H40X |
| 13W6 | Front spacer/PCB clip | 3013W6PAU99H40X |
| 17W5 | Front spacer/PCB clip | 3017W5PAU99H40X |
| 21WA4 | Front spacer/PCB clip | 321WA4PAU99H40X |
| 25W3 | Front spacer/PCB clip | 3025W3PAU99H40X |
| 27W2 | Front spacer/PCB clip | 3027W2PAU99H40X |
| 24W7 | Front spacer/PCB clip | 3024W7PAU99H40X |
| 36W4 | Front spacer/PCB clip | 3036W4PAU99H40X |
| 43W2 | Front spacer/PCB clip | 3043W2PAU99H40X |
| 47W1 | Front spacer/PCB clip | 3047W1PAU99H40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# COMBINATION D-SUB HIGH DENSITY WITH SIGNAL CONTACTS

## Solder cup – Precision machined contacts – For wire size AWG 22

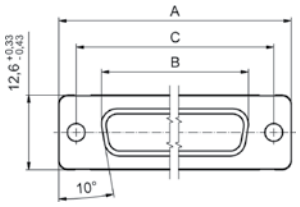


RoHS compliant

### DESCRIPTION

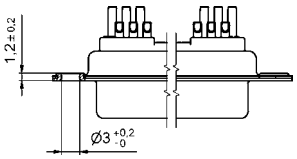
- Suitable for wire size **AWG 22**
- Mounting styles:
  - with through-hole, Ø .118" / 3 mm
  - with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
  (brass tin plated or stainless steel available on request)

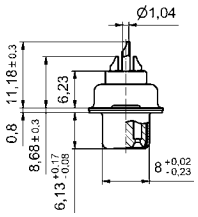
### SOCKET CONNECTOR



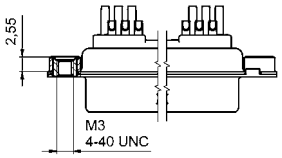

| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 2 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |

Mounting style: Through-hole

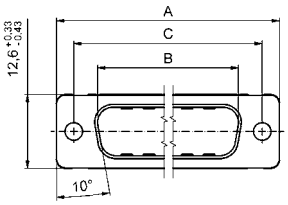



Mounting style Threaded insert

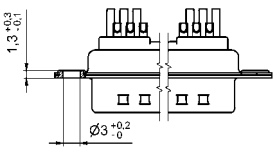


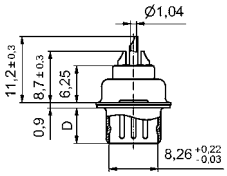

### PLUG CONNECTOR



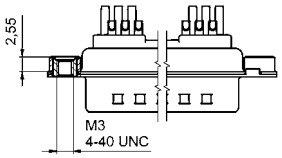

| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 2 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

Mounting style: Through-hole




Mounting style Threaded insert




### ORDER DATA

**SOCKET CONNECTOR**

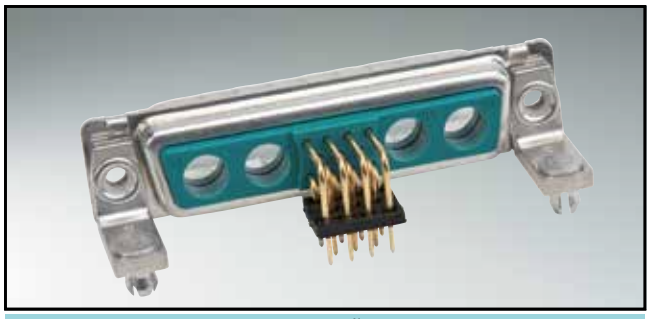
| Design | Mounting style | Part Number |
|---|---|---|
| 19W1 | Through-hole | 3H19W1SAM99A10X |
| 15W4 | Through-hole | 3H15W4SAM99A10X |
| 45W2 | Through-hole | 3H45W2SAM99A10X |
| 19W1 | M3 threaded insert | 3H19W1SAM99A20X |
| 15W4 | M3 threaded insert | 3H15W4SAM99A20X |
| 45W2 | M3 threaded insert | 3H45W2SAM99A20X |
| 19W1 | 4-40 UNC threaded insert | 3H19W1SAM99A30X |
| 15W4 | 4-40 UNC threaded insert | 3H15W4SAM99A30X |
| 45W2 | 4-40 UNC threaded insert | 3H45W2SAM99A30X |

**PLUG CONNECTOR**

| Design | Mounting style | Part Number |
|---|---|---|
| 19W1 | Through-hole | 3H19W1PAM99A10X |
| 15W4 | Through-hole | 3H15W4PAM99A10X |
| 45W2 | Through-hole | 3H45W2PAM99A10X |
| 19W1 | M3 threaded insert | 3H19W1PAM99A20X |
| 15W4 | M3 threaded insert | 3H15W4PAM99A20X |
| 45W2 | M3 threaded insert | 3H45W2PAM99A20X |
| 19W1 | 4-40 UNC threaded insert | 3H19W1PAM99A30X |
| 15W4 | 4-40 UNC threaded insert | 3H15W4PAM99A30X |
| 45W2 | 4-40 UNC threaded insert | 3H45W2PAM99A30X |

# Combination D-SUB High Density with signal contacts

## Solder pin – angled – ,350"/7,98 mm – Precision machined contacts – Metal bracket

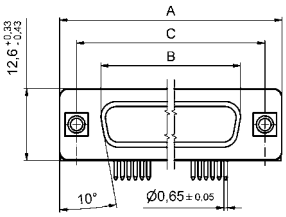


RoHS compliant

### Description

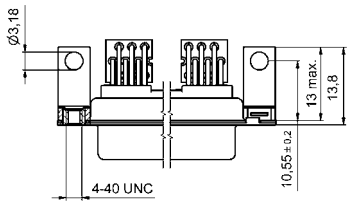
- Mounting styles:
  - mounting bracket and threaded insert 4-40 UNC
  - mounting bracket with front spacer 4-40 UNC
  - mounting bracket, PCB clip and threaded insert 4-40 UNC
  - mounting bracket, PCB clip and frontspacer 4-40 UNC
- Threaded lock M3 available on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
  (brass tin plated or stainless steel available on request)

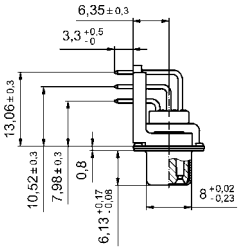
### Socket connector



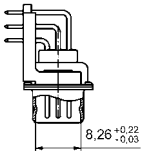

| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 2 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |

Mounting style: Through-hole

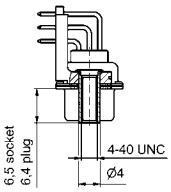


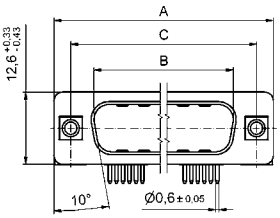

Mounting style: Threaded insert




Mounting style: Front spacer

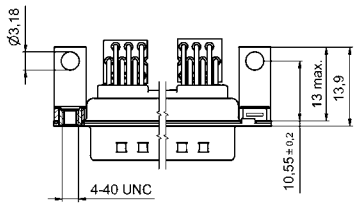


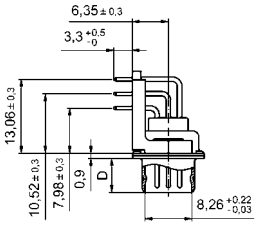

### Plug connector



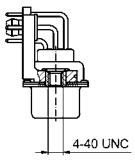

| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 2 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

Mounting style: Through-hole

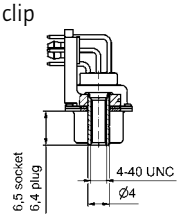



Mounting style: Threaded insert




Mounting style: Front spacer and PCB clip




### Order data

**Socket connector**

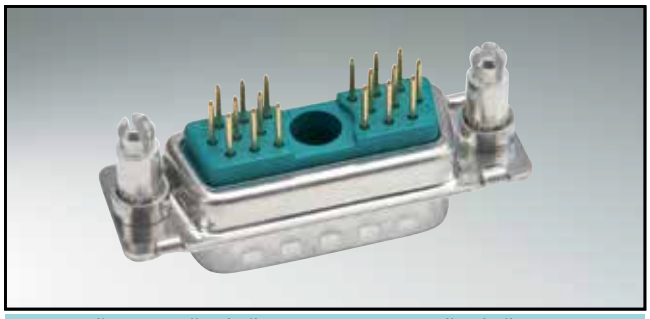
| Design | Mounting style | Part Number |
|---|---|---|
| 19W1 | 4-40 UNC threaded insert | 3H19W1SAT99G60X |
| 15W4 | 4-40 UNC threaded insert | 3H15W4SAT99G60X |
| 45W2 | 4-40 UNC threaded insert | 3H45W2SAT99G60X |
| 19W1 | 4-40 UNC threaded insert and PCB clip | 3H19W1SAT99G80X |
| 15W4 | 4-40 UNC threaded insert and PCB clip | 3H15W4SAT99G80X |
| 45W2 | 4-40 UNC threaded insert and PCB clip | 3H45W2SAT99G80X |
| 19W1 | 4-40 UNC front spacer | 3H19W1SAT99H60X |
| 15W4 | 4-40 UNC front spacer | 3H15W4SAT99H60X |
| 45W2 | 4-40 UNC front spacer | 3H45W2SAT99H60X |
| 19W1 | 4-40 UNC front spacer and PCB clip | 3H19W1SAT99H80X |
| 15W4 | 4-40 UNC front spacer and PCB clip | 3H15W4SAT99H80X |
| 45W2 | 4-40 UNC front spacer and PCB clip | 3H45W2SAT99H80X |

**Plug connector**

| Design | Mounting style | Part Number |
|---|---|---|
| 19W1 | 4-40 UNC threaded insert | 3H19W1PAT99G60X |
| 15W4 | 4-40 UNC threaded insert | 3H15W4PAT99G60X |
| 45W2 | 4-40 UNC threaded insert | 3H45W2PAT99G60X |
| 19W1 | 4-40 UNC threaded insert and PCB clip | 3H19W1PAT99G80X |
| 15W4 | 4-40 UNC threaded insert and PCB clip | 3H15W4PAT99G80X |
| 45W2 | 4-40 UNC threaded insert and PCB clip | 3H45W2PAT99G80X |
| 19W1 | 4-40 UNC front spacer | 3H19W1PAT99H60X |
| 15W4 | 4-40 UNC front spacer | 3H15W4PAT99H60X |
| 45W2 | 4-40 UNC front spacer | 3H45W2PAT99H60X |
| 19W1 | 4-40 UNC front spacer and PCB clip | 3H19W1PAT99H80X |
| 15W4 | 4-40 UNC front spacer and PCB clip | 3H15W4PAT99H80X |
| 45W2 | 4-40 UNC front spacer and PCB clip | 3H45W2PAT99H80X |

# COMBINATION D-SUB HIGH DENSITY – WITH SIGNAL CONTACTS

## Solder pin – Straight – Precision machined contacts

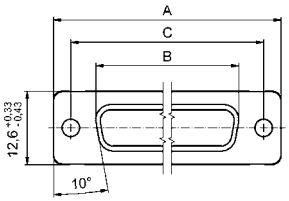


RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### DESCRIPTION

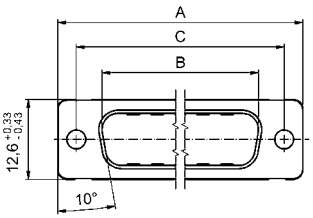
- Mounting styles:
  - with through-hole, Ø .118"/3 mm
  - with 4-40 UNC threaded insert
  - with 4-40 UNC threaded rear spacer
  - with 4-40 UNC threaded look and spacer clip
- M3 thread on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
  (brass tin plated or stainless steel available on request)

### SOCKET CONNECTOR



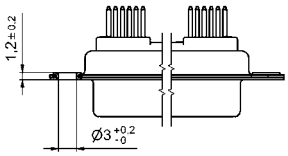

| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 2 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |

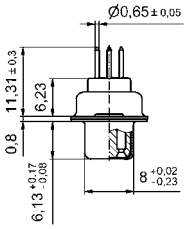
### PLUG CONNECTOR



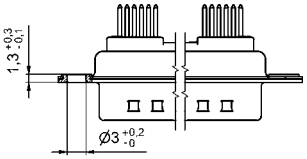

| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 2 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

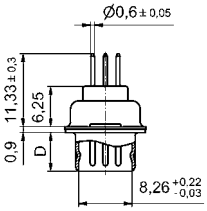
Mounting style: Through-hole



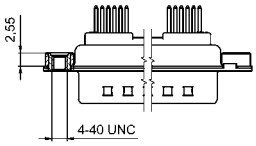




Mounting style: Through-hole




### ORDER DATA




**SOCKET CONNECTOR**

| Design | Mounting style | Part Number |
|---|---|---|
| 19W1 | Through-hole | 3H19W1SAR99A10X |
| 15W4 | Through-hole | 3H15W4SAR99A10X |
| 45W2 | Through-hole | 3H45W2SAR99A10X |
| 19W1 | 4-40 UNC threaded insert | 3H19W1SAR99A30X |
| 15W4 | 4-40 UNC threaded insert | 3H15W4SAR99A30X |
| 45W2 | 4-40 UNC threaded insert | 3H45W2SAR99A30X |

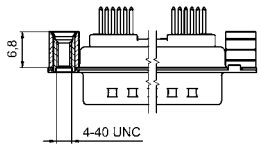
**PLUG CONNECTOR**

| Design | Mounting style | Part Number |
|---|---|---|
| 19W1 | Through-hole | 3H19W1PAR99A10X |
| 15W4 | Through-hole | 3H15W4PAR99A10X |
| 45W2 | Through-hole | 3H45W2PAR99A10X |
| 19W1 | 4-40 UNC threaded insert | 3H19W1PAR99A30X |
| 15W4 | 4-40 UNC threaded insert | 3H15W4PAR99A30X |
| 45W2 | 4-40 UNC threaded insert | 3H45W2PAR99A30X |

# Combination D-SUB High Density – Mounting styles

## Solder pin – Straight – Precision machined contacts

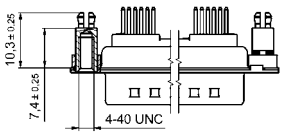
### Order data




| Socket connector | | |
|---|---|---|
| Design | Mounting style | Part Number |
| 19W1 | 4-40 UNC threaded rear spacer | 3H19W1SAR99A50X |
| 15W4 | 4-40 UNC threaded rear spacer | 3H15W4SAR99A50X |
| 45W2 | 4-40 UNC threaded rear spacer | 3H45W2SAR99A50X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style | Part Number |
| 19W1 | 4-40 UNC threaded rear spacer | 3H19W1PAR99A50X |
| 15W4 | 4-40 UNC threaded rear spacer | 3H15W4PAR99A50X |
| 45W2 | 4-40 UNC threaded rear spacer | 3H45W2PAR99A50X |

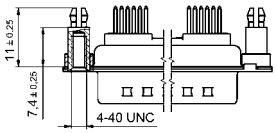
PCB thickness .063"/1,6 mm




| Socket connector | | |
|---|---|---|
| Design | Mounting style | Part Number |
| 19W1 | 4-40 UNC threaded rear spacer with PCB clip | 3H19W1SAR99E20X |
| 15W4 | 4-40 UNC threaded rear spacer with PCB clip | 3H15W4SAR99E20X |
| 45W2 | 4-40 UNC threaded rear spacer with PCB clip | 3H45W2SAR99E20X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style | Part Number |
| 19W1 | 4-40 UNC threaded rear spacer with PCB clip | 3H19W1PAR99E20X |
| 15W4 | 4-40 UNC threaded rear spacer with PCB clip | 3H15W4PAR99E20X |
| 45W2 | 4-40 UNC threaded rear spacer with PCB clip | 3H45W2PAR99E20X |

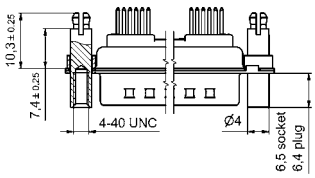
PCB thickness .091"/2,3 mm




| Socket connector | | |
|---|---|---|
| Design | Mounting style | Part Number |
| 19W1 | 4-40 UNC threaded rear spacer with PCB clip | 3H19W1SAR99E40X |
| 15W4 | 4-40 UNC threaded rear spacer with PCB clip | 3H15W4SAR99E40X |
| 45W2 | 4-40 UNC threaded rear spacer with PCB clip | 3H45W2SAR99E40X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style | Part Number |
| 19W1 | 4-40 UNC threaded rear spacer with PCB clip | 3H19W1SAR99E40X |
| 15W4 | 4-40 UNC threaded rear spacer with PCB clip | 3H15W4SAR99E40X |
| 45W2 | 4-40 UNC threaded rear spacer with PCB clip | 3H45W2SAR99E40X |

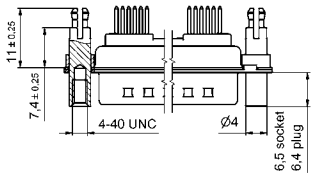
PCB thickness .063"/1,6 mm




| Socket connector | | |
|---|---|---|
| Design | Mounting style | Part Number |
| 19W1 | 4-40 UNC threaded lock and spacer clip | 3H19W1SAR99F20X |
| 15W4 | 4-40 UNC threaded lock and spacer clip | 3H15W4SAR99F20X |
| 45W2 | 4-40 UNC threaded lock and spacer clip | 3H45W2SAR99F20X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style | Part Number |
| 19W1 | 4-40 UNC threaded lock and spacer clip | 3H19W1PAR99F20X |
| 15W4 | 4-40 UNC threaded lock and spacer clip | 3H15W4PAR99F20X |
| 45W2 | 4-40 UNC threaded lock and spacer clip | 3H45W2PAR99F20X |

PCB thickness .091"/2,3 mm




| Socket connector | | |
|---|---|---|
| Design | Mounting style | Part Number |
| 19W1 | 4-40 UNC threaded lock and spacer clip | 3H19W1SAR99F40X |
| 15W4 | 4-40 UNC threaded lock and spacer clip | 3H15W4SAR99F40X |
| 45W2 | 4-40 UNC threaded lock and spacer clip | 3H45W2SAR99F40X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style | Part Number |
| 19W1 | 4-40 UNC threaded lock and spacer clip | 3H19W1PAR99F40X |
| 15W4 | 4-40 UNC threaded lock and spacer clip | 3H15W4PAR99F40X |
| 45W2 | 4-40 UNC threaded lock and spacer clip | 3H45W2PAR99F40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter

# COMBINATION D-SUB WITHOUT CONTACTS

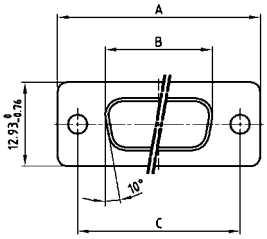
## For straight high power, coaxial or high voltage contacts

RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### DESCRIPTION

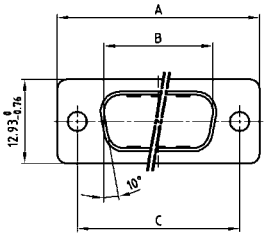
- Designs: **2W2C; 3W3; 3W3C; 5W5; 8W8**
- Mounting styles:
  - with through-hole, Ø .118"/3 mm, with 4-40 UNC threaded insert, with 4-40 UNC threaded rear spacer, with 4-40 UNC threaded rear spacer with PCB clip .291"/7.4 mm for PCB thickness .063"/1.6 mm, .091"/2.3 mm, .126"/3.2 mm
- On request: Threaded rear spacer with PCB clip .256"/6.5 mm available
- On request: M3 thread design available
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)
- recommended plastic hoods look at page 7|16, 7|17

### SOCKET CONNECTOR



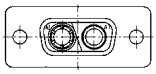

| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 1 | 31.19 | 16.46 | 25.00 +0.12 -0.13 |
| 2 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |

### PLUG CONNECTOR

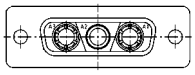



| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 1 | 31.19 | 16.79 | 25.00 +0.12 -0.13 | 6.12 |
| 2 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

### Coded socket connectors

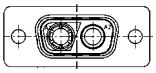


2W2C = 1 Socket – 1 Plug

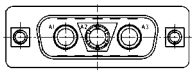


3W3C = 2 Sockets – 1 Plug

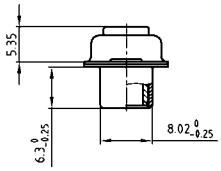
### Coded plug connectors

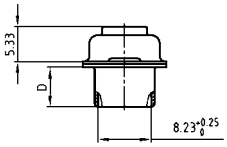


2W2C = 1 Plug – 1 Socket

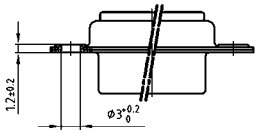


3W3C = 2 Plugs – 1 Socket



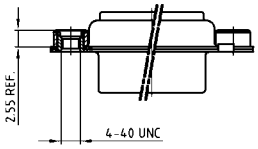




### ORDER DATA




| SOCKET CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style** | **Part Number** |
| 3W3 | Through-hole | 3003W3SXX99A10X |
| 5W5 | Through-hole | 3005W5SXX99A10X |
| 8W8 | Through-hole | 3008W8SXX99A10X |
| Coded version | | |
| 2W2C | Through-hole | 302W2CSXX99A10X |
| 3W3C | Through-hole | 303W3CSXX99A10X |

| PLUG CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style** | **Part Number** |
| 3W3 | Through-hole | 3003W3PXX99A10X |
| 5W5 | Through-hole | 3005W5PXX99A10X |
| 8W8 | Through-hole | 3008W8PXX99A10X |
| Coded version | | |
| 2W2C | Through-hole | 302W2CPXX99A10X |
| 3W3C | Through-hole | 303W3CPXX99A10X |



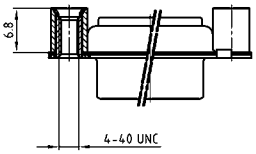

| SOCKET CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded insert | 3003W3SXX99A30X |
| 5W5 | Threaded insert | 3005W5SXX99A30X |
| 8W8 | Threaded insert | 3008W8SXX99A30X |
| Coded version | | |
| 2W2C | Threaded insert | 302W2CSXX99A30X |
| 3W3C | Threaded insert | 303W3CSXX99A30X |

| PLUG CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded insert | 3003W3PXX99A30X |
| 5W5 | Threaded insert | 3005W5PXX99A30X |
| 8W8 | Threaded insert | 3008W8PXX99A30X |
| Coded version | | |
| 2W2C | Threaded insert | 302W2CPXX99A30X |
| 3W3C | Threaded insert | 303W3CPXX99A30X |

# Combination D-SUB – Mounting styles

## For straight high power, coaxial or high voltage contacts

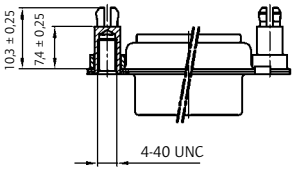
### Order data




| Socket connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded rear spacer | 3003W3SXX99A50X |
| 5W5 | Threaded rear spacer | 3005W5SXX99A50X |
| 8W8 | Threaded rear spacer | 3008W8SXX99A50X |
| Coded version | | |
| 2W2C | Threaded rear spacer | 302W2CSXX99A50X |
| 3W3C | Threaded rear spacer | 303W3CSXX99A50X |

| Plug connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded rear spacer | 3003W3PXX99A50X |
| 5W5 | Threaded rear spacer | 3005W5PXX99A50X |
| 8W8 | Threaded rear spacer | 3008W8PXX99A50X |
| Coded version | | |
| 2W2C | Threaded rear spacer | 302W2CPXX99A50X |
| 3W3C | Threaded rear spacer | 303W3CPXX99A50X |

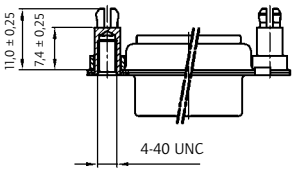
PCB thickness .063"/1.6 mm




| Socket connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded rear spacer PCB clip | 3003W3SXX99E20X |
| 5W5 | Threaded rear spacer PCB clip | 3005W5SXX99E20X |
| 8W8 | Threaded rear spacer PCB clip | 3008W8SXX99E20X |
| Coded version | | |
| 2W2C | Threaded rear spacer PCB clip | 302W2CSXX99E20X |
| 3W3C | Threaded rear spacer PCB clip | 303W3CSXX99E20X |

| Plug connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded rear spacer PCB clip | 3003W3PXX99E20X |
| 5W5 | Threaded rear spacer PCB clip | 3005W5PXX99E20X |
| 8W8 | Threaded rear spacer PCB clip | 3008W8PXX99E20X |
| Coded version | | |
| 2W2C | Threaded rear spacer PCB clip | 302W2CPXX99E20X |
| 3W3C | Threaded rear spacer PCB clip | 303W3CPXX99E20X |

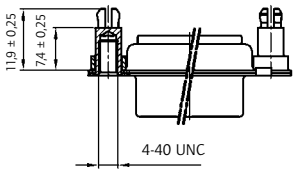
PCB thickness .091"/2.3 mm




| Socket connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded rear spacer PCB clip | 3003W3SXX99E40X |
| 5W5 | Threaded rear spacer PCB clip | 3005W5SXX99E40X |
| 8W8 | Threaded rear spacer PCB clip | 3008W8SXX99E40X |
| Coded version | | |
| 2W2C | Threaded rear spacer PCB clip | 302W2CSXX99E40X |
| 3W3C | Threaded rear spacer PCB clip | 303W3CSXX99E40X |

| Plug connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded rear spacer PCB clip | 3003W3PXX99E40X |
| 5W5 | Threaded rear spacer PCB clip | 3005W5PXX99E40X |
| 8W8 | Threaded rear spacer PCB clip | 3008W8PXX99E40X |
| Coded version | | |
| 2W2C | Threaded rear spacer PCB clip | 302W2CPXX99E40X |
| 3W3C | Threaded rear spacer PCB clip | 303W3CPXX99E40X |

PCB thickness .126"/3.2 mm



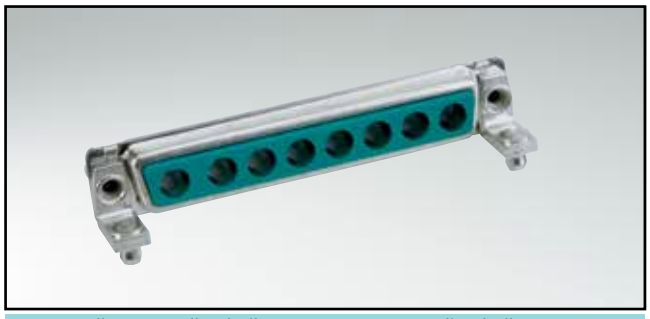

| Socket connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded rear spacer PCB clip | 3003W3SXX99E60X |
| 5W5 | Threaded rear spacer PCB clip | 3005W5SXX99E60X |
| 8W8 | Threaded rear spacer PCB clip | 3008W8SXX99E60X |
| Coded version | | |
| 2W2C | Threaded rear spacer PCB clip | 302W2CSXX99E60X |
| 3W3C | Threaded rear spacer PCB clip | 303W3CSXX99E60X |

| Plug connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded rear spacer PCB clip | 3003W3PXX99E60X |
| 5W5 | Threaded rear spacer PCB clip | 3005W5PXX99E60X |
| 8W8 | Threaded rear spacer PCB clip | 3008W8PXX99E60X |
| Coded version | | |
| 2W2C | Threaded rear spacer PCB clip | 302W2CPXX99E60X |
| 3W3C | Threaded rear spacer PCB clip | 303W3CPXX99E60X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter

# COMBINATION D-SUB WITHOUT CONTACTS

## For angled high power or coaxial contacts – Short metal bracket

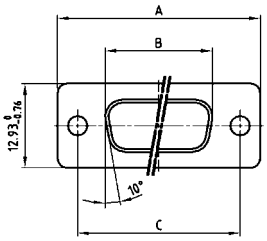


RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### DESCRIPTION

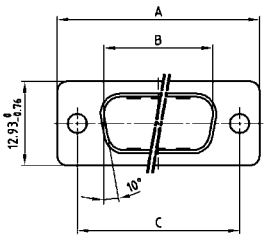
- Designs: **2W2C; 3W3; 3W3C; 5W5; 8W8**
- Mounting styles:
  - Mounting bracket and 4-40 UNC threaded insert
  - Mounting bracket with 4-40 UNC front spacer
  - Mounting bracket, PCB clip and 4-40 UNC threaded insert
  - Mounting bracket, PCB clip and 4-40 UNC front spacer
- M3 thread design available on request
- Shell: Steel tin plated
  (brass tin plated or stainless steel available on request)

### SOCKET CONNECTOR



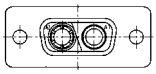

| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 1 | 31.19 | 16.46 | 25.00 +0.12 -0.13 |
| 2 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |

### PLUG CONNECTOR

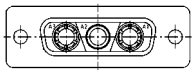



| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 1 | 31.19 | 16.79 | 25.00 +0.12 -0.13 | 6.12 |
| 2 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

### Coded socket connectors

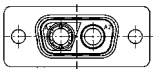


2W2C = 1 Socket – 1 Plug

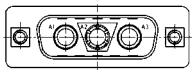


3W3C = 2 Sockets – 1 Plug

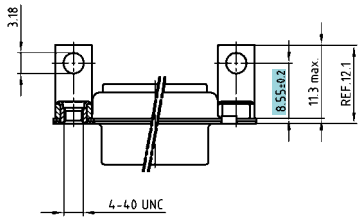
### Coded plug connectors

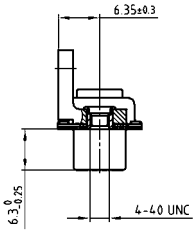


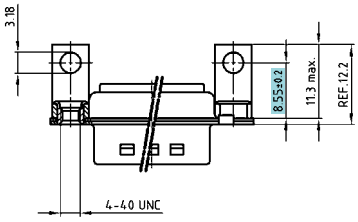
2W2C = 1 Plug – 1 Socket

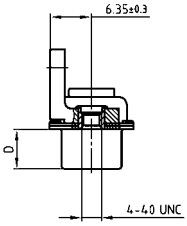


3W3C = 2 Plugs – 1 Socket

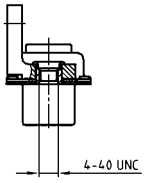



### ORDER DATA



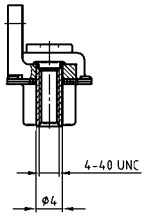

| SOCKET CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded insert | 3003W3SXX99N20X |
| 5W5 | Threaded insert | 3005W5SXX99N20X |
| 8W8 | Threaded insert | 3008W8SXX99N20X |
| Coded version | | |
| 2W2C | Threaded insert | 302W2CSXX99N20X |
| 3W3C | Threaded insert | 303W3CSXX99N20X |

| PLUG CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded insert | 3003W3PXX99N20X |
| 5W5 | Threaded insert | 3005W5PXX99N20X |
| 8W8 | Threaded insert | 3008W8PXX99N20X |
| Coded version | | |
| 2W2C | Threaded insert | 302W2CPXX99N20X |
| 3W3C | Threaded insert | 303W3CPXX99N20X |

# Combination D-SUB – Mounting styles

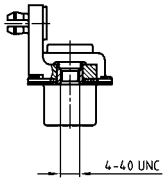
## For angled high power or coaxial contacts – Short metal bracket

### Order data



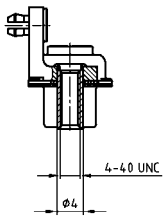

| Socket connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Front spacer | 3003W3SXX99P20X |
| 5W5 | Front spacer | 3005W5SXX99P20X |
| 8W8 | Front spacer | 3008W8SXX99P20X |
| Coded version | | |
| 2W2C | Front spacer | 302W2CSXX99P20X |
| 3W3C | Front spacer | 303W3CSXX99P20X |

| Plug connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Front spacer | 3003W3PXX99P20X |
| 5W5 | Front spacer | 3005W5PXX99P20X |
| 8W8 | Front spacer | 3008W8PXX99P20X |
| Coded version | | |
| 2W2C | Front spacer | 302W2CPXX99P20X |
| 3W3C | Front spacer | 303W3CPXX99P20X |




| Socket connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded insert / PCB clip | 3003W3SXX99N40X |
| 5W5 | Threaded insert / PCB clip | 3005W5SXX99N40X |
| 8W8 | Threaded insert / PCB clip | 3008W8SXX99N40X |
| Coded version | | |
| 2W2C | Threaded insert / PCB clip | 302W2CSXX99N40X |
| 3W3C | Threaded insert / PCB clip | 303W3CSXX99N40X |

| Plug connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded insert / PCB clip | 3003W3PXX99N40X |
| 5W5 | Threaded insert / PCB clip | 3005W5PXX99N40X |
| 8W8 | Threaded insert / PCB clip | 3008W8PXX99N40X |
| Coded version | | |
| 2W2C | Threaded insert / PCB clip | 302W2CPXX99N40X |
| 3W3C | Threaded insert / PCB clip | 303W3CPXX99N40X |



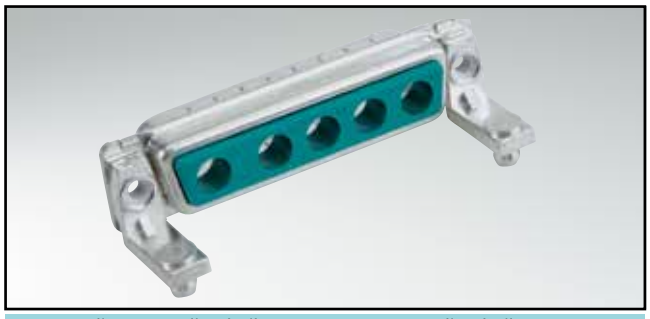

| Socket connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Front spacer / PCB clip | 3003W3SXX99P40X |
| 5W5 | Front spacer / PCB clip | 3005W5SXX99P40X |
| 8W8 | Front spacer / PCB clip | 3008W8SXX99P40X |
| Coded version | | |
| 2W2C | Front spacer / PCB clip | 302W2CSXX99P40X |
| 3W3C | Front spacer / PCB clip | 303W3CSXX99P40X |

| Plug connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Front spacer / PCB clip | 3003W3PXX99P40X |
| 5W5 | Front spacer / PCB clip | 3005W5PXX99P40X |
| 8W8 | Front spacer / PCB clip | 3008W8PXX99P40X |
| Coded version | | |
| 2W2C | Front spacer / PCB clip | 302W2CPXX99P40X |
| 3W3C | Front spacer / PCB clip | 303W3CPXX99P40X |

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness

# COMBINATION D-SUB WITHOUT CONTACTS

## For angled high power or coaxial contacts – Long metal bracket

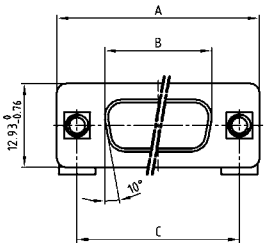


RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### DESCRIPTION

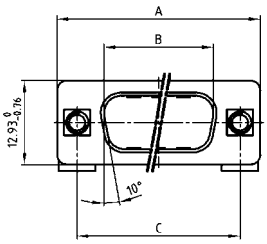
- Designs: **2W2C; 3W3; 3W3C; 5W5; 8W8**
- Mounting styles:
  - with mounting bracket and 4-40 UNC threaded insert
  - with mounting bracket with 4-40 UNC front spacer
  - with mounting bracket, PCB clip and 4-40 UNC threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC front spacer
- M3 thread design available on request
- Shell: Steel tin plated
  (brass tin plated or stainless steel available on request)

### SOCKET CONNECTOR



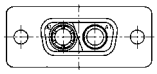

| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 1 | 31.19 | 16.46 | 25.00 +0.12 -0.13 |
| 2 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |

### PLUG CONNECTOR

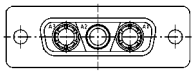



| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 1 | 31.19 | 16.79 | 25.00 +0.12 -0.13 | 6.12 |
| 2 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

### CODED SOCKET CONNECTORS

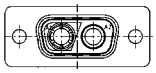


2W2C = 1 Socket – 1 Plug

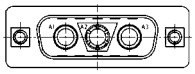


3W3C = 2 Sockets – 1 Plug

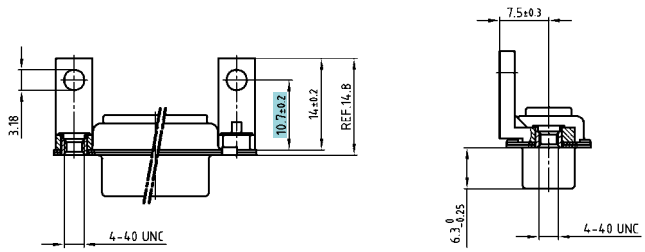
### CODED PLUG CONNECTORS

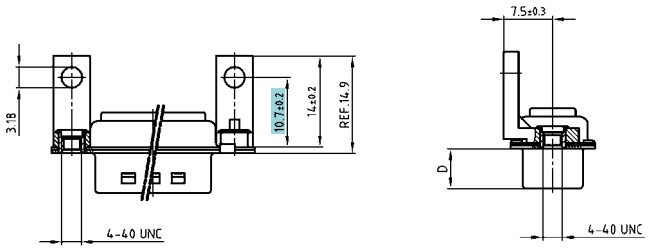


2W2C = 1 Plug – 1 Socket

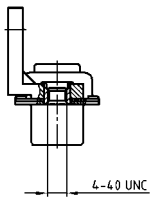


3W3C = 2 Plugs – 1 Socket




### ORDER DATA



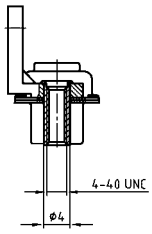

| SOCKET CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded insert | 3003W3SXX99G20X |
| 5W5 | Threaded insert | 3005W5SXX99G20X |
| 8W8 | Threaded insert | 3008W8SXX99G20X |
| Coded version | | |
| 2W2C | Threaded insert | 302W2CSXX99G20X |
| 3W3C | Threaded insert | 303W3CSXX99G20X |

| PLUG CONNECTOR | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded insert | 3003W3PXX99G20X |
| 5W5 | Threaded insert | 3005W5PXX99G20X |
| 8W8 | Threaded insert | 3008W8PXX99G20X |
| Coded version | | |
| 2W2C | Threaded insert | 302W2CPXX99G20X |
| 3W3C | Threaded insert | 303W3CPXX99G20X |

# Combination D-SUB – Mounting styles

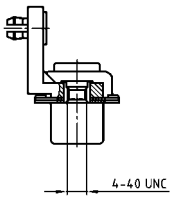
## For angled high power or coaxial contacts – Long metal bracket

### Order data



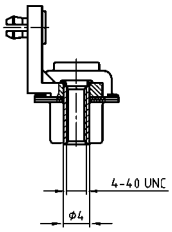

| Socket connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Front spacer | 3003W3SXX99H20X |
| 5W5 | Front spacer | 3005W5SXX99H20X |
| 8W8 | Front spacer | 3008W8SXX99H20X |
| Coded version | | |
| 2W2C | Front spacer | 302W2CSXX99H20X |
| 3W3C | Front spacer | 303W3CSXX99H20X |

| Plug connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Front spacer | 3003W3PXX99H20X |
| 5W5 | Front spacer | 3005W5PXX99H20X |
| 8W8 | Front spacer | 3008W8PXX99H20X |
| Coded version | | |
| 2W2C | Front spacer | 302W2CPXX99H20X |
| 3W3C | Front spacer | 303W3CPXX99H20X |




| Socket connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded insert / PCB clip | 3003W3SXX99G40X |
| 5W5 | Threaded insert / PCB clip | 3005W5SXX99G40X |
| 8W8 | Threaded insert / PCB clip | 3008W8SXX99G40X |
| Coded version | | |
| 2W2C | Threaded insert / PCB clip | 302W2CSXX99G40X |
| 3W3C | Threaded insert / PCB clip | 303W3CSXX99G40X |

| Plug connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Threaded insert / PCB clip | 3003W3PXX99G40X |
| 5W5 | Threaded insert / PCB clip | 3005W5PXX99G40X |
| 8W8 | Threaded insert / PCB clip | 3008W8PXX99G40X |
| Coded version | | |
| 2W2C | Threaded insert / PCB clip | 302W2CPXX99G40X |
| 3W3C | Threaded insert / PCB clip | 303W3CPXX99G40X |




| Socket connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Front spacer / PCB clip | 3003W3SXX99H40X |
| 5W5 | Front spacer / PCB clip | 3005W5SXX99H40X |
| 8W8 | Front spacer / PCB clip | 3008W8SXX99H40X |
| Coded version | | |
| 2W2C | Front spacer / PCB clip | 302W2CSXX99H40X |
| 3W3C | Front spacer / PCB clip | 303W3CSXX99H40X |

| Plug connector | | |
|---|---|---|
| **Design** | **Mounting style 4-40 UNC** | **Part Number** |
| 3W3 | Front spacer / PCB clip | 3003W3PXX99H40X |
| 5W5 | Front spacer / PCB clip | 3005W5PXX99H40X |
| 8W8 | Front spacer / PCB clip | 3008W8PXX99H40X |
| Coded version | | |
| 2W2C | Front spacer / PCB clip | 302W2CPXX99H40X |
| 3W3C | Front spacer / PCB clip | 303W3CPXX99H40X |

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness

# COMBINATION D-SUB WIHTOUT CONTACTS

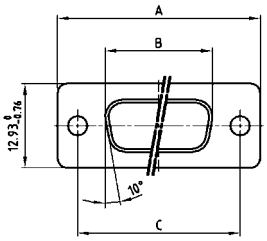
## Crimp body – For wire size AWG 20...24 and AWG 26...28

RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### DESCRIPTION

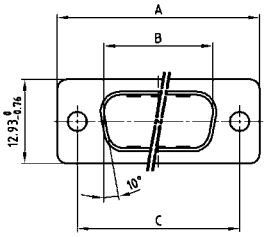
- For precision machined contacts for wire size **AWG 20...24** and **AWG 26...28**
- Mounting styles:
  - with through-hole, Ø .118"/3 mm
  - with 4-40 UNC or M3 threaded insert
- Shell: Steel tin plated
  (brass tin plated or stainless steel available on request)
- recommended plastic hoods look at page 7|16, 7|17

### SOCKET CONNECTOR

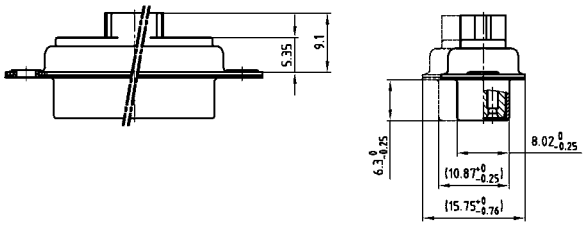



| Shellsize | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 1 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 2 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |
| 5 | 67.31 | 52.55 | 61.10 $^{+0.14}_{-0.11}$ |

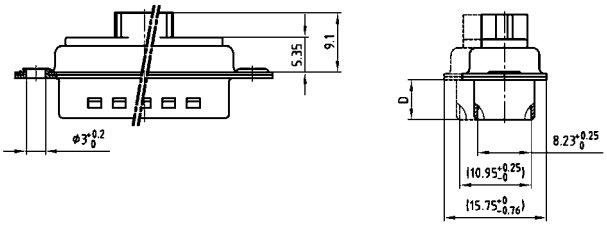
### PLUG CONNECTOR




| Shellsize | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 1 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 2 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 5 | 67.31 | 52.68 | 61.10 $^{+0.14}_{-0.11}$ | 5.99 |

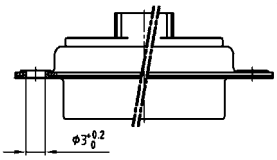



Shell size 5 = Dim. in (..)




Shell size 5 = Dim. in (..)

### ORDER DATA



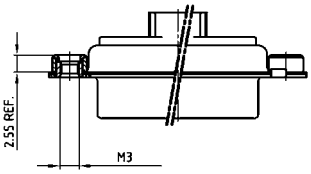

| SOCKET CONNECTOR | | |
|---|---|---|
| Design | Mounting style | Part Number |
| 5W1 | Through-hole | 3005W1SXK99A10X |
| 7W2 | Through-hole | 3007W2SXK99A10X |
| 11W1 | Through-hole | 3011W1SXK99A10X |
| 9W4 | Through-hole | 3009W4SXK99A10X |
| 13W3 | Through-hole | 3013W3SXK99A10X |
| 17W2 | Through-hole | 3017W2SXK99A10X |
| 21W1 | Through-hole | 3021W1SXK99A10X |
| 13W6 | Through-hole | 3013W6SXK99A10X |
| 17W5 | Through-hole | 3017W5SXK99A10X |
| 21WA4 | Through-hole | 321WA4SXK99A10X |
| 25W3 | Through-hole | 3025W3SXK99A10X |
| 27W2 | Through-hole | 3027W2SXK99A10X |
| 24W7 | Through-hole | 3024W7SXK99A10X |
| 36W4 | Through-hole | 3036W4SXK99A10X |
| 43W2 | Through-hole | 3043W2SXK99A10X |
| 47W1 | Through-hole | 3047W1SXK99A10X |

| PLUG CONNECTOR | | |
|---|---|---|
| Design | Mounting style | Part Number |
| 5W1 | Through-hole | 3005W1PXK99A10X |
| 7W2 | Through-hole | 3007W2PXK99A10X |
| 11W1 | Through-hole | 3011W1PXK99A10X |
| 9W4 | Through-hole | 3009W4PXK99A10X |
| 13W3 | Through-hole | 3013W3PXK99A10X |
| 17W2 | Through-hole | 3017W2PXK99A10X |
| 21W1 | Through-hole | 3021W1PXK99A10X |
| 13W6 | Through-hole | 3013W6PXK99A10X |
| 17W5 | Through-hole | 3017W5PXK99A10X |
| 21WA4 | Through-hole | 321WA4PXK99A10X |
| 25W3 | Through-hole | 3025W3PXK99A10X |
| 27W2 | Through-hole | 3027W2PXK99A10X |
| 24W7 | Through-hole | 3024W7PXK99A10X |
| 36W4 | Through-hole | 3036W4PXK99A10X |
| 43W2 | Through-hole | 3043W2PXK99A10X |
| 47W1 | Through-hole | 3047W1PXK99A10X |

# Combination D-SUB – Mounting styles

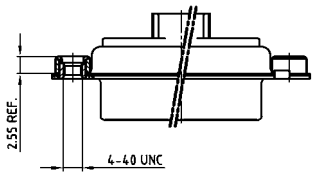
## Crimp body (without contacts) – For wire size AWG 20...24 and AWG 26...28

### Order data




| Socket connector | | |
|---|---|---|
| Design | Mounting style M3 | Part Number |
| 5W1 | Threaded insert | 3005W1SXK99A20X |
| 7W2 | Threaded insert | 3007W2SXK99A20X |
| 11W1 | Threaded insert | 3011W1SXK99A20X |
| 9W4 | Threaded insert | 3009W4SXK99A20X |
| 13W3 | Threaded insert | 3013W3SXK99A20X |
| 17W2 | Threaded insert | 3017W2SXK99A20X |
| 21W1 | Threaded insert | 3021W1SXK99A20X |
| 13W6 | Threaded insert | 3013W6SXK99A20X |
| 17W5 | Threaded insert | 3017W5SXK99A20X |
| 21WA4 | Threaded insert | 321WA4SXK99A20X |
| 25W3 | Threaded insert | 3025W3SXK99A20X |
| 27W2 | Threaded insert | 3027W2SXK99A20X |
| 24W7 | Threaded insert | 3024W7SXK99A20X |
| 36W4 | Threaded insert | 3036W4SXK99A20X |
| 43W2 | Threaded insert | 3043W2SXK99A20X |
| 47W1 | Threaded insert | 3047W1SXK99A20X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style M3 | Part Number |
| 5W1 | Threaded insert | 3005W1PXK99A20X |
| 7W2 | Threaded insert | 3007W2PXK99A20X |
| 11W1 | Threaded insert | 3011W1PXK99A20X |
| 9W4 | Threaded insert | 3009W4PXK99A20X |
| 13W3 | Threaded insert | 3013W3PXK99A20X |
| 17W2 | Threaded insert | 3017W2PXK99A20X |
| 21W1 | Threaded insert | 3021W1PXK99A20X |
| 13W6 | Threaded insert | 3013W6PXK99A20X |
| 17W5 | Threaded insert | 3017W5PXK99A20X |
| 21WA4 | Threaded insert | 321WA4PXK99A20X |
| 25W3 | Threaded insert | 3025W3PXK99A20X |
| 27W2 | Threaded insert | 3027W2PXK99A20X |
| 24W7 | Threaded insert | 3024W7PXK99A20X |
| 36W4 | Threaded insert | 3036W4PXK99A20X |
| 43W2 | Threaded insert | 3043W2PXK99A20X |
| 47W1 | Threaded insert | 3047W1PXK99A20X |

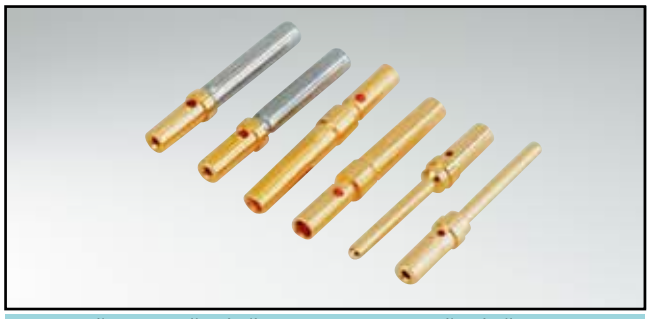



| Socket connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded insert | 3005W1SXK99A30X |
| 7W2 | Threaded insert | 3007W2SXK99A30X |
| 11W1 | Threaded insert | 3011W1SXK99A30X |
| 9W4 | Threaded insert | 3009W4SXK99A30X |
| 13W3 | Threaded insert | 3013W3SXK99A30X |
| 17W2 | Threaded insert | 3017W2SXK99A30X |
| 21W1 | Threaded insert | 3021W1SXK99A30X |
| 13W6 | Threaded insert | 3013W6SXK99A30X |
| 17W5 | Threaded insert | 3017W5SXK99A30X |
| 21WA4 | Threaded insert | 321WA4SXK99A30X |
| 25W3 | Threaded insert | 3025W3SXK99A30X |
| 27W2 | Threaded insert | 3027W2SXK99A30X |
| 24W7 | Threaded insert | 3024W7SXK99A30X |
| 36W4 | Threaded insert | 3036W4SXK99A30X |
| 43W2 | Threaded insert | 3043W2SXK99A30X |
| 47W1 | Threaded insert | 3047W1SXK99A30X |

| Plug connector | | |
|---|---|---|
| Design | Mounting style 4-40 UNC | Part Number |
| 5W1 | Threaded insert | 3005W1PXK99A30X |
| 7W2 | Threaded insert | 3007W2PXK99A30X |
| 11W1 | Threaded insert | 3011W1PXK99A30X |
| 9W4 | Threaded insert | 3009W4PXK99A30X |
| 13W3 | Threaded insert | 3013W3PXK99A30X |
| 17W2 | Threaded insert | 3017W2PXK99A30X |
| 21W1 | Threaded insert | 3021W1PXK99A30X |
| 13W6 | Threaded insert | 3013W6PXK99A30X |
| 17W5 | Threaded insert | 3017W5PXK99A30X |
| 21WA4 | Threaded insert | 321WA4PXK99A30X |
| 25W3 | Threaded insert | 3025W3PXK99A30X |
| 27W2 | Threaded insert | 3027W2PXK99A30X |
| 24W7 | Threaded insert | 3024W7PXK99A30X |
| 36W4 | Threaded insert | 3036W4PXK99A30X |
| 43W2 | Threaded insert | 3043W2PXK99A30X |
| 47W1 | Threaded insert | 3047W1PXK99A30X |

# Combination D-SUB Contacts

## Crimp contacts – Precision machined – For wire size AWG 20...24 and AWG 26...28



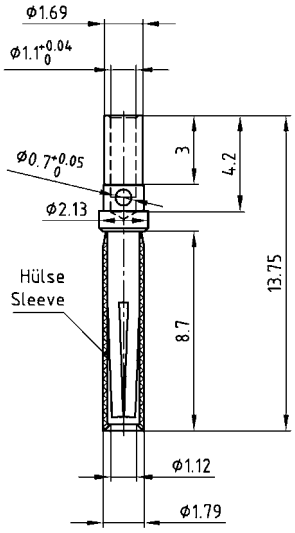
RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### Description

- For wire size **AWG 20...24** and **AWG 26–28**
- Quality class 3
- Quality class 1 and another quality classes on request

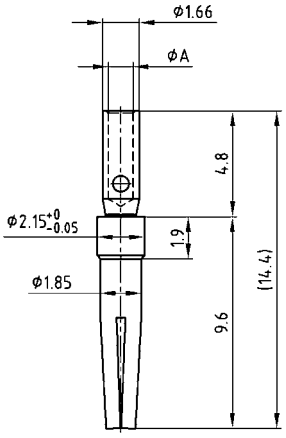
### Product drawing

Signal socket crimp contact
(Closed entry version)

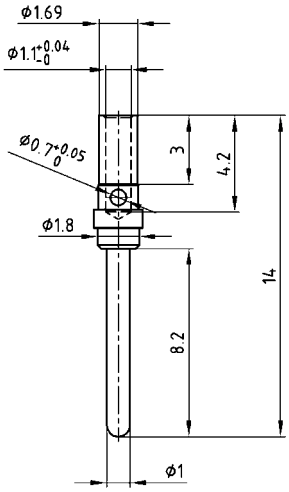



| AWG | A +0.04 |
|---|---|
| 20-24 | Ø 1.16 |
| 26-28 | Ø 0.65 |

Signal socket crimp contact
(Standard version)




Signal plug crimp contact
(Standard version)




| Designs | |
|---|---|
| Contact material Socket | Copper alloy |
| Closed entry version | Stainless steel sleeve |
| Contact material plug | Brass |
| Quality class 1 | 500 mating cycles |
| Quality class 3 | 50 mating cycles |

### Order data

**Socket contact**

| Contact type | AWG | Quality class | Part Number |
|---|---|---|---|
| Socket* / Closed entry | 20...24 | 1 | 132C15019X |
| Socket* / Closed entry | 26...28 | 1 | 132C15029X |
| Socket / Standard | 20...24 | 3 | 162A18709X |
| Socket / Standard | 26...28 | 3 | 162A18719X |

*Preferred type

**Plug contact**

| Contact type | AWG | Quality class | Part Number |
|---|---|---|---|
| Plug / Standard | 20...24 | 1 | 131C15019X |
| Plug / Standard | 26...28 | 1 | 131C15029X |
| Plug / Standard | 20...24 | 3 | 131A15019X |
| Plug / Standard | 26...28 | 3 | 131A15029X |

# Combination D-SUB Contacts

## High power contacts – Solder cup – Straight

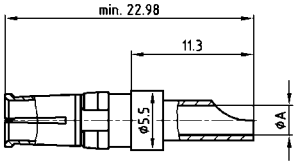
RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### Description

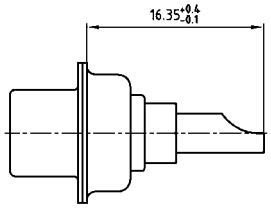
- Precision machined contacts
- Quality class 3: 50 mating cycles
- Quality class 1: 500 mating cycles
- Mating side gold plated
- Termination side gold or tin plated
- Other quality classes on request
- To order these preassembled in the connector, use the termination code shown below, in the part number creator at the front of this section

### Product drawing

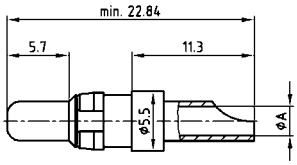
Socket contact




Installation dimension

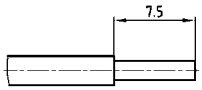



Plug contact

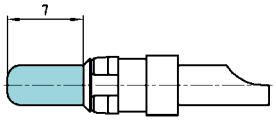



| AWG | Current rating | ØA+0.15 |
|---|---|---|
| 16-20 | 10A | 1.80 |
| 12-14 | 20A | 2.70 |
| 10-12 | 30A | 3.50 |
| 8-10 | 40A | 4.80 |

Wire stripping




Premating contact




### Order data

**Socket contact**

| AWG | Quality class | Code* tin plated | Part Number tin plated | Code* gold plated | Part Number gold plated |
|---|---|---|---|---|---|
| 16...20 | 1 | F1 | 13-003501 | 41 | 132C10019X |
| 16...20 | 3 | F2 | 13-003503 | 61 | 132A10019X |
| 12...14 | 1 | F3 | 13-003511 | 42 | 132C10029X |
| 12...14 | 3 | F4 | 13-003513 | 62 | 132A10029X |
| 10...12 | 1 | F5 | 13-003521 | 43 | 132C10039X |
| 10...12 | 3 | F6 | 13-003523 | 63 | 132A10039X |
| 8...10 | 1 | F7 | 13-003531 | 44 | 132C10049X |
| 8...10 | 3 | F8 | 13-003533 | 64 | 132A10049X |

**Plug contact**

| AWG | Quality class | Code* tin plated | Part Number tin plated | Code* gold plated | Part Number gold plated |
|---|---|---|---|---|---|
| 16...20 | 1 | F1 | 13-003541 | 41 | 131C10019X |
| 16...20 | 3 | F2 | 13-003543 | 61 | 131A10019X |
| 12...14 | 1 | F3 | 13-003551 | 42 | 131C10029X |
| 12...14 | 3 | F4 | 13-003553 | 62 | 131A10029X |
| 10...12 | 1 | F5 | 13-003561 | 43 | 131C10039X |
| 10...12 | 3 | F6 | 13-003563 | 63 | 131A10039X |
| 8...10 | 1 | F7 | 13-003571 | 44 | 131C10049X |
| 8...10 | 3 | F8 | 13-003573 | 64 | 131A10049X |

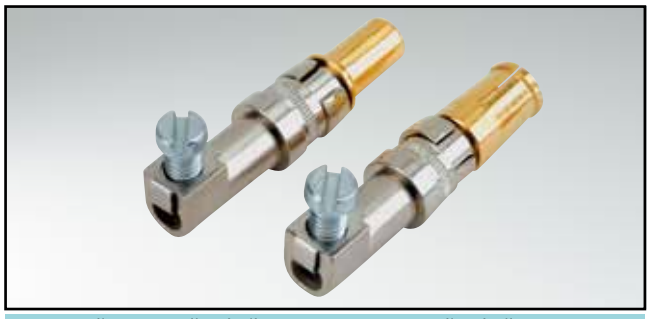
**Premating contact**

| AWG | Ampere | Quality class | Part Number tin plated | Quality class | Part Number gold plated |
|---|---|---|---|---|---|
| 16-20 | 10 A | 1 | 13-003581 | 1 | 131C10119X |
| 12-14 | 20 A | 1 | 13-003591 | 1 | 131C10129X |
| 10-12 | 30 A | 1 | 13-003601 | 1 | 131C10139X |
| 8-10 | 40 A | 1 | 13-003611 | 1 | 131C10149X |

*Code use with part number creator

# Combination D-SUB Contacts

## High power contacts – Screw termination – Straight – For wire size AWG 14



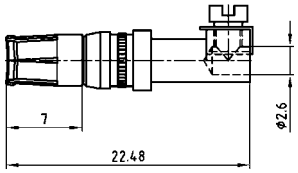
RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### Description

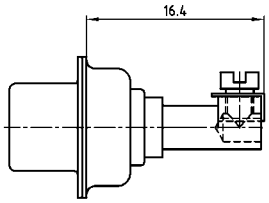
- Precision machined contacts for wire size **AWG 14**, max. 20 A
- Quality class 3: 50 mating cycles (gold plated)
- Quality class 1: 500 mating cycles (gold plated)
- Other quality classes on request
- For field attachable applications

### Product drawing

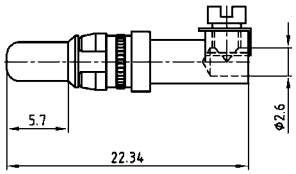
Socket contact




Installation dimension

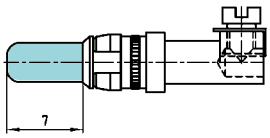



Plug contact




| AWG | Current rating | ØA+0.15 |
|---|---|---|
| 16-20 | 10A | 1.80 |
| 12-14 | 20A | 2.70 |
| 10-12 | 30A | 3.50 |
| 8-10 | 40A | 4.80 |

Premating contact




### Order data

**Socket contact**

| Contact type | AWG | Ampere | Quality class | Part Number |
|---|---|---|---|---|
| Socket | 14 | 20 A | 1 | 132C36009X |
| Socket | 14 | 20 A | 3 | 132A36009X |

**Plug contact**

| Contact type | AWG | Ampere | Quality class | Part Number |
|---|---|---|---|---|
| Plug | 14 | 20 A | 1 | 131C36009X |
| Plug | 14 | 20 A | 3 | 131A36009X |
| Plug premating | 14 | 20 A | 1 | 131C36109X |

# Combination D-SUB Contacts

## High power contacts – Crimp – Straight

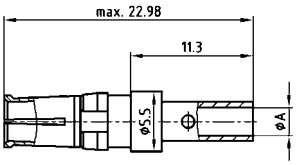
RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### Description

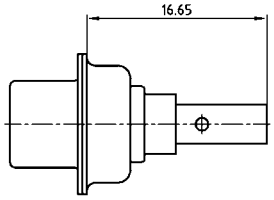
- Precision machined contacts
- Quality class 3: 50 mating cycles
- Quality class 1: 500 mating cycles
- Mating side gold plated
- Termination side gold or tin plated
- Other quality classes on request

### Product drawing

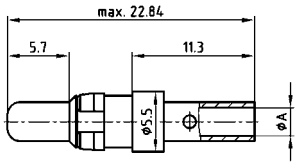
Socket contact




Installation dimension

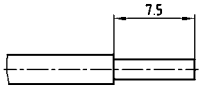



Plug contact

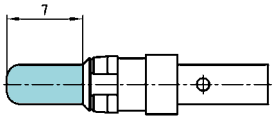



| AWG | Current rating | ØA+0.15 |
|---|---|---|
| 16-20 | 10A | 1.70 |
| 12-14 | 20A | 2.60 |
| 10-12 | 30A | 3.70 |
| 8-10 | 40A | 4.60 |

Wire stripping




Premating contact




### Order data

**Socket contact**

| AWG | Ampere | Quality class | Part Number tin plated | Quality class | Part Number gold plated |
|---|---|---|---|---|---|
| 16-20 | 10 A | 1 | 13-003621 | 1 | 132C11019X |
| 16-20 | 10 A | 3 | 13-003623 | 3 | 132A11019X |
| 12-14 | 20 A | 1 | 13-003631 | 1 | 132C11029X |
| 12-14 | 20 A | 3 | 13-003633 | 3 | 132A11029X |
| 10-12 | 30 A | 1 | 13-003641 | 1 | 132C11039X |
| 10-12 | 30 A | 3 | 13-003643 | 3 | 132A11039X |
| 8-10 | 40 A | 1 | 13-003651 | 1 | 132C11049X |
| 8-10 | 40 A | 3 | 13-003653 | 3 | 132A11049X |

**Plug contact**

| AWG | Ampere | Quality class | Part Number tin plated | Quality class | Part Number gold plated |
|---|---|---|---|---|---|
| 16-20 | 10 A | 1 | 13-003661 | 1 | 131C11019X |
| 16-20 | 10 A | 3 | 13-003663 | 3 | 131A11019X |
| 12-14 | 20 A | 1 | 13-003671 | 1 | 131C11029X |
| 12-14 | 20 A | 3 | 13-003673 | 3 | 131A11029X |
| 10-12 | 30 A | 1 | 13-003681 | 1 | 131C11039X |
| 10-12 | 30 A | 3 | 13-003683 | 3 | 131A11039X |
| 8-10 | 40 A | 1 | 13-003691 | 1 | 131C11049X |
| 8-10 | 40 A | 3 | 13-003693 | 3 | 131A11049X |

**Premating contact**

| AWG | Ampere | Quality class | Part Number tin plated | Quality class | Part Number tin plated |
|---|---|---|---|---|---|
| 16-20 | 10 A | 1 | 13-003701 | 1 | 131C11119X |
| 12-14 | 20 A | 1 | 13-003711 | 1 | 131C11129X |
| 10-12 | 30 A | 1 | 13-003721 | 1 | 131C11139X |
| 8-10 | 40 A | 1 | 13-003731 | 1 | 131C11149X |

# Combination D-SUB Contacts

## High power contacts – Solder cup or crimp – angled

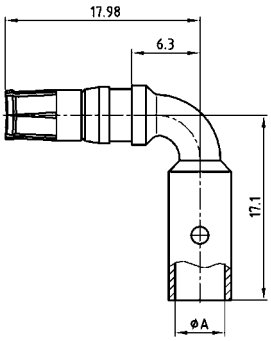
RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### Description

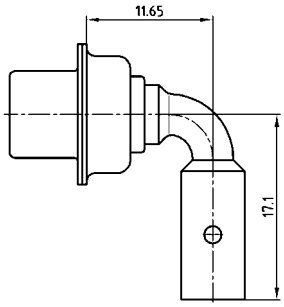
- Precision machined contacts
- Quality class 3: 50 mating cycles (gold plated)
- Quality class 1: 500 mating cycles (gold plated)
- Other quality classes on request

### Product drawing

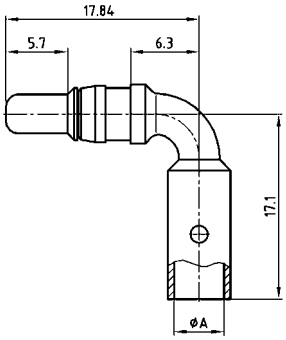
Socket contact



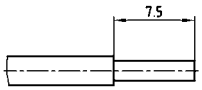

Installation dimension
Shell size 1-4




Plug contact

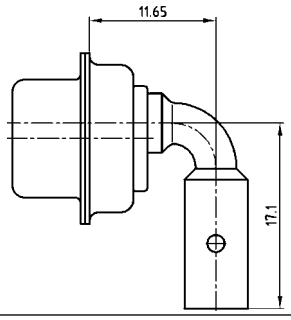



Wire stripping

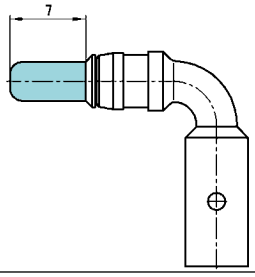



| AWG | Current rating | Ø A +0.15 | Crimp Plier Part.no. 360X12269X |
|---|---|---|---|
| 16-20 | 10A | 1.70 | 1.40/1.25 |
| 12-14 | 20A | 2.60 | 1.85/1.65 |
| 10-12 | 30A | 3.70 | 2.30/2.05 |
| 8-10 | 40A | 4.60 | 2.30/2.05 |

Installation dimension
Shell size 5




Premating contact




### Order data

**Socket contact**

| Contact type | AWG | Ampere | Quality class | Part Number |
|---|---|---|---|---|
| Socket | 16...20 | 10 A | 1 | 132C16019X |
| Socket | 16...20 | 10 A | 3 | 132A16019X |
| Socket | 12...14 | 20 A | 1 | 132C16029X |
| Socket | 12...14 | 20 A | 3 | 132A16029X |
| Socket | 10...12 | 30 A | 1 | 132C16039X |
| Socket | 10...12 | 30 A | 3 | 132A16039X |
| Socket | 8...10 | 40 A | 1 | 132C16049X |
| Socket | 8...10 | 40 A | 3 | 132A16049X |

**Plug contact**

| Contact type | AWG | Ampere | Quality class | Part Number |
|---|---|---|---|---|
| Plug | 16...20 | 10 A | 1 | 131C16019X |
| Plug | 16...20 | 10 A | 3 | 131A16019X |
| Plug | 12...14 | 20 A | 1 | 131C16029X |
| Plug | 12...14 | 20 A | 3 | 131A16029X |
| Plug | 10...12 | 30 A | 1 | 131C16039X |
| Plug | 10...12 | 30 A | 3 | 131A16039X |
| Plug | 8...10 | 40 A | 1 | 131C16049X |
| Plug | 8...10 | 40 A | 3 | 131A16049X |

**Premating contact**

| Contact type | AWG | Ampere | Quality class | Part Number |
|---|---|---|---|---|
| Plug premating | 16...20 | 10 A | 1 | 131C16119X |
| Plug premating | 12...14 | 20 A | 1 | 131C16129X |
| Plug premating | 10...12 | 30 A | 1 | 131C16139X |
| Plug premating | 8...10 | 40 A | 1 | 131C16149X |

# Combination D-SUB Contacts

## High power contacts – Solder pin – angled

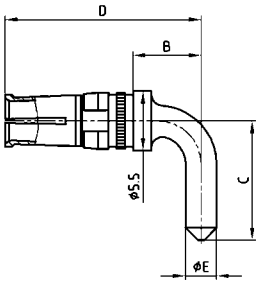
RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### Description

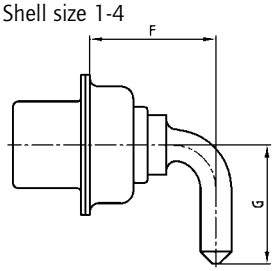
- Precision machined contacts
- Quality class 3: 50 mating cycles
- Quality class 1: 500 mating cycles
- Mating side gold plated
- Termination side tin plated
- Other quality classes on request
- To order these preassembled in the connector, use the termination code shown below, in the part number creator at the front of this section

### Product drawing

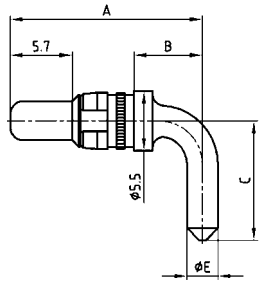
Socket contact




Installation dimension
Shell size 1-4



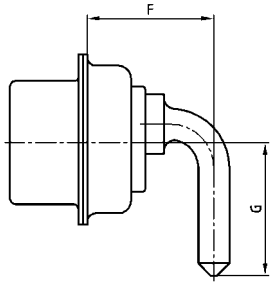

Plug contact



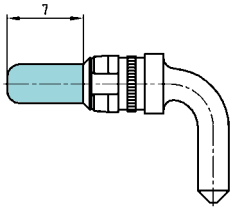

| Shellsize | Current rating | Termination | A | B | C | D | Ø E | F | G |
|---|---|---|---|---|---|---|---|---|---|
| 1-4 | 15A | 55/59 | 14.54 | 3.00 | 10.50 | 14.68 | 1.90 | 8.35 | 10.50 |
| 1-4 | 20A | 56/73 | 17.84 | 6.30 | 11.00 | 17.98 | 2.85 | 11.65 | 11.00 |
| 1-4 | 30A | 57/74 | 26.54 | 15.00 | 9.50 | 26.68 | 3.20 | 20.35 | 9.50 |
| 1-4 | 40A | 58/75 | 17.84 | 6.30 | 11.00 | 17.98 | 3.75 | 11.65 | 11.00 |
| 5 | 20A | 66/81 | 20.39 | 8.85 | 14.00 | 20.53 | 2.85 | 14.20 | 12.58 |
| 5 | 30A | 67/82 | 20.39 | 8.85 | 14.00 | 20.53 | 3.20 | 14.20 | 12.58 |
| 5 | 30A | 65/85 | 26.54 | 15.00 | 13.50 | 26.68 | 3.20 | 20.35 | 12.08 |
| 5 | 40A | 60/77 | 20.39 | 8.85 | 14.00 | 20.53 | 3.75 | 14.20 | 12.58 |

| hole diameter of PCB: |
|---|
| 1.95 = 2.30 ± 0.1 |
| 2.60 = 3.00 ± 0.1 |
| 2.85 = 3.20 ± 0.1 |
| 3.18 = 3.60 ± 0.1 |
| 3.75 = 4.10 ± 0.1 |

Installation dimension
Shell size 5




Premating contact




### Order data

**Socket contact**

| Contact type | Shell size | Quality class | Termination* | Part Number |
|---|---|---|---|---|
| Socket | 1-4 | 1 | 55 | 132C13009X |
| Socket | 1-4 | 3 | 59 | 132A13009X |
| Socket | 1-4 | 1 | 56 | 132C13019X |
| Socket | 1-4 | 3 | 73 | 132A13019X |
| Socket | 1-4 | 1 | 57 | 132C13029X |
| Socket | 1-4 | 3 | 74 | 132A13029X |
| Socket | 1-4 | 1 | 58 | 132C13039X |
| Socket | 1-4 | 3 | 75 | 132A13039X |
| Socket | 5 | 1 | 66 | 132C13060X |
| Socket | 5 | 3 | 81 | 132A13060X |
| Socket | 5 | 1 | 67 | 132C13070X |
| Socket | 5 | 3 | 82 | 132A13070X |
| Socket | 5 | 1 | 65 | 132C13059X |
| Socket | 5 | 3 | 85 | 132A13059X |
| Socket | 5 | 1 | 60 | 132C13049X |
| Socket | 5 | 3 | 77 | 132A13049X |

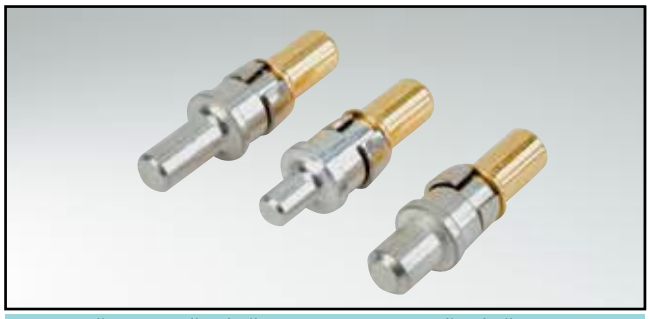
**Plug contact**

| Contact type | Shell size | Quality class | Termination* | Part Number |
|---|---|---|---|---|
| Plug | 1-4 | 1 | 55 | 131C13009X |
| Plug | 1-4 | 3 | 59 | 131A13009X |
| Plug | 1-4 | 1 | 56 | 131C13019X |
| Plug | 1-4 | 3 | 73 | 131A13019X |
| Plug | 1-4 | 1 | 57 | 131C13029X |
| Plug | 1-4 | 3 | 74 | 131A13029X |
| Plug | 1-4 | 1 | 58 | 131C13039X |
| Plug | 1-4 | 3 | 75 | 131A13039X |
| Plug | 5 | 1 | 66 | 131C13060X |
| Plug | 5 | 3 | 81 | 131A13060X |
| Plug | 5 | 1 | 67 | 131C13070X |
| Plug | 5 | 3 | 82 | 131A13070X |
| Plug | 5 | 1 | 65 | 131C13059X |
| Plug | 5 | 3 | 85 | 131A13059X |
| Plug | 5 | 1 | 60 | 131C13049X |
| Plug | 5 | 3 | 77 | 131A13049X |
| Plug premating | 1-4 | 1 | | 131C13109X |
| Plug premating | 1-4 | 1 | | 131C13119X |
| Plug premating | 1-4 | 1 | | 131C13129X |
| Plug premating | 1-4 | 1 | | 131C13139X |
| Plug premating | 5 | 1 | | 131C13160X |
| Plug premating | 5 | 1 | | 131C13170X |
| Plug premating | 5 | 1 | | 131C13159X |
| Plug premating | 5 | 1 | | 131C13149X |

*Code use with part number creator

# Combination D-SUB Contacts

## High power contacts – Solder pin – Straight



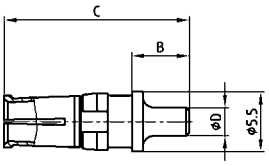
RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### Description

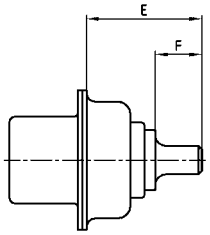
- Precision machined contacts
- Quality class 3: 50 mating cycles (gold plated)
- Quality class 1: 500 mating cycles (gold plated)
- Mating side gold plated
- Termination side tin plated
- Other quality classes on request
- To order these preassembled in the connector, use the termination code shown below, in the part number creator at the front of this section

### Product drawing

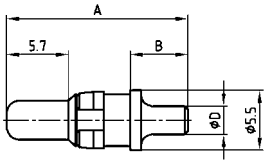
Socket contact




Installation dimension



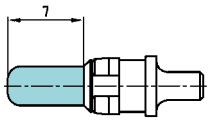

Plug contact




| Current rating | Termination | A | B | C | Ø D | E | F |
|---|---|---|---|---|---|---|---|
| 20A | 48/68** | 15.84 | 4.60 | 15.98 | 1.95 | 9.65 | 3.80 |
| 20A | 49/69 | 16.84 | 5.30 | 16.98 | 2.60 | 10.65 | 4.30 |
| 20A | 50/70** | 16.24 | 4.70 | 16.38 | 2.85 | 10.05 | 3.70 |
| 30A | 51/71 | 19.04 | 7.50 | 19.18 | 3.18 | 12.85 | 6.70 |
| 40A | 52/72 | 17.29 | 5.75 | 17.43 | 3.75 | 11.10 | 4.75 |

| PCB hole diameter at: |
|---|
| 1.95 = 2.30 ± 0.1 |
| 2.60 = 3.00 ± 0.1 |
| 2.85 = 3.20 ± 0.1 |
| 3.18 = 3.60 ± 0.1 |
| 3.75 = 4.10 ± 0.1 |

Premating contact




### Order data

**Socket contact**

| Contact type | Ampere | Quality class | Termination* | Part Number |
|---|---|---|---|---|
| Socket | 20 A | 1 | 48** | 132C12019X |
| Socket | 20 A | 3 | 68** | 132A12019X |
| Socket | 20 A | 1 | 49 | 132C12029X |
| Socket | 20 A | 3 | 69 | 132A12029X |
| Socket | 20 A | 1 | 50** | 132C12039X |
| Socket | 20 A | 3 | 70** | 132A12039X |
| Socket | 30 A | 1 | 51 | 132C12049X |
| Socket | 30 A | 3 | 71 | 132A12049X |
| Socket | 40 A | 1 | 52 | 132C12059X |
| Socket | 40 A | 3 | 72 | 132A12059X |

**Plug contact**

| Contact type | Ampere | Quality class | Termination* | Part Number |
|---|---|---|---|---|
| Plug | 20 A | 1 | 48** | 131C12019X |
| Plug | 20 A | 3 | 68** | 131A12019X |
| Plug | 20 A | 1 | 49 | 131C12029X |
| Plug | 20 A | 3 | 69 | 131A12029X |
| Plug | 20 A | 1 | 50** | 131C12039X |
| Plug | 20 A | 3 | 70** | 131A12039X |
| Plug | 30 A | 1 | 51 | 131C12049X |
| Plug | 30 A | 3 | 71 | 131A12049X |
| Plug | 40 A | 1 | 52 | 131C12059X |
| Plug | 40 A | 3 | 72 | 131A12059X |

**Premating contact**

| Contact type | Ampere | Quality class | Part Number |
|---|---|---|---|
| Plug premating | 20A/ Ø .077"/1.95 | 1 | 131C12119X |
| Plug premating | 20A/ Ø .102"/2.60 | 1 | 131C12129X |
| Plug premating | 20A/ Ø .112"/2.85 | 1 | 131C12139X |
| Plug premating | 30A/ Ø .125"/3.18 | 1 | 131C12149X |
| Plug premating | 40A/ Ø .148"/3.75 | 1 | 131C12159X |

*Code use with part number creator
**not suitable for PCB 2.3 + 3.2 mm

# Combination D-SUB Contacts

## High power contacts – Press-fit version – Straight

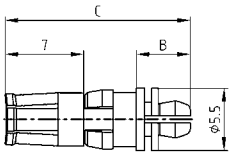
RoHS compliant

### Description

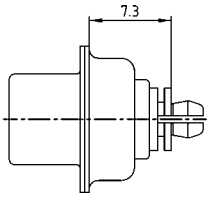
- Precision machined contacts
- Quality class 1: 500 mating cycles
- Mating area gold plated
- Press-fit area tin plated
- Other quality classes on request
- To order these preassembled in the connector, use the termination code shown below, in the part number creator at the front of this section

### Product drawing

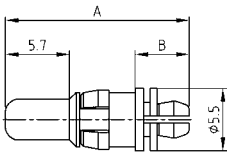
Socket contact




Installation dimension

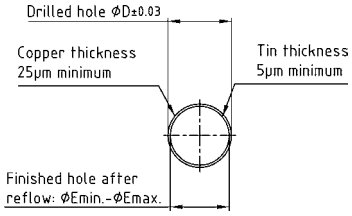



Plug contact




| Termination Type | Ampere | A | B | C | D +0.03 | E min. | E max. |
|---|---|---|---|---|---|---|---|
| P1 | 30A | 16.34 | 4.8 | 16.48 | 3.13 | 2.96 | 3.11 |
| P2 | 30A | 16.34 | 4.8 | 16.48 | 3.27 | 3.10 | 3.25 |
| P4 | 30A | 15.94 | 4.4 | 16.08 | 3.22 | 3.02 | 3.20 |

PCB hole drilling for high power pressfit contact




### Order data

**Socket contact**

| Contact type | Ampere | Quality class | Termination* | Part Number |
|---|---|---|---|---|
| Socket | 30 A | 1 | P1 | 132C00229A |
| Socket | 30 A | 1 | P2 | 132C00299A |
| Socket | 30 A | 1 | P4 | 132C19019X |

**Plug contact**

| Contact type | Ampere | Quality class | Termination* | Part Number |
|---|---|---|---|---|
| Plug | 30 A | 1 | P1 | 131C00319A |
| Plug | 30 A | 1 | P2 | 131C00389A |
| Plug | 30 A | 1 | P4 | 131C19019X |

# Combination D-SUB Contacts

## High voltage contacts – Solder termination – Straight and angled – For wire size AWG 20

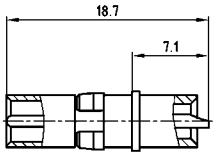
RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### Description

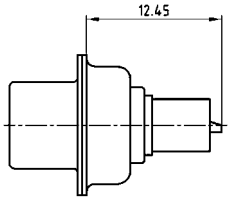
- Precision machined contacts for wire size **AWG 20**, max. 2,8 kV
- Quality class 1: 500 mating cycles (gold plated)
- Other quality classes on request

### Product drawing

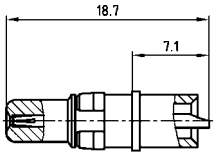
Socket contact straight



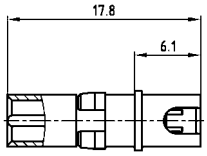

Installation dimension straight



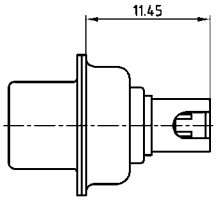

Plug contact straight



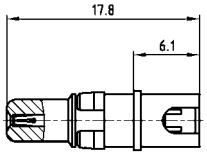

Socket contact angled



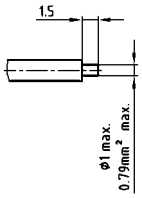

Installation dimension angled



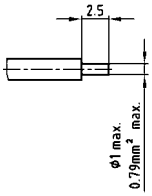

Plug contact angled




Wire stripping




Wire stripping




### Order data

**Socket contact**

| Contact type | AWG | Part Number |
|---|---|---|
| Socket/Straight | 20 | 132J14019X |
| Socket/Angled | 20 | 132J14519X |

**Plug contact**

| Contact type | AWG | Part Number |
|---|---|---|
| Plug/Straight | 20 | 131J14019X |
| Plug/Angled | 20 | 131J14519X |

# COMBINATION D-SUB CONTACTS

## Coaxial contacts – Straight – Inner conductor solder-, outer conductor crimp- / solder termination

RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

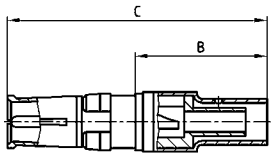
### DESCRIPTION

- 50 and 75 Ω-design
- Contact platings mating area:
  - .051 µ"/1.3 µm Au inner conductor / .032 µ"/0.8 µm Au outer conductor
  - .008µ"/0.2 µm Au inner and outer conductor
- Contact platings termination area:
  - .008 µ"/0.2 µm Au
  - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

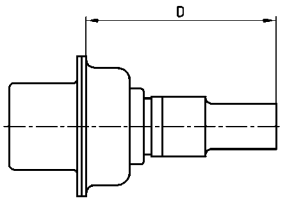
### PRODUCT DRAWING

## 50 Ω version

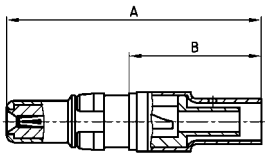
Socket contact



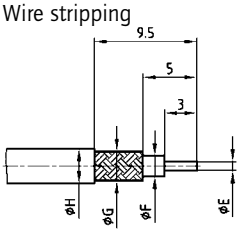

Installation dimension




Plug contact



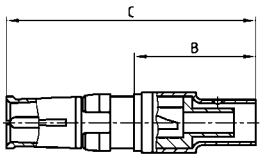

Wire stripping



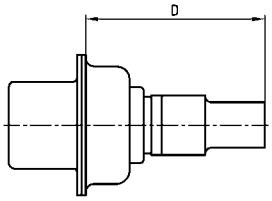

| Usable Cables RG | A | B | C | D max. | Ø E max. | Ø F max. | Ø G max. | Ø H max. |
|---|---|---|---|---|---|---|---|---|
| 178BU, 196AU,404 U | 22.50 | 11.20 | 23.00 | 17.55 | 0.85 | 1.20 | 1.40 | 2.30 |
| 174U, 188AU, 316U | 22.50 | 11.20 | 23.00 | 17.55 | 0.85 | 1.90 | 2.30 | 3.20 |
| 180BU | 22.50 | 11.20 | 23.00 | 17.55 | 0.85 | 2.80 | 3.10 | 4.50 |
| 58CU, 141AU | 26.30 | 14.80 | 26.80 | 20.15 | 1.00 | 3.00 | 3.60 | 5.20 |
| 316U double braided | 23.50 | 12.20 | 24.00 | 17.55 | 0.85 | 1.90 | 2.70 | 3.20 |

## 75 Ω version

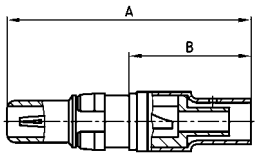
Socket contact



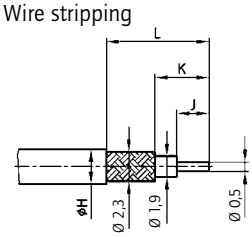

Installation dimension




Plug contact




Wire stripping




| Usable Cables RG | A | B | C | D max. | Ø H max. | J | K | L |
|---|---|---|---|---|---|---|---|---|
| 179BU, 187AU | 18.55 | 7.30 | 19.05 | 12.80 | 3.20 | 2.00 | 3.10 | 6.00 |
| 179BU, 187AU | 22.50 | 11.20 | 23.00 | 16.70 | 3.20 | 3.00 | 5.00 | 9.50 |

### ORDER DATA

**SOCKET CONTACT**

| Imp. | Cable | Part Number 1,3 µm / tin plated | Part Number 1,3 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 178BU, 196AU, 404U | 13-003004 | 132J20019X |
| 50 Ω | 174U, 188AU, 316U | 13-003014 | 132J20029X |
| 50 Ω | 180BU | 13-003024 | 132J20039X |
| 50 Ω | 58CU, 141AU | 13-003034 | 132J20049X |
| 50 Ω | 316U double braided | 13-003044 | 132J20059X |
| 75 Ω | 179BU, 187AU (B=.287"/7.3mm) | 13-003054 | 132J30019X |
| 75 Ω | 179BU, 187 AU (B=.441"/11.2 mm) | 13-003064 | 132J30029X |

**PLUG CONTACT**

| Imp. | Cable | Part Number 1,3 µm / tin plated | Part Number 1,3 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 178BU, 196AU, 404U | 13-003074 | 131J20019X |
| 50 Ω | 174U, 188AU, 316U | 13-003084 | 131J20029X |
| 50 Ω | 180BU | 13-003094 | 131J20039X |
| 50 Ω | 58CU, 141AU | 13-003104 | 131J20049X |
| 50 Ω | 316U double braided | 13-003114 | 131J20059X |
| 75 Ω | 179BU, 187AU (B=.287"/7.3mm) | 13-003124 | 131J30019X |
| 75 Ω | 179BU, 187 AU (B=.441"/11.2 mm) | 13-003134 | 131J30029X |

**SOCKET CONTACT**

| Imp. | Cable | Part Number 0,2 µm / tin plated | Part Number 0,2 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 178BU, 196AU, 404U | 13-003003 | 132A20019X |
| 50 Ω | 174U, 188AU, 316U | 13-003013 | 132A20029X |
| 50 Ω | 180BU | 13-003023 | 132A20039X |
| 50 Ω | 58CU, 141AU | 13-003033 | 132A20049X |
| 50 Ω | 316U double braided | 13-003043 | 132A20059X |
| 75 Ω | 179BU, 187AU (B=.287"/7.3mm) | 13-003053 | 132A30019X |
| 75 Ω | 179BU, 187 AU (B=.441"/11.2 mm) | 13-003063 | 132A30029X |

**PLUG CONTACT**

| Imp. | Cable | Part Number 0,2 µm / tin plated | Part Number 0,2 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 178BU, 196AU, 404U | 13-003073 | 131A20019X |
| 50 Ω | 174U, 188AU, 316U | 13-003083 | 131A20029X |
| 50 Ω | 180BU | 13-003093 | 131A20039X |
| 50 Ω | 58CU, 141AU | 13-003103 | 131A20049X |
| 50 Ω | 316U double braided | 13-003113 | 131A20059X |
| 75 Ω | 179BU, 187AU (B=.287"/7.3mm) | 13-003123 | 131A30019X |
| 75 Ω | 179BU, 187 AU (B=.441"/11.2 mm) | 13-003133 | 131A30029X |

# Combination D-SUB Contacts

## Coaxial contacts – Straight – Inner and outer conductor crimp termination

RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

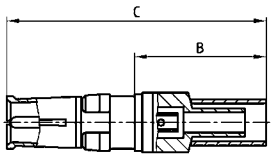
### Description

- 50 and 75 Ω-design
- Contact platings mating area:
  - .051 µ"/1.3 µm Au inner conductor / .032 µ"/0.8 µm Au outer conductor
  - .008µ"/0.2 µm Au inner and outer conductor
- Contact platings termination area:
  - .008 µ"/0.2 µm Au
  - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

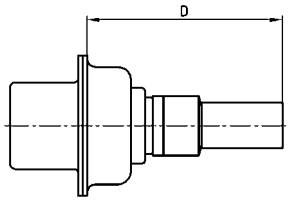
### Product drawing

## 50 Ω version

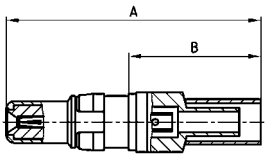
Socket contact



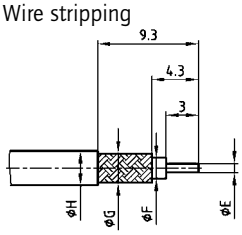

Installation dimension




Plug contact



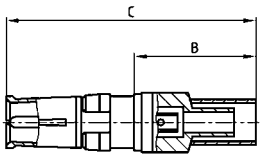

Wire stripping



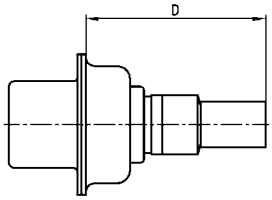

| Usable Cables RG | A | B | C | D max. | Ø E max. | Ø F max. | Ø G max. | Ø H max. |
|---|---|---|---|---|---|---|---|---|
| 174Bu, 188AU, 316U | 22.50 | 11.20 | 23.00 | 16.60 | 0.60 | 1.90 | 2.30 | 3.20 |
| 316U double braided | 22.50 | 11.20 | 23.00 | 16.60 | 0.60 | 1.90 | 3.00 | 3.80 |
| 58CU, 141AU | 22.20 | 10.90 | 22.70 | 16.30 | 1.30 | 3.70 | 4.30 | 5.20 |

## 75 Ω version

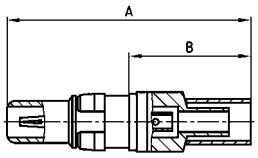
Socket contact



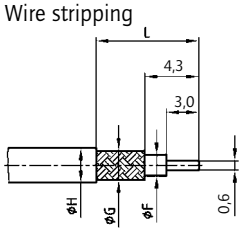

Installation dimension




Plug contact




Wire stripping




| Usable Cables RG | A | B | C | D | Ø F max. | Ø G max. | Ø H max. | L |
|---|---|---|---|---|---|---|---|---|
| 179BU, 187AU | 22.45 | 11.20 | 22.95 | 16.70 | 1.90 | 2.30 | 3.20 | 9.30 |
| 180BU | 21.65 | 10.40 | 22.15 | 15.90 | 2.80 | 3.20 | 4.50 | 8.80 |

### Order data

**Socket contact**

| Imp. | Cable | Part Number 1,3 µm / tin plated | Part Number 1,3 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 174U, 188AU, 316U | 13-003144 | 132J21019X |
| 50 Ω | 316U double braided | 13-003154 | 132J21029X |
| 50 Ω | 58CU, 141AU | 13-003164 | 132J21039X |
| 75 Ω | 179BU, 187AU | 13-003174 | 132J31019X |
| 75 Ω | 180BU | 13-003184 | 132J31029X |

**Plug contact**

| Imp. | Cable | Part Number 1,3 µm / tin plated | Part Number 1,3 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 174U, 188AU, 316U | 13-003194 | 131J21019X |
| 50 Ω | 316U double braided | 13-003204 | 131J21029X |
| 50 Ω | 58CU, 141AU | 13-003214 | 131J21039X |
| 75 Ω | 179BU, 187AU | 13-003224 | 131J31019X |
| 75 Ω | 180BU | 13-003234 | 131J31029X |

**Buchsenkontakt**

| Imp. | Cable | Part Number 0,2 µm / tin plated | Part Number 0,2 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 174U, 188AU, 316U | 13-003143 | 132A21019X |
| 50 Ω | 316U double braided | 13-003153 | 132A21029X |
| 50 Ω | 58CU, 141AU | 13-003163 | 132A21039X |
| 75 Ω | 179BU, 187AU | 13-003173 | 132A31019X |
| 75 Ω | 180BU | 13-003183 | 132A31029X |

**Plug contact**

| Imp. | Cable | Part Number 0,2 µm / tin plated | Part Number 0,2 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 174U, 188AU, 316U | 13-003193 | 131A21019X |
| 50 Ω | 316U double braided | 13-003203 | 131A21029X |
| 50 Ω | 58CU, 141AU | 13-003213 | 131A21039X |
| 75 Ω | 179BU, 187AU | 13-003223 | 131A31019X |
| 75 Ω | 180BU | 13-003233 | 131A31029X |

# Combination D-SUB Contacts

## Coaxial contacts – Angled – Inner conductor solder-, outer conductor crimp- / Solder termination

RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

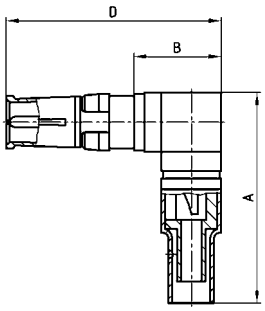
### Description

- 50 Ω design
- Contact platings mating area:
  - .051 µ"/1.3 µm Au inner conductor / .032 µ"/0.8 µm Au outer conductor
  - .008µ"/0.2 µm Au inner and outer conductor
- Contact platings termination area:
  - .008 µ"/0.2 µm Au
  - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

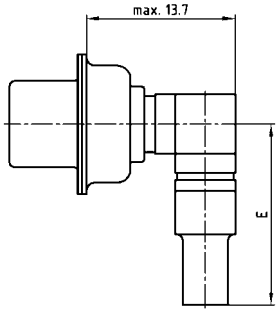
### Product drawing

### 50 Ω version

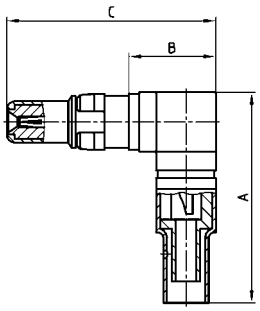
Socket contact



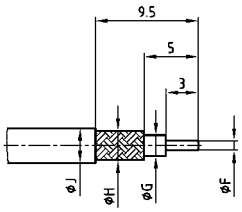

Installation dimension




Plug contact




Wire stripping




| Usable Cables RG | A | B | C | D | E | Ø F max. | Ø G max. | Ø H max. | Ø J max. |
|---|---|---|---|---|---|---|---|---|---|
| 174U, 188AU, 316U | 18.50 | 8.20 | 19.30 | 19.80 | 15.70 | 0.85 | 1.90 | 2.30 | 3.20 |
| 178BU, 196AU, 404U | 18.50 | 8.20 | 19.30 | 19.80 | 15.70 | 0.85 | 1.20 | 1.40 | 2.30 |
| 316U double braided | 19.50 | 8.20 | 19.30 | 19.80 | 16.70 | 0.85 | 1.90 | 2.70 | 3.50 |

### Order data

**Socket contact**

| Imp. | Cable | Part Number 1,3 µm / tin plated | Part Number 1,3 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 178BU, 196AU, 404U | 13-003244 | 132J22029X |
| 50 Ω | 174U, 188AU, 316U | 13-003254 | 132J22019X |
| 50 Ω | 316U double braided | 13-003264 | 132J22039X |

**Plug contact**

| Imp. | Cable | Part Number 1,3 µm / tin plated | Part Number 1,3 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 178BU, 196AU, 404U | 13-003274 | 131J22029X |
| 50 Ω | 174U, 188AU, 316U | 13-003284 | 131J22019X |
| 50 Ω | 316U double braided | 13-003294 | 131J22039X |

**Socket contact**

| Imp. | Cable | Part Number 0,2 µm / tin plated | Part Number 0,2 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 178BU, 196AU, 404U | 13-003243 | 132A22029X |
| 50 Ω | 174U, 188AU, 316U | 13-003253 | 132A22019X |
| 50 Ω | 316U double braided | 13-003263 | 132A22039X |

**Plug contact**

| Imp. | Cable | Part Number 0,2 µm / tin plated | Part Number 0,2 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 178BU, 196AU, 404U | 13-003273 | 131A22029X |
| 50 Ω | 174U, 188AU, 316U | 13-003283 | 131A22019X |
| 50 Ω | 316U double braided | 13-003293 | 131A22039X |

# COMBINATION D-SUB CONTACTS

## Coaxial contacts – Angled – Inner- and outer conductor crimp termination

RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

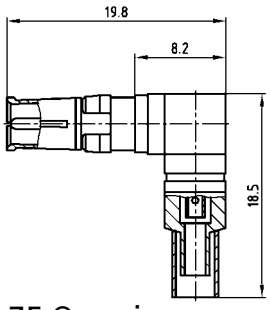
### DESCRIPTION

- 50 and 75 Ω-design
- Contact platings mating area:
  - .051 µ"/1.3 µm Au inner conductor / .032 µ"/0.8 µm Au outer conductor
  - .008µ"/0.2 µm Au inner and outer conductor
- Contact platings termination area:
  - .008 µ"/0.2 µm Au
  - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

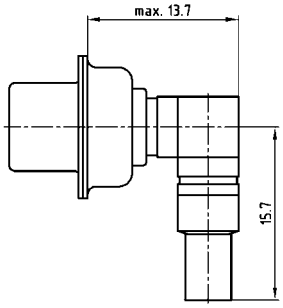
### PRODUCT DRAWING

### 50 Ω version

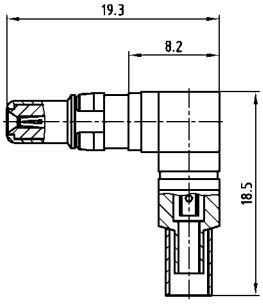
Socket contact




Installation dimension

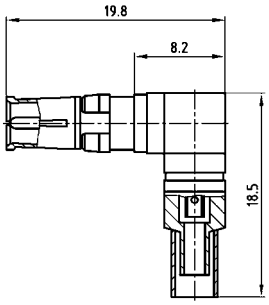



Plug contact

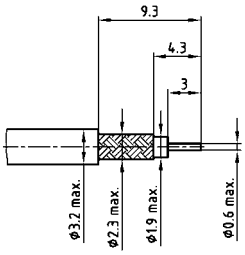



### 75 Ω version

Socket contact

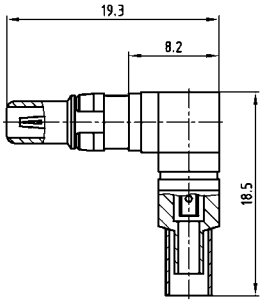



Wire stripping




verwendbare Kabel: RG- 174U, 188AU, 316U
Usable Cables

Plug contact




### ORDER DATA

**SOCKET CONTACT**

| Imp. | Cable | Part Number 1,3 µm / tin plated | Part Number 1,3 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 174U, 188AU, 316U | 13-003304 | 132J23019X |
| 75 Ω | 179BU, 187AU | 13-003314 | 132J33019X |

**PLUG CONTACT**

| Imp. | Cable | Part Number 1,3 µm / tin plated | Part Number 1,3 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 174U, 188AU, 316U | 13-003324 | 131J23019X |
| 75 Ω | 179BU, 187AU | 13-003334 | 131J33019X |

**SOCKET CONTACT**

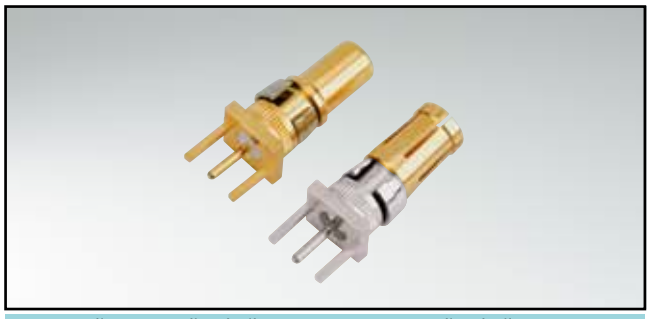
| Imp. | Cable | Part Number 0,2 µm / tin plated | Part Number 0,2 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 174U, 188AU, 316U | 13-003303 | 132A23019X |
| 75 Ω | 179BU, 187AU | 13-003313 | 132A33019X |

**PLUG CONTACT**

| Imp. | Cable | Part Number 0,2 µm / tin plated | Part Number 0,2 µm / 0,2 µm |
|---|---|---|---|
| 50 Ω | 174U, 188AU, 316U | 13-003323 | 131A23019X |
| 75 Ω | 179BU, 187AU | 13-003333 | 131A33019X |

# Combination D-SUB Contacts

## Coaxial contacts – Straight – PCB termination – 3 solder pins



RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

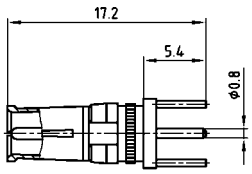
### Description

- 50 and 75 Ω-design
- Contact platings mating area:
  - .051 µ"/1.3 µm Au inner conductor / .032 µ"/0.8 µm Au outer conductor
  - .008µ"/0.2 µm Au inner and outer conductor
- Contact platings termination area:
  - .008 µ"/0.2 µm Au
  - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

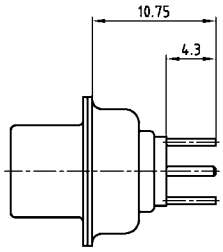
### Product drawing

#### 50 Ω version

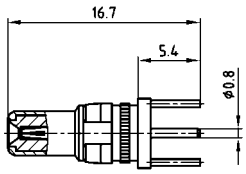
Socket contact




Installation dimension

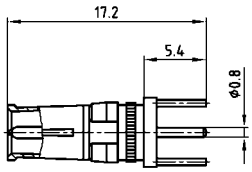


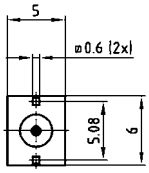

Plug contact



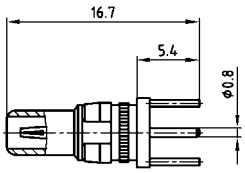

#### 75 Ω version

Socket contact




Plug contact




### Order data

**Socket contact**

| Imp. | Termination* | Part Number 1,3 µm / tin plated | Termination* | Part Number 1,3 µm / 0,2 µm |
|---|---|---|---|---|
| 50 Ω | L1 | 13-003344 | 76 | 132J24019X |
| 75 Ω | L2 | 13-003354 | 86 | 132J34019X |

**Plug contact**

| Imp. | Termination* | Part Number 1,3 µm / tin plated | Termination* | Part Number 1,3 µm / 0,2 µm |
|---|---|---|---|---|
| 50 Ω | L1 | 13-003364 | 76 | 131J24019X |
| 75 Ω | L2 | 13-003374 | 86 | 131J34019X |

**Socket contact**

| Imp. | Termination* | Part Number 0,2 µm / tin plated | Termination* | Part Number 0,2 µm / 0,2 µm |
|---|---|---|---|---|
| 50 Ω | L3 | 13-003343 | G7 | 132A24019X |
| 75 Ω | L4 | 13-003353 | G8 | 132A34019X |

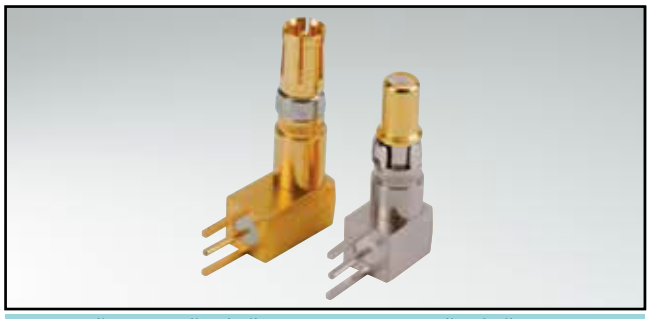
**Plug contact**

| Imp. | Termination* | Part Number 0,2 µm / tin plated | Termination* | Part Number 0,2 µm / 0,2 µm |
|---|---|---|---|---|
| 50 Ω | L3 | 13-003363 | G7 | 131A24019X |
| 75 Ω | L4 | 13-003373 | G8 | 131A34019X |

*Code use with part number creator

# COMBINATION D-SUB CONTACTS

## Coaxial contacts – Angled – PCB termination – 3 solder pins



RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

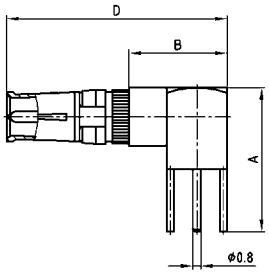
### DESCRIPTION

- 50 and 75 Ω-design
- Contact platings mating area:
  - .051 µ"/1.3 µm Au inner conductor / .032 µ"/0.8 µm Au outer conductor
  - .008µ"/0.2 µm Au inner and outer conductor
- Contact platings termination area:
  - .008 µ"/0.2 µm Au
  - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

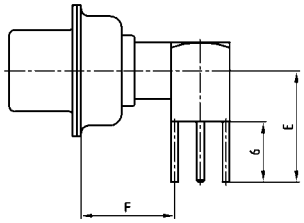
### PRODUCT DRAWING

### 50 Ω version

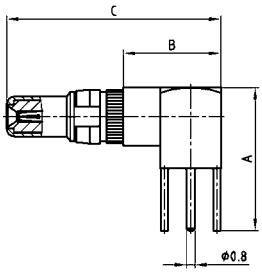
Socket contact




Installation dimension

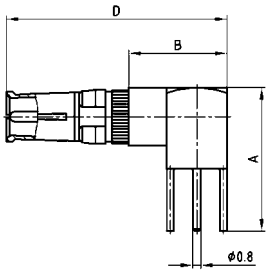


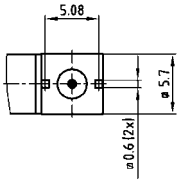

Plug contact




### 75 Ω version

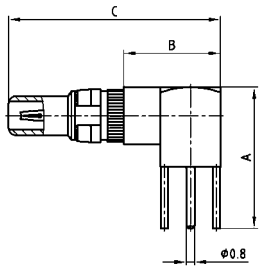
Socket contact




| Shellsize | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| 1-4 | 13.80 | 9.30 | 20.70 | 21.20 | 11.00 | 9.30 |
| 5 | 16.80 | 11.80 | 23.20 | 23.70 | 14.00 | 11.80 |

Plug contact




### ORDER DATA

**SOCKET CONTACT**

| Imp. | Shell size | Termination* | Part Number 1,3 µm / tin plated | Termination* | Part Number 1,3 µm / 0,2 µm |
|---|---|---|---|---|---|
| 50 Ω | 1-4 | L5 | 13-003384 | 78 | 132J25019X |
| 50 Ω | 5 | L6 | 13-003394 | 79 | 132J25029X |
| 75 Ω | 1-4 | L7 | 13-003404 | 88 | 132J35019X |
| 75 Ω | 5 | L8 | 13-003414 | 89 | 132J35029X |

**PLUG CONTACT**

| Imp. | Shell size | Termination* | Part Number 1,3 µm / tin plated | Termination* | Part Number 1,3 µm / 0,2 µm |
|---|---|---|---|---|---|
| 50 Ω | 1-4 | L5 | 13-003424 | 78 | 131J25019X |
| 50 Ω | 5 | L6 | 13-003434 | 79 | 131J25029X |
| 75 Ω | 1-4 | L7 | 13-003444 | 88 | 131J35019X |
| 75 Ω | 5 | L8 | 13-003454 | 89 | 131J35029X |

**SOCKET CONTACT**

| Imp. | Shell size | Termination* | Part Number 0,2 µm / tin plated | Termination* | Part Number 0,2 µm / 0,2 µm |
|---|---|---|---|---|---|
| 50 Ω | 1-4 | L9 | 13-003383 | G9 | 132A25019X |
| 50 Ω | 5 | M1 | 13-003393 | H1 | 132A25029X |
| 75 Ω | 1-4 | M2 | 13-003403 | H2 | 132A35019X |
| 75 Ω | 5 | M3 | 13-003413 | H3 | 132A35029X |

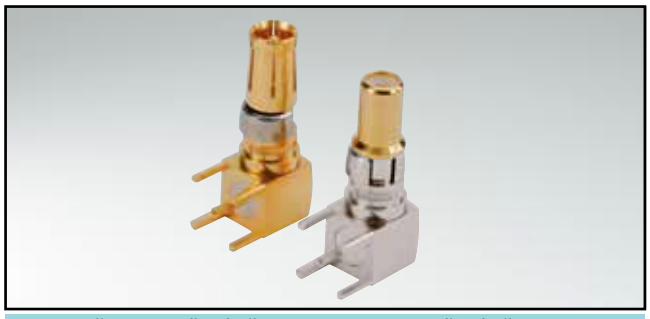
**PLUG CONTACT**

| Imp. | Shell size | Termination* | Part Number 0,2 µm / tin plated | Termination* | Part Number 0,2 µm / 0,2 µm |
|---|---|---|---|---|---|
| 50 Ω | 1-4 | L9 | 13-003423 | G9 | 131A25019X |
| 50 Ω | 5 | M1 | 13-003433 | H1 | 131A25029X |
| 75 Ω | 1-4 | M2 | 13-003443 | H2 | 131A35019X |
| 75 Ω | 5 | M3 | 13-003453 | H3 | 131A35029X |

*Code use with part number creator

# Combination D-SUB Contacts

## Coaxial contacts – Angled – PCB termination – 5 solder pins



RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

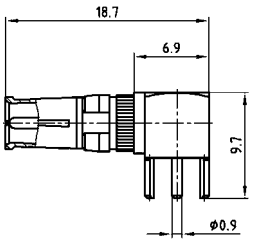
### Description

- 50 and 75 Ω-design
- Contact platings mating area:
  - .051 µ"/1.3 µm Au inner conductor / .032 µ"/0.8 µm Au outer conductor
  - .008µ"/0.2 µm Au inner and outer conductor
- Contact platings termination area:
  - .008 µ"/0.2 µm Au
  - tin plated
- Other platings on request

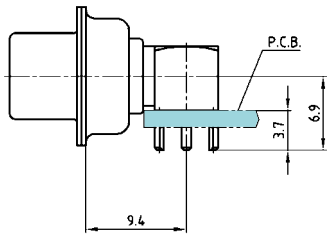
### Product drawing

#### 50 Ω version

Socket contact

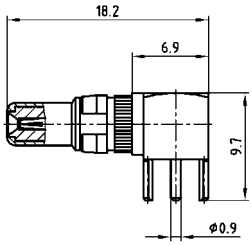



Installation dimension



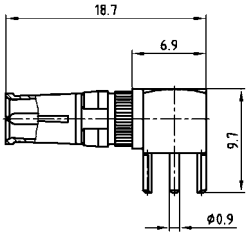

For mounting connector on edge of PCB without metal bracket

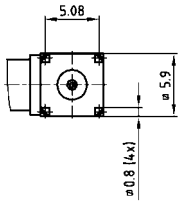
Plug contact



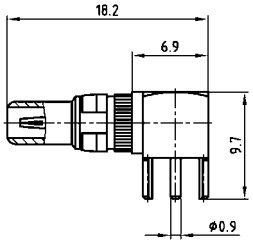

#### 75 Ω version

Socket contact




Plug contact




### Order data

**Socket contact**

| Imp. | Termination* | Part Number 1,3 µm / tin plated | Termination* | Part Number 1,3 µm / 0,2 µm |
|---|---|---|---|---|
| 50 Ω | M4 | 13-003464 | 80 | 132J25519X |
| 75 Ω | M5 | 13-003474 | 90 | 132J35519X |

**Plug contact**

| Imp. | Termination* | Part Number 1,3 µm / tin plated | Termination* | Part Number 1,3 µm / 0,2 µm |
|---|---|---|---|---|
| 50 Ω | M4 | 13-003484 | 80 | 131J25519X |
| 75 Ω | M5 | 13-003494 | 90 | 131J35519X |

**Socket contact**

| Imp. | Termination* | Part Number 0,2 µm / tin plated | Termination* | Part Number 0,2 µm / 0,2 µm |
|---|---|---|---|---|
| 50 Ω | M6 | 13-003463 | H4 | 132A25519X |
| 75 Ω | M7 | 13-003473 | H5 | 132A35519X |

**Plug contact**

| Imp. | Termination* | Part Number 0,2 µm / tin plated | Termination* | Part Number 0,2 µm / 0,2 µm |
|---|---|---|---|---|
| 50 Ω | M6 | 13-003483 | H4 | 131A25519X |
| 75 Ω | M7 | 13-003493 | H5 | 131A35519X |

*Code use with part number creator

# COMBINATION D-SUB – DUAL PORT WITH SIGNAL AND POWER CONTACTS

## Solder pin – Angled – Precision machined contacts – Connector spacing .750"/19,05 mm

RoHS compliant

### DESCRIPTION

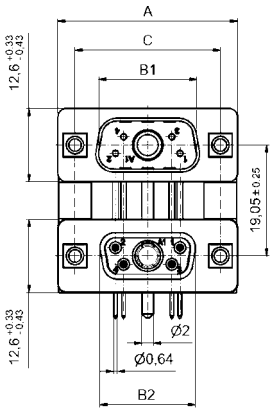
- Designs: **5W1/ 7W2/ 13W3/ 17W2/ 17W5**
- Mounting styles:
  - with mounting bracket and 4-40 UNC threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)
- Other variations on request
- **Upper connector is rotated 180 degrees**

### PRODUCT DRAWING

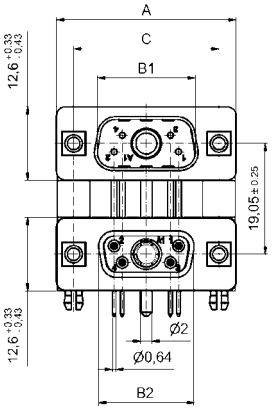
| Type | A $^{+0}_{-0.76}$ | B1 $^{+0.25}_{-0}$ | B2 $^{+0}_{-0.25}$ | C | D $^{+0}_{-0.3}$ |
|---|---|---|---|---|---|
| 5W1 | 31.19 | 16.79 | 16.46 | 25.00 $^{+0.12}_{-0.12}$ | 6.12 |
| 7W2 | 39.52 | 25.12 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 13W3 | 53.42 | 38.84 | 38.50 | 47.04 $^{+0.13}$ | 5.99 |
| 17W2 | 53.42 | 38.84 | 38.50 | 47.04 $^{+0.13}$ | 5.99 |
| 17W5 | 69.70 | 55.30 | 54.96 | 63.50 $^{+0.13}$ | 5.99 |

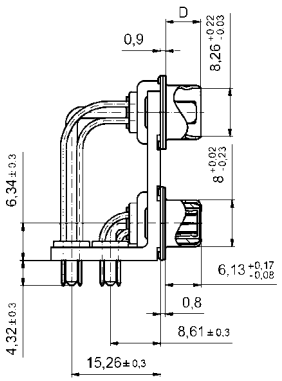
**Graphical representation of only one variant!**

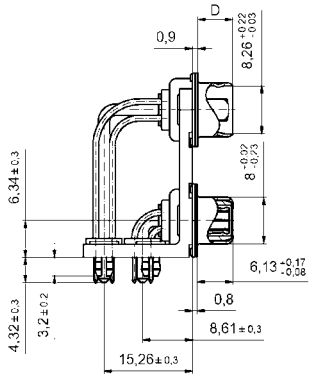
Mounting style: 4-40 UNC threaded insert

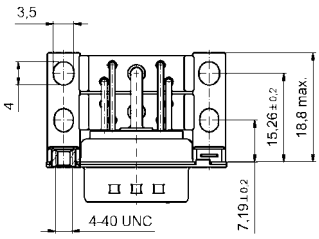


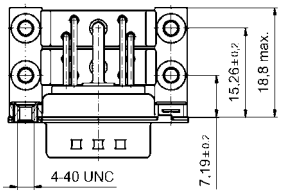

Mounting style: PCB clip and 4-40 UNC threaded insert



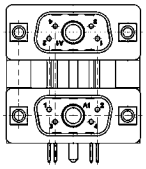



# Combination D-SUB – Dual port variations

## Solder pin – Angled – Precision machined contacts – Connector spacing .750"/19,05 mm

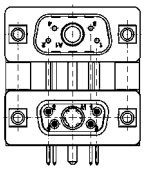
### Order data



Variation:
plug upper –
plug bottom

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 x 5W1 | Threaded insert | 13-001013 |
| 2 X 7W2 | Threaded insert | 13-001023 |
| 2 X 13W3 | Threaded insert | 13-001033 |
| 2 X 17W2 | Threaded insert | 13-001043 |
| 2 X 17W5 | Threaded insert | 13-001053 |

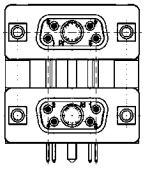
| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 x 5W1 | Threaded insert/PCB clip | 13-001213 |
| 2 X 7W2 | Threaded insert/PCB clip | 13-001223 |
| 2 X 13W3 | Threaded insert/PCB clip | 13-001233 |
| 2 X 17W2 | Threaded insert/PCB clip | 13-001243 |
| 2 X 17W5 | Threaded insert/PCB clip | 13-001253 |



Variation:
plug upper –
socket bottom

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 x 5W1 | Threaded insert | 13-001063 |
| 2 X 7W2 | Threaded insert | 13-001073 |
| 2 X 13W3 | Threaded insert | 13-001083 |
| 2 X 17W2 | Threaded insert | 13-001093 |
| 2 X 17W5 | Threaded insert | 13-001103 |

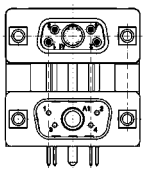
| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 x 5W1 | Threaded insert/PCB clip | 13-001263 |
| 2 X 7W2 | Threaded insert/PCB clip | 13-001273 |
| 2 X 13W3 | Threaded insert/PCB clip | 13-001283 |
| 2 X 17W2 | Threaded insert/PCB clip | 13-001293 |
| 2 X 17W5 | Threaded insert/PCB clip | 13-001303 |



Variation:
socket upper –
socket bottom

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 x 5W1 | Threaded insert | 13-001113 |
| 2 X 7W2 | Threaded insert | 13-001123 |
| 2 X 13W3 | Threaded insert | 13-001133 |
| 2 X 17W2 | Threaded insert | 13-001143 |
| 2 X 17W5 | Threaded insert | 13-001153 |

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 x 5W1 | Threaded insert/PCB clip | 13-001313 |
| 2 X 7W2 | Threaded insert/PCB clip | 13-001323 |
| 2 X 13W3 | Threaded insert/PCB clip | 13-001333 |
| 2 X 17W2 | Threaded insert/PCB clip | 13-001343 |
| 2 X 17W5 | Threaded insert/PCB clip | 13-001353 |



Variation:
socket upper –
plug bottom

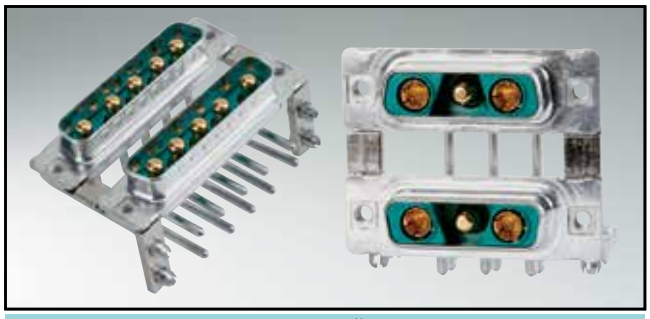
| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 x 5W1 | Threaded insert | 13-001163 |
| 2 X 7W2 | Threaded insert | 13-001173 |
| 2 X 13W3 | Threaded insert | 13-001183 |
| 2 X 17W2 | Threaded insert | 13-001193 |
| 2 X 17W5 | Threaded insert | 13-001203 |

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 x 5W1 | Threaded insert/PCB clip | 13-001363 |
| 2 X 7W2 | Threaded insert/PCB clip | 13-001373 |
| 2 X 13W3 | Threaded insert/PCB clip | 13-001383 |
| 2 X 17W2 | Threaded insert/PCB clip | 13-001393 |
| 2 X 17W5 | Threaded insert/PCB clip | 13-001403 |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# COMBINATION D-SUB – DUAL PORT WITH POWER CONTACTS

## Solder pin – Angled – Precision machined contacts – Connector spacing .750"/19,05 mm



RoHS compliant

### DESCRIPTION

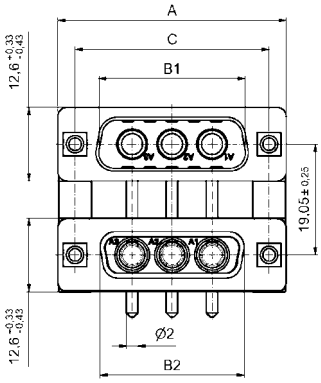
- Designs: **2W2C/ 3W3/ 3W3C/ 5W5/ 8W8**
- Mounting styles:
  - with mounting bracket and 4-40 UNC threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)
- **Upper connector is rotated 180 degrees**

### PRODUCT DRAWING

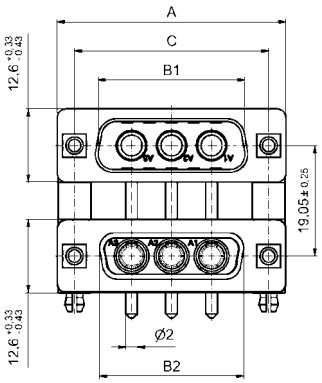
| Type | A $^{+0}_{-0.76}$ | B1 $^{+0.25}_{-0}$ | B2 $^{+0}_{-0.25}$ | C | D $^{+0}_{-0.3}$ |
|---|---|---|---|---|---|
| 2W2C | 31.19 | 16.79 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 3W3 | 39.52 | 25.12 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 3W3C | 39.52 | 25.12 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 5W5 | 53.42 | 38.84 | 38.50 | 47.04 ±0.13 | 5.99 |
| 8W8 | 69.70 | 55.30 | 54.96 | 63.50 ±0.13 | 5.99 |

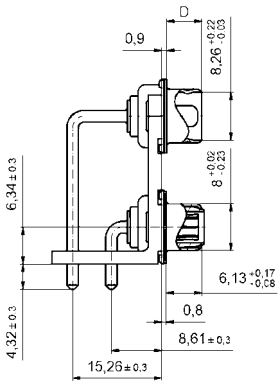
**Graphical representation of only one variant!**

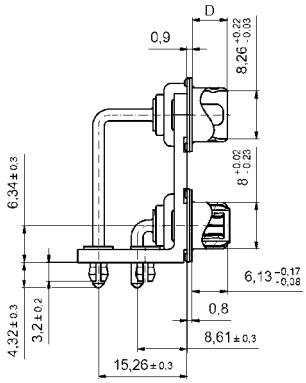
Mounting style: 4-40 UNC threaded insert

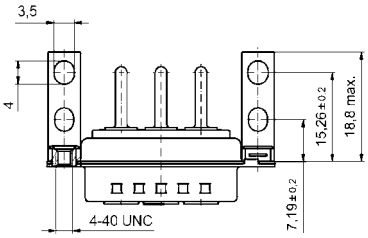


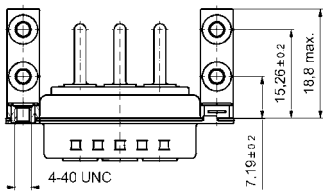

Mounting style: PCB clip and 4-40 UNC threaded insert



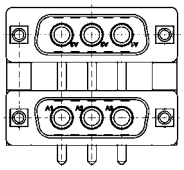



# Combination D-SUB – Dual port variations

## Solder pin – Angled – Precision machined contacts – Connector spacing .750"/19,05 mm

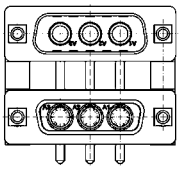
### Order data



Variation:
plug upper –
plug bottom

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 X 3W3 | Threaded insert | 13-001413 |
| 2 X 3W3 | Threaded insert | 13-001423 |
| 2 X 3W3C | Threaded insert | 13-001433 |
| 2 X 5W5 | Threaded insert | 13-001443 |
| 2 X 8W8 | Threaded insert | 13-001453 |

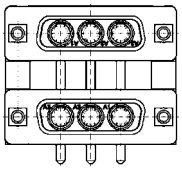
| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 X 2W2C | Threaded insert/PCB clip | 13-001613 |
| 2 X 3W3 | Threaded insert/PCB clip | 13-001623 |
| 2 X 3W3C | Threaded insert/PCB clip | 13-001633 |
| 2 X 5W5 | Threaded insert/PCB clip | 13-001643 |
| 2 X 8W8 | Threaded insert/PCB clip | 13-001653 |



Variation:
plug upper –
socket bottom

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 X 2W2C | Threaded insert | 13-001463 |
| 2 X 3W3 | Threaded insert | 13-001473 |
| 2 X 3W3C | Threaded insert | 13-001483 |
| 2 X 5W5 | Threaded insert | 13-001493 |
| 2 X 8W8 | Threaded insert | 13-001503 |

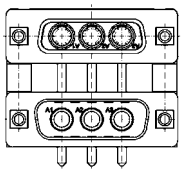
| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 X 2W2C | Threaded insert/PCB clip | 13-001663 |
| 2 X 3W3 | Threaded insert/PCB clip | 13-001673 |
| 2 X 3W3C | Threaded insert/PCB clip | 13-001683 |
| 2 X 5W5 | Threaded insert/PCB clip | 13-001693 |
| 2 X 8W8 | Threaded insert/PCB clip | 13-001703 |



Variation:
socket upper –
socket bottom

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 X 2W2C | Threaded insert | 13-001513 |
| 2 X 3W3 | Threaded insert | 13-001523 |
| 2 X 3W3C | Threaded insert | 13-001533 |
| 2 X 5W5 | Threaded insert | 13-001543 |
| 2 X 8W8 | Threaded insert | 13-001553 |

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 X 2W2C | Threaded insert/PCB clip | 13-001713 |
| 2 X 3W3 | Threaded insert/PCB clip | 13-001723 |
| 2 X 3W3C | Threaded insert/PCB clip | 13-001733 |
| 2 X 5W5 | Threaded insert/PCB clip | 13-001743 |
| 2 X 8W8 | Threaded insert/PCB clip | 13-001753 |



Variation:
socket upper –
plug bottom

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 X 2W2C | Threaded insert | 13-001563 |
| 2 X 3W3 | Threaded insert | 13-001573 |
| 2 X 3W3C | Threaded insert | 13-001583 |
| 2 X 5W5 | Threaded insert | 13-001593 |
| 2 X 8W8 | Threaded insert | 13-001603 |

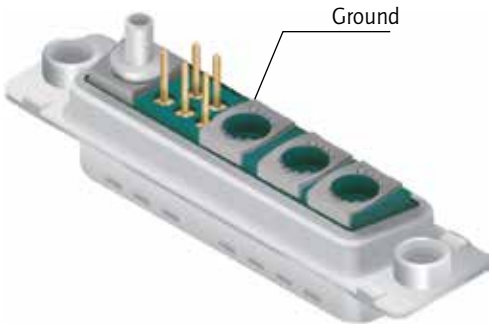
| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 2 X 2W2C | Threaded insert/PCB clip | 13-001763 |
| 2 X 3W3 | Threaded insert/PCB clip | 13-001773 |
| 2 X 3W3C | Threaded insert/PCB clip | 13-001783 |
| 2 X 5W5 | Threaded insert/PCB clip | 13-001793 |
| 2 X 8W8 | Threaded insert/PCB clip | 13-001803 |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# Combination D-SUB Accessories

## Grounding for coaxial contacts

To optimize a perfect ground connection from the coaxial contact (outer conductor) to the metal shell. (Factory installed)..




## Guide post

For safe mating of male and female connectors with contact loss. Guide post made for metal can be installed after connector is mounted.

**Part Number**

| | |
|---|---|
| **Guide post** | **160X11279X** |

## Hole plug

The hole plug can be used for both male and female connector. The assembly is implemented from the mating side. The hole plug is used to plug un wanted holes in the insulator.

**Material:** Polyester GF UL 94 V-O
**Colour:** black

**Part Number**

| | |
|---|---|
| **Hole plug** | **160X0939X** |

# Conversion table

| µm 1/1000 mm | µinch 1/1000 inch |
|---|---|
| 0,10 | 4 |
| 0,20 | 8 |
| 0,25 | 10 |
| 0,30 | 12 |
| 0,50 | 20 |
| 0,70 | 28 |
| 0,75 | 30 |
| 0,80 | 32 |
| 1,00 | 39 |
| 1,27 | 50 |
| 2,00 | 79 |
| 2,50 | 98 |
| 3,00 | 118 |
| 4,00 | 157 |
| 5,00 | 197 |

| mm | inch |
|---|---|
| 0,10 | .004 |
| 0,20 | .008 |
| 0,25 | .012 |
| 0,35 | .014 |
| 0,40 | .016 |
| 0,45 | .018 |
| 0,50 | .020 |
| 0,55 | .022 |
| 0,60 | .024 |
| 0,64 | .025 |
| 0,65 | .026 |
| 0,70 | .028 |
| 0,75 | .030 |
| 0,80 | .032 |
| 0,85 | .034 |
| 0,90 | .035 |
| 1,00 | .039 |
| 1,20 | .047 |
| 1,25 | .049 |
| 1,27 | .050 |
| 1,30 | .051 |
| 1,35 | .053 |
| 1,40 | .055 |
| 1,45 | .057 |
| 1,50 | .059 |
| 1,60 | .063 |
| 1,70 | .067 |
| 1,80 | .071 |
| 1,85 | .073 |
| 1,90 | .075 |
| 2,00 | .079 |
| 2,10 | .083 |
| 2,20 | .087 |
| 2,30 | .091 |
| 2,40 | .095 |
| 2,50 | .098 |
| 2,54 | .100 |
| 2,60 | .102 |
| 2,70 | .106 |
| 2,80 | .110 |
| 2,84 | .112 |
| 2,90 | .114 |
| 3,00 | .118 |
| 3,10 | .122 |
| 3,20 | .126 |

| mm | inch |
|---|---|
| 3,30 | .130 |
| 3,40 | .134 |
| 3,50 | .138 |
| 3,60 | .142 |
| 3,70 | .146 |
| 3,80 | .150 |
| 3,81 | .150 |
| 3,90 | .154 |
| 4,00 | .158 |
| 4,10 | .161 |
| 4,20 | .165 |
| 4,30 | .169 |
| 4,50 | .177 |
| 4,70 | .185 |
| 4,90 | .193 |
| 5,00 | .197 |
| 5,08 | .200 |
| 5,10 | .201 |
| 5,20 | .205 |
| 5,30 | .209 |
| 5,40 | .213 |
| 5,50 | .217 |
| 5,60 | .220 |
| 5,70 | .224 |
| 5,80 | .228 |
| 6,00 | .236 |
| 6,10 | .240 |
| 6,40 | .252 |
| 6,50 | .256 |
| 6,60 | .260 |
| 6,70 | .264 |
| 6,80 | .268 |
| 6,90 | .272 |
| 7,00 | .276 |
| 7,10 | .280 |
| 7,20 | .283 |
| 7,40 | .291 |
| 7,50 | .295 |
| 7,60 | .299 |
| 7,62 | .300 |
| 7,70 | .303 |
| 7,80 | .307 |
| 7,98 | .314 |
| 8,00 | .315 |
| 8,18 | .318 |
| 8,20 | .323 |
| 8,30 | .327 |
| 8,40 | .331 |
| 8,50 | .335 |
| 8,60 | .339 |
| 8,90 | .350 |
| 9,00 | .354 |
| 9,10 | .358 |
| 9,20 | .362 |
| 9,30 | .366 |
| 9,40 | .370 |
| 9,50 | .374 |
| 9,60 | .378 |
| 9,70 | .382 |
| 9,90 | .390 |
| 10,00 | .395 |

| mm | inch |
|---|---|
| 10,16 | .400 |
| 10,26 | .402 |
| 10,36 | .406 |
| 10,56 | .413 |
| 10,66 | .417 |
| 10,76 | .421 |
| 11,00 | .433 |
| 11,20 | .441 |
| 11,40 | .449 |
| 11,50 | .453 |
| 11,60 | .457 |
| 11,90 | .469 |
| 12,00 | .472 |
| 12,20 | .480 |
| 12,30 | .484 |
| 12,40 | .488 |
| 12,50 | .492 |
| 12,70 | .500 |
| 12,90 | .508 |
| 13,00 | .512 |
| 13,10 | .516 |
| 13,20 | .520 |
| 13,50 | .532 |
| 13,60 | .535 |
| 13,70 | .539 |
| 13,90 | .547 |
| 14,00 | .551 |
| 14,30 | .563 |
| 14,40 | .567 |
| 14,50 | .571 |
| 14,70 | .579 |
| 14,80 | .583 |
| 14,90 | .587 |
| 14,98 | .590 |
| 15,00 | .591 |
| 15,20 | .598 |
| 15,24 | .600 |
| 15,40 | .606 |
| 15,50 | .610 |
| 15,60 | .614 |
| 15,90 | .626 |
| 16,00 | .630 |
| 16,20 | .638 |
| 16,50 | .650 |
| 16,60 | .654 |
| 16,80 | .661 |
| 17,00 | .669 |
| 17,20 | .677 |
| 17,30 | .681 |
| 17,50 | .689 |
| 17,60 | .693 |
| 17,70 | .697 |
| 17,78 | .700 |
| 17,80 | .701 |
| 17,90 | .705 |
| 18,00 | .709 |
| 18,10 | .713 |
| 18,30 | .721 |
| 18,60 | .732 |
| 19,00 | .748 |
| 19,20 | .756 |

| mm | inch |
|---|---|
| 19,50 | .768 |
| 19,70 | .776 |
| 19,80 | .780 |
| 19,90 | .783 |
| 20,00 | .787 |
| 20,10 | .791 |
| 20,30 | .799 |
| 20,32 | .800 |
| 20,50 | .807 |
| 21,00 | .827 |
| 21,10 | .831 |
| 21,70 | .854 |
| 22,00 | .866 |
| 22,10 | .870 |
| 22,20 | .874 |
| 22,30 | .878 |
| 22,40 | .882 |
| 22,50 | .886 |
| 22,60 | .890 |
| 22,80 | .898 |
| 22,86 | .900 |
| 22,90 | .902 |
| 23,00 | .906 |
| 23,10 | .909 |
| 23,30 | .917 |
| 23,50 | .925 |
| 24,00 | .945 |
| 24,30 | .957 |
| 24,60 | .969 |
| 24,90 | .980 |
| 25,00 | .984 |
| 25,10 | .998 |
| 25,40 | 1.000 |
| 25,60 | 1.008 |
| 25,90 | 1.020 |
| 26,00 | 1.024 |
| 26,30 | 1.035 |
| 26,60 | 1.047 |
| 26,70 | 1.051 |
| 27,00 | 1.063 |
| 27,20 | 1.071 |
| 27,40 | 1.079 |
| 27,50 | 1.093 |
| 27,90 | 1.098 |
| 27,94 | 1.100 |
| 28,00 | 1.102 |
| 28,20 | 1.110 |
| 28,50 | 1.122 |
| 28,70 | 1.130 |
| 29,00 | 1.142 |
| 29,20 | 1.150 |
| 29,40 | 1.158 |
| 29,50 | 1.161 |
| 29,70 | 1.169 |
| 29,90 | 1.177 |
| 30,00 | 1.181 |
| 30,20 | 1.189 |
| 30,40 | 1.197 |
| 30,48 | 1.200 |
| 30,50 | 1.201 |
| 30,80 | 1.213 |

| mm | inch |
|---|---|
| 30,90 | 1.217 |
| 31,00 | 1.220 |
| 31,20 | 1.228 |
| 31,50 | 1.240 |
| 31,70 | 1.248 |
| 32,00 | 1.260 |
| 32,20 | 1.268 |
| 32,30 | 1.272 |
| 32,50 | 1.280 |
| 32,80 | 1.291 |
| 33,00 | 1.299 |
| 33,10 | 1.303 |
| 33,30 | 1.311 |
| 33,80 | 1.331 |
| 34,00 | 1.339 |
| 34,20 | 1.346 |
| 34,40 | 1.354 |
| 35,00 | 1.378 |
| 35,40 | 1.394 |
| 35,50 | 1.398 |
| 35,56 | 1.400 |
| 35,60 | 1.402 |
| 36,00 | 1.417 |
| 36,50 | 1.437 |
| 36,60 | 1.441 |
| 36,70 | 1.445 |
| 37,00 | 1.457 |
| 37,30 | 1.469 |
| 37,50 | 1.476 |
| 37,60 | 1.480 |
| 37,70 | 1.484 |
| 37,90 | 1.492 |
| 38,00 | 1.496 |
| 38,10 | 1.500 |
| 39,00 | 1.535 |
| 39,20 | 1.543 |
| 39,30 | 1.547 |
| 39,90 | 1.571 |
| 40,00 | 1.575 |
| 40,30 | 1.587 |
| 40,40 | 1.591 |
| 40,60 | 1.598 |
| 41,00 | 1.614 |
| 41,60 | 1.638 |
| 42,70 | 1.681 |
| 43,18 | 1.700 |
| 44,20 | 1.740 |
| 44,80 | 1.764 |
| 45,80 | 1.803 |
| 46,30 | 1.823 |
| 46,70 | 1.839 |
| 47,00 | 1.850 |
| 47,20 | 1.858 |
| 47,30 | 1.862 |
| 47,50 | 1.870 |
| 47,80 | 1.882 |
| 48,00 | 1.890 |
| 48,10 | 1.894 |
| 48,26 | 1.900 |
| 48,80 | 1.921 |
| 49,10 | 1.933 |

| mm | inch |
|---|---|
| 49,50 | 1.949 |
| 49,90 | 1.965 |
| 50,10 | 1.972 |
| 50,30 | 1.980 |
| 50,50 | 1.988 |
| 50,70 | 1.996 |
| 50,80 | 2.000 |
| 51,40 | 2.024 |
| 51,50 | 2.028 |
| 52,00 | 2.047 |
| 52,30 | 2.059 |
| 52,80 | 2.079 |
| 53,00 | 2.087 |
| 53,20 | 2.095 |
| 53,80 | 2.118 |
| 54,00 | 2.126 |
| 54,20 | 2.134 |
| 54,90 | 2.161 |
| 55,00 | 2.165 |
| 55,40 | 2.181 |
| 55,70 | 2.193 |
| 56,60 | 2.228 |
| 57,40 | 2.260 |
| 57,80 | 2.276 |
| 57,90 | 2.280 |
| 58,42 | 2.300 |
| 59,00 | 2.323 |
| 59,20 | 2.331 |
| 59,80 | 2.354 |
| 59,90 | 2.358 |
| 60,00 | 2.362 |
| 60,96 | 2.400 |
| 61,10 | 2.406 |
| 62,00 | 2.441 |
| 63,00 | 2.480 |
| 63,50 | 2.500 |
| 64,00 | 2.520 |
| 65,00 | 2.560 |
| 67,00 | 2.638 |
| 68,00 | 2.677 |
| 69,00 | 2.717 |
| 70,00 | 2.756 |
| 71,00 | 2.795 |
| 74,00 | 2.913 |
| 75,00 | 2.953 |
| 76,20 | 3.000 |
| 77,00 | 3.032 |
| 78,74 | 3.100 |
| 80,00 | 3.150 |
| 81,28 | 3.200 |
| 84,00 | 3.307 |
| 85,00 | 3.346 |
| 86,36 | 3.400 |
| 88,90 | 3.500 |
| 90,00 | 3.543 |
| 91,44 | 3.600 |
| 94,00 | 3.701 |
| 95,00 | 3.740 |
| 100,00 | 3.937 |
| 110,00 | 4.331 |
| 120,00 | 4.724 |

SECTION 3

# FILTER D-SUB CONNECTORS

At increasing data transfer rates and operating frequencies it becomes increasingly important to safeguard the function of electrical devices and systems in their interactive relationship so that operation can be free of interference. This is also the clear objective of the EMC law.

In applications where connectors penetrate shielded enclosures commonly represent a breakdown in shielding since the connector's plastic isolating body provides no shielding against any interference signals that may be present.

Therefore high frequency interference signals can be passed in or out of the system without hindrance.

The connector's contacts act as antennas that receive and transmit interference signals because filtering is typically implemented on the PC board.

Interface connectors with integrated filters can be of benefit in these cases.

CONEC filter D-subminiature connectors contribute to the protection of EMC zones. The intergrated filter inside the connector saves PCB-space and can be installed into an existing PCB layout. To replace an unfiltered connector into filtered one is simple and effective.

One of the standard filters offered by CONEC is the so-called "C filter".

Depending on the problem situations, other possible variations can be employed; a two-stage LC filter and a three stage PI filter (C-L-C) are also available in various connector configurations within the standard product line.

In some cases EMC problems do not become apparent until after a device has been put into service where it is exposed to interference in its installed location. Ambient conditions and the device influence one another mutually.
Where EMC problems arise under certain operating conditions, CONEC's broad product line of standardized D-SUB filter adapters with a myriad of filter capacities and different filter technologies represents a quick and effective solution.

Retrofit to the existing D-SUB interface connector, this can prove to be the solution to many different EMC problems.

The CONEC team will be glad to help you select the right product.

# Part Number Creator

2 4 1 A 1011 O X

**Product Line**

**Design**
1 = Plug connector, standard DWV
2 = Socket connector, standard DWV
3 = Adapter, standard DWV
4 = Adapter, high DWV
5 = Plug connector, high DWV
6 = Socket connector, high DWV
7* = Plug connector, ultra high DWV
8* = Socket connector, ultra high DWV
9* = Adapter, ultra high DWV

*on request

**Quality class for contacts**
A = Quality class 3 / 50 mating cycles
B = Quality class 2 / 200 mating cycles
C = Quality class 1 / 500 mating cycles

**Serial number**

**Design**
OX = Standard design

## Filter connectors for higher DWV

Increasing requirements, with respect to higher DWV for filter connectors, have induced us to carry out advanced development in this direction.
CONEC is capable of delivering filter connectors with DWV of 1500 VDC.

The various DWV ratings are as follows:

1 Standard DWV .....300/424 VDC
2 High DWV.....707 VDC
3 Ultra high DWV.....1000/1500 VDC (on request)

Furthermore, the filter connector can be designed for ultra high DWV of up to 2500 VDC at 10/700 pulse voltage.
Filter connectors so designed fulfill the standards established according to CE requirements, i.e. 1414 VDC.
For example, capacity ratings range from 180 pF to 1300 pF for standard series.

For special capacitiance values consult factury.

# Technical Data

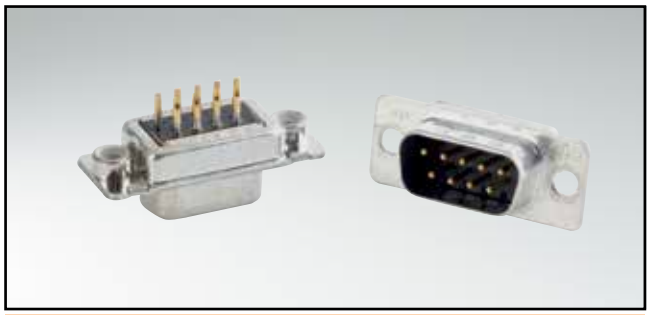
| Materials | Filter D-SUB Standard<br>9, 15, 25, 37 and 50 position | Filter D-SUB High Density<br>15, 25, 44, 62 and 78 position |
|---|---|---|
| Insulator | Polyester GF UL94 V-0 | |
| Contacts | CU alloy | |
| Contact plating | Gold plated over nickel, solder area tin plated only at PCB version | |
| Shell | Steel tin plated (on request: brass tin plated) | |
| **Mechanical and electrical characteristics** | | |
| Dielectric with standing voltage | • Standard 424 VDC<br>• Standard 300 VDC (for :T-Filter)<br>• High DWV 707 VDC<br>• Ultra high DWV 1500 VDC*<br>• Ultra high DWV 1000 VDC* (for :T-Filter)<br>*on request | • Standard 300 VDC |
| Working voltage | • Standard 100 VDC*<br>• High DWV 100 VDC*<br>• Ultra high DWV 200 VDC*<br>*Depending on isolation coordination (refer to DIN VDE 0110/IEC 664-1) | • Standard 100 VDC* |
| Contact resistance | Max. 10 mΩ prior to stressing, Δ R max. 10 mΩ after stressing per DIN 41652, Part 2 | |
| Insulation resistance | ≥ 1GΩ | |
| Current rating | 7.5 A (UL) / 5 A (CSA,VDE) | 3 A (UL,VDE) / 2.5 A (CSA) |
| Voltage surge 10/700µs | Standard 300 V<br>High Voltage 500 V | Standard 300 V |
| Mating and unmating forces | 9 pos. ≤ 30 N<br>15 pos. ≤ 50 N<br>25 pos. ≤ 83 N<br>37 pos. ≤ 123 N<br>50 pos. ≤ 167 N | 15 pos. ≤ 50 N<br>26 pos. ≤ 83 N<br>44 pos. ≤ 110 N<br>62 pos. ≤ 170 N |
| Temperature working range | -25°C to +105°C | -25°C to +85°C |
| Humidity | 40°C / 85% relative humidity / RH | |
| Capacitor values<br>For other capacitance values please contact the factory. | 180 pF ± 20% tolerance<br>370 pF ± 20% tolerance<br>830 pF ± 20% tolerance<br>1300 pF ± 20% tolerance<br>other capacitor values on request | 180 pF ± 20% tolerance<br>370 pF ± 20% tolerance<br>830 pF ± 20% tolerance |
| Quality class | A= Quality class 3 = 50 cycles, B = Quality class 2=200 cycles, C = Quality class 1 = 500 cycles | |

| Solder parameter | Preheating | | Solder terminal dipping parameters | |
|---|---|---|---|---|
| | max. Temperature | Duration | max. Solder bath Temperature | max. Terminal Immersion Time |
| Recommended wave-solder parameters | 100°C | 30s | 260°C | 5s |

Technical specifications are subject to change without notice.

# C-FILTER D-SUB STANDARD

## Solder cup – Precision machined contacts – For wire size AWG 26

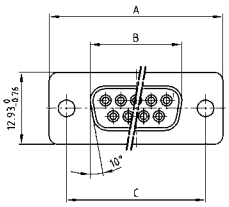


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### DESCRIPTION

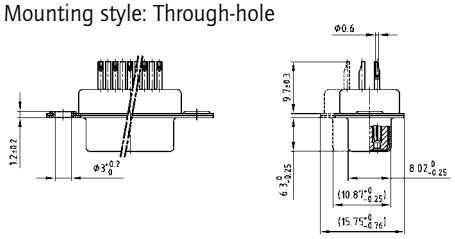
- Suitable for wire size **AWG 26**
- Mounting styles:
  - with through-hole, Ø .118"/3 mm
  - with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated on request)

### SOCKET CONNECTOR

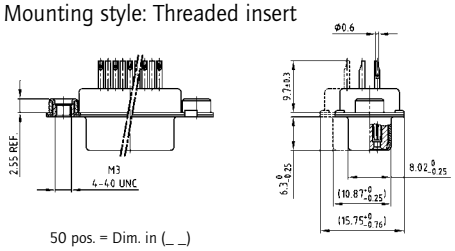


| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 15 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |
| 50 | 67.31 | 52.55 | 61.10 $^{+0.14}_{-0.11}$ |

Mounting style: Through-hole

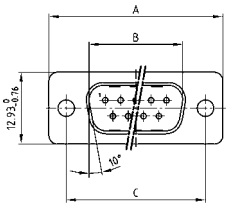


Mounting style: Threaded insert



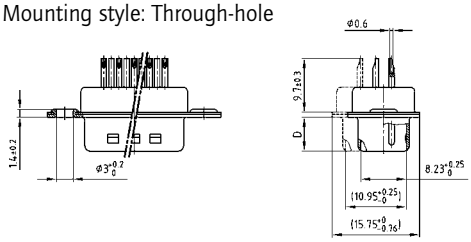
50 pos. = Dim. in (_ _)

### PLUG CONNECTOR

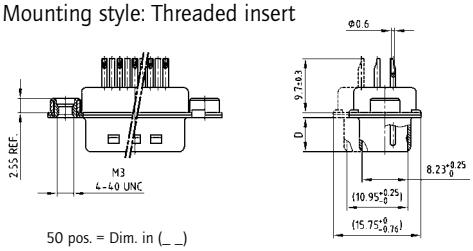


| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 50 | 67.31 | 52.68 | 61.10 $^{+0.14}_{-0.11}$ | 5.99 |

Mounting style: Through-hole



Mounting style: Threaded insert



50 pos. = Dim. in (_ _)

### ORDER DATA

## Capacitance 180 pF

**SOCKET CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 242A15910X |
| 15 | Through-hole | 242A15920X |
| 25 | Through-hole | 242A15930X |
| 37 | Through-hole | 242A15940X |
| 50 | Through-hole | 242A15950X |
| 09 | 4-40 UNC Threaded insert | 242A15960X |
| 15 | 4-40 UNC Threaded insert | 242A15970X |
| 25 | 4-40 UNC Threaded insert | 242A15980X |
| 37 | 4-40 UNC Threaded insert | 242A15990X |
| 50 | 4-40 UNC Threaded insert | 242A16000X |
| 09 | M3 Threaded insert | 242A16010X |
| 15 | M3 Threaded insert | 242A16020X |
| 25 | M3 Threaded insert | 242A16030X |
| 37 | M3 Threaded insert | 242A16040X |
| 50 | M3 Threaded insert | 242A16050X |

**PLUG CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 241A18530X |
| 15 | Through-hole | 241A18540X |
| 25 | Through-hole | 241A18550X |
| 37 | Through-hole | 241A18560X |
| 50 | Through-hole | 241A18570X |
| 09 | 4-40 UNC Threaded insert | 241A18580X |
| 15 | 4-40 UNC Threaded insert | 241A18590X |
| 25 | 4-40 UNC Threaded insert | 241A18600X |
| 37 | 4-40 UNC Threaded insert | 241A18610X |
| 50 | 4-40 UNC Threaded insert | 241A18620X |
| 09 | M3 Threaded insert | 241A18630X |
| 15 | M3 Threaded insert | 241A18640X |
| 25 | M3 Threaded insert | 241A18650X |
| 37 | M3 Threaded insert | 241A18660X |
| 50 | M3 Threaded insert | 241A18670X |

# C-Filter D-SUB Standard

## Solder cup – Precision machined contacts – For wire size AWG 26

### Order data

### Capacitance 370 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 242A11610X |
| 15 | Through-hole | 242A11620X |
| 25 | Through-hole | 242A11630X |
| 37 | Through-hole | 242A11640X |
| 50 | Through-hole | 242A15820X |
| 09 | 4-40 UNC Threaded insert | 242A11730X |
| 15 | 4-40 UNC Threaded insert | 242A11740X |
| 25 | 4-40 UNC Threaded insert | 242A11750X |
| 37 | 4-40 UNC Threaded insert | 242A11760X |
| 50 | 4-40 UNC Threaded insert | 242A15850X |
| 09 | M3 Threaded insert | 242A11850X |
| 15 | M3 Threaded insert | 242A11860X |
| 25 | M3 Threaded insert | 242A11870X |
| 37 | M3 Threaded insert | 242A11880X |
| 50 | M3 Threaded insert | 242A15880X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 241A11600X |
| 15 | Through-hole | 241A11610X |
| 25 | Through-hole | 241A11620X |
| 37 | Through-hole | 241A11630X |
| 50 | Through-hole | 241A15930X |
| 09 | 4-40 UNC Threaded insert | 241A11720X |
| 15 | 4-40 UNC Threaded insert | 241A11730X |
| 25 | 4-40 UNC Threaded insert | 241A11740X |
| 37 | 4-40 UNC Threaded insert | 241A11750X |
| 50 | 4-40 UNC Threaded insert | 241A15960X |
| 09 | M3 Threaded insert | 241A11840X |
| 15 | M3 Threaded insert | 241A11850X |
| 25 | M3 Threaded insert | 241A11860X |
| 37 | M3 Threaded insert | 241A11870X |
| 50 | M3 Threaded insert | 241A15990X |

### Capacitance 830 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 242A11690X |
| 15 | Through-hole | 242A11700X |
| 25 | Through-hole | 242A11710X |
| 37 | Through-hole | 242A11720X |
| 50 | Through-hole | 242A15840X |
| 09 | 4-40 UNC Threaded insert | 242A11810X |
| 15 | 4-40 UNC Threaded insert | 242A11820X |
| 25 | 4-40 UNC Threaded insert | 242A11830X |
| 37 | 4-40 UNC Threaded insert | 242A11840X |
| 50 | 4-40 UNC Threaded insert | 242A15870X |
| 09 | M3 Threaded insert | 242A11930X |
| 15 | M3 Threaded insert | 242A11940X |
| 25 | M3 Threaded insert | 242A11950X |
| 37 | M3 Threaded insert | 242A11960X |
| 50 | M3 Threaded insert | 242A15900X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 241A11680X |
| 15 | Through-hole | 241A11690X |
| 25 | Through-hole | 241A11700X |
| 37 | Through-hole | 241A11710X |
| 50 | Through-hole | 241A15950X |
| 09 | 4-40 UNC Threaded insert | 241A11800X |
| 15 | 4-40 UNC Threaded insert | 241A11810X |
| 25 | 4-40 UNC Threaded insert | 241A11820X |
| 37 | 4-40 UNC Threaded insert | 241A11830X |
| 50 | 4-40 UNC Threaded insert | 241A15980X |
| 09 | M3 Threaded insert | 241A11920X |
| 15 | M3 Threaded insert | 241A11930X |
| 25 | M3 Threaded insert | 241A11940X |
| 37 | M3 Threaded insert | 241A11950X |
| 50 | M3 Threaded insert | 241A16010X |

### Capacitance 1300 pF

**Socket connector**

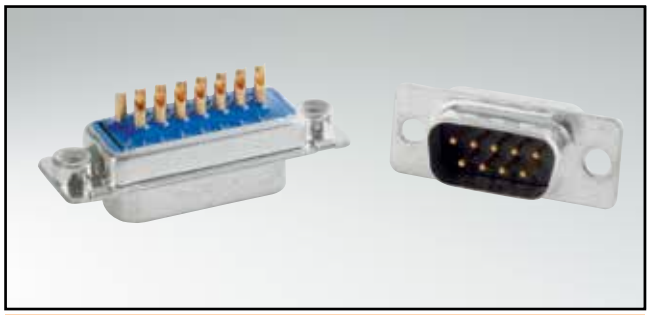
| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 242A11650X |
| 15 | Through-hole | 242A11660X |
| 25 | Through-hole | 242A11670X |
| 37 | Through-hole | 242A11680X |
| 50 | Through-hole | 242A15830X |
| 09 | 4-40 UNC Threaded insert | 242A11770X |
| 15 | 4-40 UNC Threaded insert | 242A11780X |
| 25 | 4-40 UNC Threaded insert | 242A11790X |
| 37 | 4-40 UNC Threaded insert | 242A11800X |
| 50 | 4-40 UNC Threaded insert | 242A15860X |
| 09 | M3 Threaded insert | 242A11890X |
| 15 | M3 Threaded insert | 242A11900X |
| 25 | M3 Threaded insert | 242A11910X |
| 37 | M3 Threaded insert | 242A11920X |
| 50 | M3 Threaded insert | 242A15890X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 241A11640X |
| 15 | Through-hole | 241A11650X |
| 25 | Through-hole | 241A11660X |
| 37 | Through-hole | 241A11670X |
| 50 | Through-hole | 241A15940X |
| 09 | 4-40 UNC Threaded insert | 241A11760X |
| 15 | 4-40 UNC Threaded insert | 241A11770X |
| 25 | 4-40 UNC Threaded insert | 241A11780X |
| 37 | 4-40 UNC Threaded insert | 241A11790X |
| 50 | 4-40 UNC Threaded insert | 241A15970X |
| 09 | M3 Threaded insert | 241A11880X |
| 15 | M3 Threaded insert | 241A11890X |
| 25 | M3 Threaded insert | 241A11900X |
| 37 | M3 Threaded insert | 241A11910X |
| 50 | M3 Threaded insert | 241A16000X |

# C-FILTER D-SUB STANDARD

## Solder cup – Precision machined contacts – For wire size AWG 20

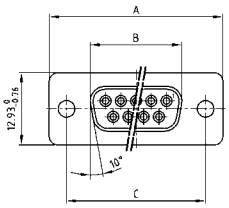


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### DESCRIPTION

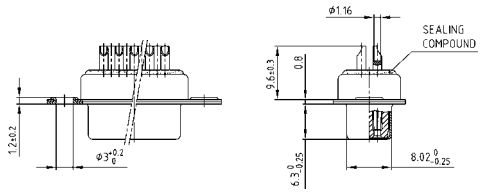
- Suitable for wire size **AWG 20**
- Mounting styles:
  - with through-hole, Ø .118"/3 mm
  - with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated on request)

### SOCKET CONNECTOR

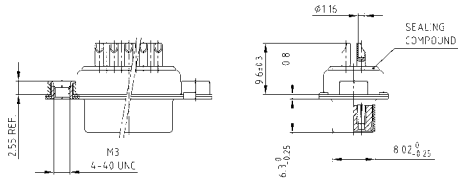



| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 15 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |

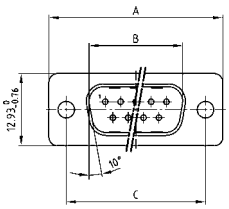
Mounting style: Through-hole




Mounting style: Threaded insert

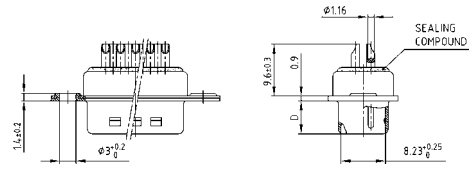



### PLUG CONNECTOR

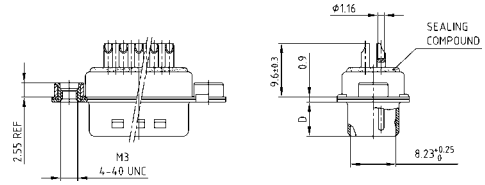



| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

Mounting style: Through-hole




Mounting style: Threaded insert




### ORDER DATA

## Capacitance 180 pF

**SOCKET CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 242A26740X |
| 15 | Through-hole | 242A26750X |
| 25 | Through-hole | 242A26760X |
| 37 | Through-hole | 242A26770X |
| 09 | 4-40 UNC Threaded insert | 242A26900X |
| 15 | 4-40 UNC Threaded insert | 242A26910X |
| 25 | 4-40 UNC Threaded insert | 242A26920X |
| 37 | 4-40 UNC Threaded insert | 242A26930X |
| 09 | M3 Threaded insert | 242A27060X |
| 15 | M3 Threaded insert | 242A27070X |
| 25 | M3 Threaded insert | 242A27080X |
| 37 | M3 Threaded insert | 242A27090X |

**PLUG CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 241A26840X |
| 15 | Through-hole | 241A26850X |
| 25 | Through-hole | 241A26860X |
| 37 | Through-hole | 241A26870X |
| 09 | 4-40 UNC Threaded insert | 241A27000X |
| 15 | 4-40 UNC Threaded insert | 241A27010X |
| 25 | 4-40 UNC Threaded insert | 241A27020X |
| 37 | 4-40 UNC Threaded insert | 241A27030X |
| 09 | M3 Threaded insert | 241A27160X |
| 15 | M3 Threaded insert | 241A27170X |
| 25 | M3 Threaded insert | 241A27180X |
| 37 | M3 Threaded insert | 241A27190X |

# C-Filter D-SUB Standard

## Solder cup – Precision machined contacts – For wire size AWG 20

### Order data

### Capacitance 370 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 242A26780X |
| 15 | Through-hole | 242A26790X |
| 25 | Through-hole | 242A26800X |
| 37 | Through-hole | 242A26810X |
| 09 | 4-40 UNC Threaded insert | 242A26940X |
| 15 | 4-40 UNC Threaded insert | 242A26950X |
| 25 | 4-40 UNC Threaded insert | 242A26960X |
| 37 | 4-40 UNC Threaded insert | 242A26970X |
| 09 | M3 Threaded insert | 242A27100X |
| 15 | M3 Threaded insert | 242A27110X |
| 25 | M3 Threaded insert | 242A27120X |
| 37 | M3 Threaded insert | 242A27130X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 241A26880X |
| 15 | Through-hole | 241A26890X |
| 25 | Through-hole | 241A26900X |
| 37 | Through-hole | 241A26910X |
| 09 | 4-40 UNC Threaded insert | 241A27040X |
| 15 | 4-40 UNC Threaded insert | 241A27050X |
| 25 | 4-40 UNC Threaded insert | 241A27060X |
| 37 | 4-40 UNC Threaded insert | 241A27070X |
| 09 | M3 Threaded insert | 241A27200X |
| 15 | M3 Threaded insert | 241A27210X |
| 25 | M3 Threaded insert | 241A27220X |
| 37 | M3 Threaded insert | 241A27230X |

### Capacitance 830 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 242A26820X |
| 15 | Through-hole | 242A26830X |
| 25 | Through-hole | 242A26840X |
| 37 | Through-hole | 242A26850X |
| 09 | 4-40 UNC Threaded insert | 242A26980X |
| 15 | 4-40 UNC Threaded insert | 242A26990X |
| 25 | 4-40 UNC Threaded insert | 242A27000X |
| 37 | 4-40 UNC Threaded insert | 242A27010X |
| 09 | M3 Threaded insert | 242A27140X |
| 15 | M3 Threaded insert | 242A27150X |
| 25 | M3 Threaded insert | 242A27160X |
| 37 | M3 Threaded insert | 242A27170X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 241A26920X |
| 15 | Through-hole | 241A26930X |
| 25 | Through-hole | 241A26940X |
| 37 | Through-hole | 241A26950X |
| 09 | 4-40 UNC Threaded insert | 241A27080X |
| 15 | 4-40 UNC Threaded insert | 241A27090X |
| 25 | 4-40 UNC Threaded insert | 241A27100X |
| 37 | 4-40 UNC Threaded insert | 241A27110X |
| 09 | M3 Threaded insert | 241A27240X |
| 15 | M3 Threaded insert | 241A27250X |
| 25 | M3 Threaded insert | 241A27260X |
| 37 | M3 Threaded insert | 241A27270X |

### Capacitance 1300 pF

**Socket connector**

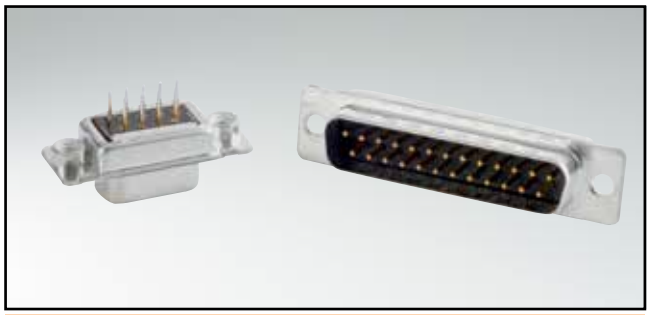
| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 242A26860X |
| 15 | Through-hole | 242A26870X |
| 25 | Through-hole | 242A26880X |
| 37 | Through-hole | 242A26890X |
| 09 | 4-40 UNC Threaded insert | 242A27020X |
| 15 | 4-40 UNC Threaded insert | 242A27030X |
| 25 | 4-40 UNC Threaded insert | 242A27040X |
| 37 | 4-40 UNC Threaded insert | 242A27050X |
| 09 | M3 Threaded insert | 242A27180X |
| 15 | M3 Threaded insert | 242A27190X |
| 25 | M3 Threaded insert | 242A27200X |
| 37 | M3 Threaded insert | 242A27210X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 241A26960X |
| 15 | Through-hole | 241A26970X |
| 25 | Through-hole | 241A26980X |
| 37 | Through-hole | 241A26990X |
| 09 | 4-40 UNC Threaded insert | 241A27120X |
| 15 | 4-40 UNC Threaded insert | 241A27130X |
| 25 | 4-40 UNC Threaded insert | 241A27140X |
| 37 | 4-40 UNC Threaded insert | 241A27150X |
| 09 | M3 Threaded insert | 241A27280X |
| 15 | M3 Threaded insert | 241A27290X |
| 25 | M3 Threaded insert | 241A27300X |
| 37 | M3 Threaded insert | 241A27310X |

# C-FILTER D-SUB STANDARD

## Solder pin – Straight – Precision machined contacts

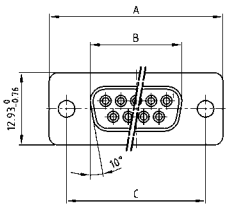


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### DESCRIPTION

- Mounting styles:
  - with through-hole, Ø .118"/3 mm
  - with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated on request)

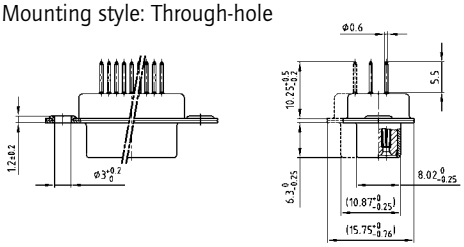
### SOCKET CONNECTOR



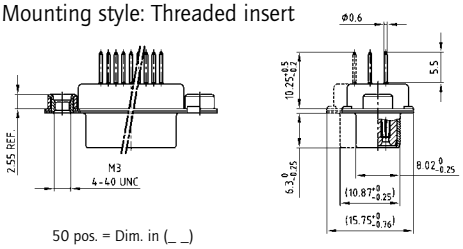

| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 15 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |
| 50 | 67.31 | 52.55 | 61.10 $^{+0.14}_{-0.11}$ |

PCB-Layout: Kat1kFUA

Mounting style: Through-hole

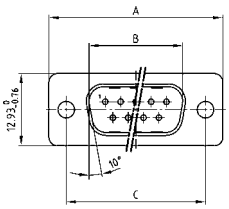



Mounting style: Threaded insert




50 pos. = Dim. in (_ _)

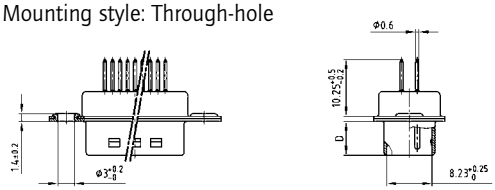
### PLUG CONNECTOR



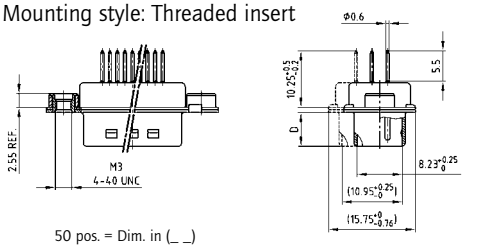

| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 50 | 67.31 | 52.68 | 61.10 $^{+0.14}_{-0.11}$ | 5.99 |

PCB-Layout: Kat1kFUA

Mounting style: Through-hole




Mounting style: Threaded insert




50 pos. = Dim. in (_ _)

### ORDER DATA

## Capacitance 180 pF

**SOCKET CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 242A16060X |
| 15 | Through-hole | 242A16070X |
| 25 | Through-hole | 242A16080X |
| 37 | Through-hole | 242A16090X |
| 50 | Through-hole | 242A16100X |
| 09 | 4-40 UNC Threaded insert | 242A16110X |
| 15 | 4-40 UNC Threaded insert | 242A16120X |
| 25 | 4-40 UNC Threaded insert | 242A16130X |
| 37 | 4-40 UNC Threaded insert | 242A16140X |
| 50 | 4-40 UNC Threaded insert | 242A16150X |
| 09 | M3 Threaded insert | 242A16160X |
| 15 | M3 Threaded insert | 242A16170X |
| 25 | M3 Threaded insert | 242A16180X |
| 37 | M3 Threaded insert | 242A16190X |
| 50 | M3 Threaded insert | 242A16200X |

**PLUG CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 241A18680X |
| 15 | Through-hole | 241A18690X |
| 25 | Through-hole | 241A18700X |
| 37 | Through-hole | 241A18710X |
| 50 | Through-hole | 241A18720X |
| 09 | 4-40 UNC Threaded insert | 241A18730X |
| 15 | 4-40 UNC Threaded insert | 241A18740X |
| 25 | 4-40 UNC Threaded insert | 241A18750X |
| 37 | 4-40 UNC Threaded insert | 241A18760X |
| 50 | 4-40 UNC Threaded insert | 241A18770X |
| 09 | M3 Threaded insert | 241A18780X |
| 15 | M3 Threaded insert | 241A18790X |
| 25 | M3 Threaded insert | 241A18800X |
| 37 | M3 Threaded insert | 241A18810X |
| 50 | M3 Threaded insert | 241A18820X |

# C-Filter D-SUB Standard

## Solder pin – Straight – Precision machined contacts

### Order data

## Capacitance 370 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 242A10010X |
| 15 | Through-hole | 242A10020X |
| 25 | Through-hole | 242A10030X |
| 37 | Through-hole | 242A10040X |
| 50 | Through-hole | 242A15580X |
| 09 | 4-40 UNC Threaded insert | 242A10130X |
| 15 | 4-40 UNC Threaded insert | 242A10140X |
| 25 | 4-40 UNC Threaded insert | 242A10150X |
| 37 | 4-40 UNC Threaded insert | 242A10160X |
| 50 | 4-40 UNC Threaded insert | 242A15610X |
| 09 | M3 Threaded insert | 242A10250X |
| 15 | M3 Threaded insert | 242A10260X |
| 25 | M3 Threaded insert | 242A10270X |
| 37 | M3 Threaded insert | 242A10280X |
| 50 | M3 Threaded insert | 242A15640X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 241A10010X |
| 15 | Through-hole | 241A10020X |
| 25 | Through-hole | 241A10030X |
| 37 | Through-hole | 241A10040X |
| 50 | Through-hole | 241A15690X |
| 09 | 4-40 UNC Threaded insert | 241A10130X |
| 15 | 4-40 UNC Threaded insert | 241A10140X |
| 25 | 4-40 UNC Threaded insert | 241A10150X |
| 37 | 4-40 UNC Threaded insert | 241A10160X |
| 50 | 4-40 UNC Threaded insert | 241A15720X |
| 09 | M3 Threaded insert | 241A10250X |
| 15 | M3 Threaded insert | 241A10260X |
| 25 | M3 Threaded insert | 241A10270X |
| 37 | M3 Threaded insert | 241A10280X |
| 50 | M3 Threaded insert | 241A15750X |

## Capacitance 830 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 242A10090X |
| 15 | Through-hole | 242A10100X |
| 25 | Through-hole | 242A10110X |
| 37 | Through-hole | 242A10120X |
| 50 | Through-hole | 242A15600X |
| 09 | 4-40 UNC Threaded insert | 242A10210X |
| 15 | 4-40 UNC Threaded insert | 242A10220X |
| 25 | 4-40 UNC Threaded insert | 242A10230X |
| 37 | 4-40 UNC Threaded insert | 242A10240X |
| 50 | 4-40 UNC Threaded insert | 242A15630X |
| 09 | M3 Threaded insert | 242A10330X |
| 15 | M3 Threaded insert | 242A10340X |
| 25 | M3 Threaded insert | 242A10350X |
| 37 | M3 Threaded insert | 242A10360X |
| 50 | M3 Threaded insert | 242A15660X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 241A10090X |
| 15 | Through-hole | 241A10100X |
| 25 | Through-hole | 241A10110X |
| 37 | Through-hole | 241A10120X |
| 50 | Through-hole | 241A15710X |
| 09 | 4-40 UNC Threaded insert | 241A10210X |
| 15 | 4-40 UNC Threaded insert | 241A10220X |
| 25 | 4-40 UNC Threaded insert | 241A10230X |
| 37 | 4-40 UNC Threaded insert | 241A10240X |
| 50 | 4-40 UNC Threaded insert | 241A15740X |
| 09 | M3 Threaded insert | 241A10330X |
| 15 | M3 Threaded insert | 241A10340X |
| 25 | M3 Threaded insert | 241A10350X |
| 37 | M3 Threaded insert | 241A10360X |
| 50 | M3 Threaded insert | 241A15770X |

## Capacitance 1300 pF

**Socket connector**

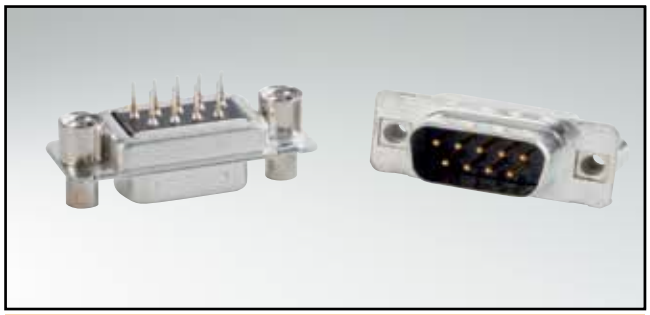
| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 242A10050X |
| 15 | Through-hole | 242A10060X |
| 25 | Through-hole | 242A10070X |
| 37 | Through-hole | 242A10080X |
| 50 | Through-hole | 242A15590X |
| 09 | 4-40 UNC Threaded insert | 242A10170X |
| 15 | 4-40 UNC Threaded insert | 242A10180X |
| 25 | 4-40 UNC Threaded insert | 242A10190X |
| 37 | 4-40 UNC Threaded insert | 242A10200X |
| 50 | 4-40 UNC Threaded insert | 242A15620X |
| 09 | M3 Threaded insert | 242A10290X |
| 15 | M3 Threaded insert | 242A10300X |
| 25 | M3 Threaded insert | 242A10310X |
| 37 | M3 Threaded insert | 242A10320X |
| 50 | M3 Threaded insert | 242A15650X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 241A10050X |
| 15 | Through-hole | 241A10060X |
| 25 | Through-hole | 241A10070X |
| 37 | Through-hole | 241A10080X |
| 50 | Through-hole | 241A15700X |
| 09 | 4-40 UNC Threaded insert | 241A10170X |
| 15 | 4-40 UNC Threaded insert | 241A10180X |
| 25 | 4-40 UNC Threaded insert | 241A10190X |
| 37 | 4-40 UNC Threaded insert | 241A10200X |
| 50 | 4-40 UNC Threaded insert | 241A15730X |
| 09 | M3 Threaded insert | 241A10290X |
| 15 | M3 Threaded insert | 241A10300X |
| 25 | M3 Threaded insert | 241A10310X |
| 37 | M3 Threaded insert | 241A10320X |
| 50 | M3 Threaded insert | 241A15760X |

# C-FILTER D-SUB STANDARD

## Solder pin – Straight – Precision machined contacts

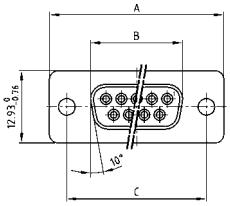


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### DESCRIPTION

- Mounting styles:
  - with 4-40 UNC or M3 threaded rear spacer
  - with 4-40 UNC or M3 front and threaded rear spacer
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated on request)

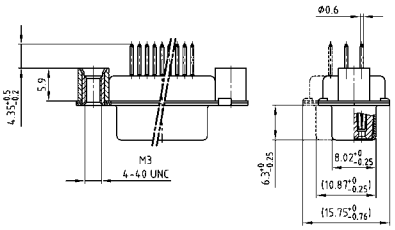
### SOCKET CONNECTOR



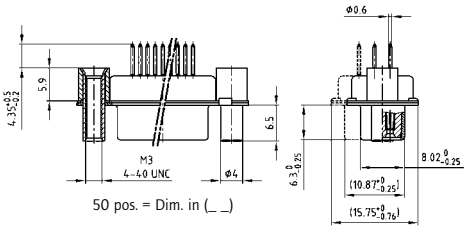
| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 15 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |
| 50 | 67.31 | 52.55 | 61.10 $^{+0.14}_{-0.11}$ |

PCB-Layout: Kat1kFUA

Mounting style: Threaded rear spacer

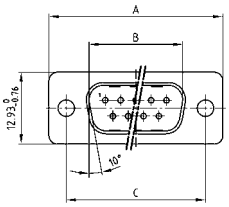


Mounting style: Threaded rear spacer, front spacer



50 pos. = Dim. in (_ _)

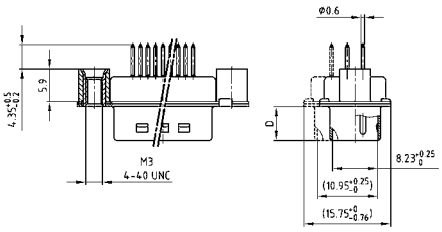
### PLUG CONNECTOR



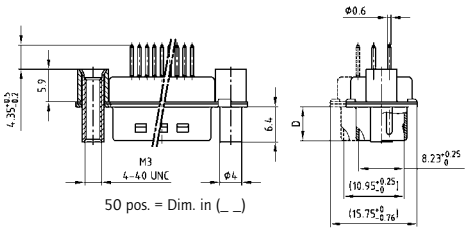
| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 50 | 67.31 | 52.68 | 61.10 $^{+0.14}_{-0.11}$ | 5.99 |

PCB-Layout: Kat1kFUA

Mounting style: Threaded rear spacer



Mounting style: Threaded rear spacer, front spacer



50 pos. = Dim. in (_ _)

### ORDER DATA

## Capacitance 180 pF

**SOCKET CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer | 242A16210X |
| 15 | 4-40 UNC Threaded rear spacer | 242A16220X |
| 25 | 4-40 UNC Threaded rear spacer | 242A16230X |
| 37 | 4-40 UNC Threaded rear spacer | 242A16240X |
| 50 | 4-40 UNC Threaded rear spacer | 242A16250X |
| 09 | M3 Threaded rear spacer | 242A16260X |
| 15 | M3 Threaded rear spacer | 242A16270X |
| 25 | M3 Threaded rear spacer | 242A16280X |
| 37 | M3 Threaded rear spacer | 242A16290X |
| 50 | M3 Threaded rear spacer | 242A16300X |
| 09 | 4-40 UNC Front / Threaded rear spacer | 242A16310X |
| 15 | 4-40 UNC Front / Threaded rear spacer | 242A16320X |
| 25 | 4-40 UNC Front / Threaded rear spacer | 242A16330X |
| 37 | 4-40 UNC Front / Threaded rear spacer | 242A16340X |
| 50 | 4-40 UNC Front / Threaded rear spacer | 242A16350X |
| 09 | M3 Front / Threaded rear spacer | 242A16360X |
| 15 | M3 Front / Threaded rear spacer | 242A16370X |
| 25 | M3 Front / Threaded rear spacer | 242A16380X |
| 37 | M3 Front / Threaded rear spacer | 242A16390X |
| 50 | M3 Front / Threaded rear spacer | 242A16400X |

**PLUG CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer | 241A18830X |
| 15 | 4-40 UNC Threaded rear spacer | 241A18840X |
| 25 | 4-40 UNC Threaded rear spacer | 241A18850X |
| 37 | 4-40 UNC Threaded rear spacer | 241A18860X |
| 50 | 4-40 UNC Threaded rear spacer | 241A18870X |
| 09 | M3 Threaded rear spacer | 241A18880X |
| 15 | M3 Threaded rear spacer | 241A18890X |
| 25 | M3 Threaded rear spacer | 241A18900X |
| 37 | M3 Threaded rear spacer | 241A18910X |
| 50 | M3 Threaded rear spacer | 241A18920X |
| 09 | 4-40 UNC Front / Threaded rear spacer | 241A18930X |
| 15 | 4-40 UNC Front / Threaded rear spacer | 241A18940X |
| 25 | 4-40 UNC Front / Threaded rear spacer | 241A18950X |
| 37 | 4-40 UNC Front / Threaded rear spacer | 241A18960X |
| 50 | 4-40 UNC Front / Threaded rear spacer | 241A18970X |
| 09 | M3 Front / Threaded rear spacer | 241A18980X |
| 15 | M3 Front / Threaded rear spacer | 241A18990X |
| 25 | M3 Front / Threaded rear spacer | 241A19000X |
| 37 | M3 Front / Threaded rear spacer | 241A19010X |
| 50 | M3 Front / Threaded rear spacer | 241A19020X |

# C-Filter D-SUB Standard

## Solder pin – Straight – Precision machined contacts

### Order data

## Capacitance 370 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer | 242A10370X |
| 15 | 4-40 UNC Threaded rear spacer | 242A10380X |
| 25 | 4-40 UNC Threaded rear spacer | 242A10390X |
| 37 | 4-40 UNC Threaded rear spacer | 242A10400X |
| 50 | 4-40 UNC Threaded rear spacer | 242A15670X |
| 09 | M3 Threaded rear spacer | 242A10490X |
| 15 | M3 Threaded rear spacer | 242A10500X |
| 25 | M3 Threaded rear spacer | 242A10510X |
| 37 | M3 Threaded rear spacer | 242A10520X |
| 50 | M3 Threaded rear spacer | 242A15700X |
| 09 | 4-40 UNC Front / Threaded rear spacer | 242A10610X |
| 15 | 4-40 UNC Front / Threaded rear spacer | 242A10620X |
| 25 | 4-40 UNC Front / Threaded rear spacer | 242A10630X |
| 37 | 4-40 UNC Front / Threaded rear spacer | 242A10640X |
| 50 | 4-40 UNC Front / Threaded rear spacer | 242A15730X |
| 09 | M3 Front / Threaded rear spacer | 242A10730X |
| 15 | M3 Front / Threaded rear spacer | 242A10740X |
| 25 | M3 Front / Threaded rear spacer | 242A10750X |
| 37 | M3 Front / Threaded rear spacer | 242A10760X |
| 50 | M3 Front / Threaded rear spacer | 242A15760X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer | 241A10370X |
| 15 | 4-40 UNC Threaded rear spacer | 241A10380X |
| 25 | 4-40 UNC Threaded rear spacer | 241A10390X |
| 37 | 4-40 UNC Threaded rear spacer | 241A10400X |
| 50 | 4-40 UNC Threaded rear spacer | 241A15780X |
| 09 | M3 Threaded rear spacer | 241A10490X |
| 15 | M3 Threaded rear spacer | 241A10500X |
| 25 | M3 Threaded rear spacer | 241A10510X |
| 37 | M3 Threaded rear spacer | 241A10520X |
| 50 | M3 Threaded rear spacer | 241A15810X |
| 09 | 4-40 UNC Front / Threaded rear spacer | 241A10610X |
| 15 | 4-40 UNC Front / Threaded rear spacer | 241A10620X |
| 25 | 4-40 UNC Front / Threaded rear spacer | 241A10630X |
| 37 | 4-40 UNC Front / Threaded rear spacer | 241A10640X |
| 50 | 4-40 UNC Front / Threaded rear spacer | 241A15840X |
| 09 | M3 Front / Threaded rear spacer | 241A10730X |
| 15 | M3 Front / Threaded rear spacer | 241A10740X |
| 25 | M3 Front / Threaded rear spacer | 241A10750X |
| 37 | M3 Front / Threaded rear spacer | 241A10760X |
| 50 | M3 Front / Threaded rear spacer | 241A15870X |

## Capacitance 830 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer | 242A10450X |
| 15 | 4-40 UNC Threaded rear spacer | 242A10460X |
| 25 | 4-40 UNC Threaded rear spacer | 242A10470X |
| 37 | 4-40 UNC Threaded rear spacer | 242A10480X |
| 50 | 4-40 UNC Threaded rear spacer | 242A15690X |
| 09 | M3 Threaded rear spacer | 242A10570X |
| 15 | M3 Threaded rear spacer | 242A10580X |
| 25 | M3 Threaded rear spacer | 242A10590X |
| 37 | M3 Threaded rear spacer | 242A10600X |
| 50 | M3 Threaded rear spacer | 242A15720X |
| 09 | 4-40 UNC Front / Threaded rear spacer | 242A10690X |
| 15 | 4-40 UNC Front / Threaded rear spacer | 242A10700X |
| 25 | 4-40 UNC Front / Threaded rear spacer | 242A10710X |
| 37 | 4-40 UNC Front / Threaded rear spacer | 242A10720X |
| 50 | 4-40 UNC Front / Threaded rear spacer | 242A15750X |
| 09 | M3 Front / Threaded rear spacer | 242A10810X |
| 15 | M3 Front / Threaded rear spacer | 242A10820X |
| 25 | M3 Front / Threaded rear spacer | 242A10830X |
| 37 | M3 Front / Threaded rear spacer | 242A10840X |
| 50 | M3 Front / Threaded rear spacer | 242A15780X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer | 241A10450X |
| 15 | 4-40 UNC Threaded rear spacer | 241A10460X |
| 25 | 4-40 UNC Threaded rear spacer | 241A10470X |
| 37 | 4-40 UNC Threaded rear spacer | 241A10480X |
| 50 | 4-40 UNC Threaded rear spacer | 241A15800X |
| 09 | M3 Threaded rear spacer | 241A10570X |
| 15 | M3 Threaded rear spacer | 241A10580X |
| 25 | M3 Threaded rear spacer | 241A10590X |
| 37 | M3 Threaded rear spacer | 241A10600X |
| 50 | M3 Threaded rear spacer | 241A15830X |
| 09 | 4-40 UNC Front / Threaded rear spacer | 241A10690X |
| 15 | 4-40 UNC Front / Threaded rear spacer | 241A10700X |
| 25 | 4-40 UNC Front / Threaded rear spacer | 241A10710X |
| 37 | 4-40 UNC Front / Threaded rear spacer | 241A10720X |
| 50 | 4-40 UNC Front / Threaded rear spacer | 241A15860X |
| 09 | M3 Front / Threaded rear spacer | 241A10810X |
| 15 | M3 Front / Threaded rear spacer | 241A10820X |
| 25 | M3 Front / Threaded rear spacer | 241A10830X |
| 37 | M3 Front / Threaded rear spacer | 241A10840X |
| 50 | M3 Front / Threaded rear spacer | 241A15890X |

## Capacitance 1300 pF

**Socket connector**

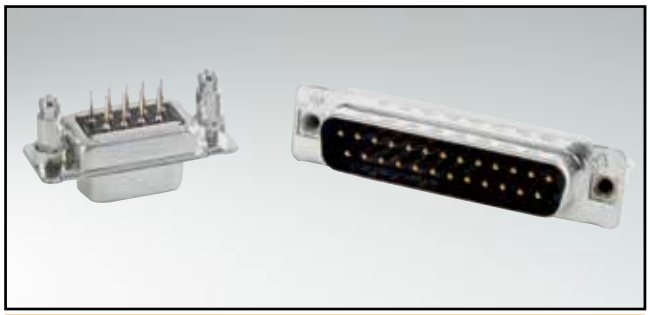
| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer | 242A10410X |
| 15 | 4-40 UNC Threaded rear spacer | 242A10420X |
| 25 | 4-40 UNC Threaded rear spacer | 242A10430X |
| 37 | 4-40 UNC Threaded rear spacer | 242A10440X |
| 50 | 4-40 UNC Threaded rear spacer | 242A15680X |
| 09 | M3 Threaded rear spacer | 242A10530X |
| 15 | M3 Threaded rear spacer | 242A10540X |
| 25 | M3 Threaded rear spacer | 242A10550X |
| 37 | M3 Threaded rear spacer | 242A10560X |
| 50 | M3 Threaded rear spacer | 242A15710X |
| 09 | 4-40 UNC Front / Threaded rear spacer | 242A10650X |
| 15 | 4-40 UNC Front / Threaded rear spacer | 242A10660X |
| 25 | 4-40 UNC Front / Threaded rear spacer | 242A10670X |
| 37 | 4-40 UNC Front / Threaded rear spacer | 242A10680X |
| 50 | 4-40 UNC Front / Threaded rear spacer | 242A15740X |
| 09 | M3 Front / Threaded rear spacer | 242A10770X |
| 15 | M3 Front / Threaded rear spacer | 242A10780X |
| 25 | M3 Front / Threaded rear spacer | 242A10790X |
| 37 | M3 Front / Threaded rear spacer | 242A10800X |
| 50 | M3 Front / Threaded rear spacer | 242A15770X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer | 241A10410X |
| 15 | 4-40 UNC Threaded rear spacer | 241A10420X |
| 25 | 4-40 UNC Threaded rear spacer | 241A10430X |
| 37 | 4-40 UNC Threaded rear spacer | 241A10440X |
| 50 | 4-40 UNC Threaded rear spacer | 241A15790X |
| 09 | M3 Threaded rear spacer | 241A10530X |
| 15 | M3 Threaded rear spacer | 241A10540X |
| 25 | M3 Threaded rear spacer | 241A10550X |
| 37 | M3 Threaded rear spacer | 241A10560X |
| 50 | M3 Threaded rear spacer | 241A15820X |
| 09 | 4-40 UNC Front / Threaded rear spacer | 241A10650X |
| 15 | 4-40 UNC Front / Threaded rear spacer | 241A10660X |
| 25 | 4-40 UNC Front / Threaded rear spacer | 241A10670X |
| 37 | 4-40 UNC Front / Threaded rear spacer | 241A10680X |
| 50 | 4-40 UNC Front / Threaded rear spacer | 241A15850X |
| 09 | M3 Front / Threaded rear spacer | 241A10770X |
| 15 | M3 Front / Threaded rear spacer | 241A10780X |
| 25 | M3 Front / Threaded rear spacer | 241A10790X |
| 37 | M3 Front / Threaded rear spacer | 241A10800X |
| 50 | M3 Front / Threaded rear spacer | 241A15880X |

# C-FILTER D-SUB STANDARD

## Solder pin – Straight – Precision machined contacts

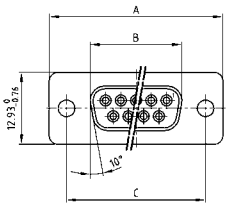


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### DESCRIPTION

- Mounting styles:
  - with 4-40 UNC or M3 threaded rear spacer with PCB clip
  - with 4-40 UNC or M3 front and threaded rear spacer with PCB clip
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated on request)

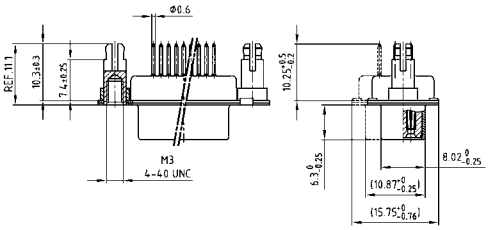
### SOCKET CONNECTOR



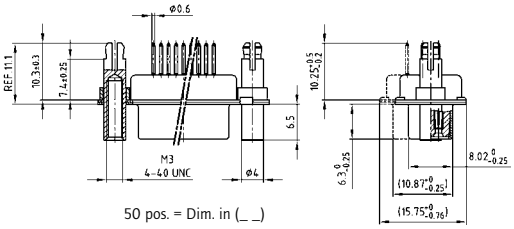
| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 15 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |
| 50 | 67.31 | 52.55 | 61.10 $^{+0.14}_{-0.11}$ |

PCB-Layout: Kat1kFUA

Mounting style: Threaded rear spacer with PCB clip

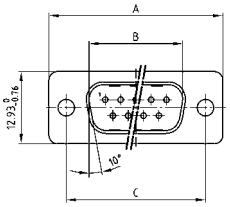


Mounting style: Front and threaded rear spacer with PCB clip



50 pos. = Dim. in (_ _)

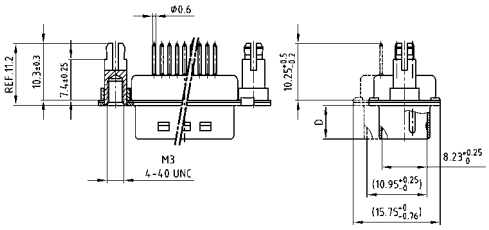
### PLUG CONNECTOR



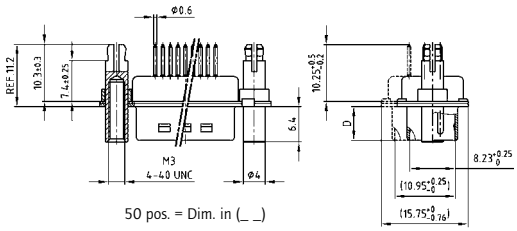
| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 50 | 67.31 | 52.68 | 61.10 $^{+0.14}_{-0.11}$ | 5.99 |

PCB-Layout: Kat1kFUA

Mounting style: Threaded rear spacer with PCB clip



Mounting style: Front and threaded rear spacer with PCB clip



50 pos. = Dim. in (_ _)

### ORDER DATA

## Capacitance 180 pF

**SOCKET CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer PCB clip | 242A16460X |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 242A16470X |
| 25 | 4-40 UNC Threaded rear spacer PCB clip | 242A16480X |
| 37 | 4-40 UNC Threaded rear spacer PCB clip | 242A16490X |
| 50 | 4-40 UNC Threaded rear spacer PCB clip | 242A16500X |
| 09 | M3 Threaded rear spacer PCB clip | 242A16510X |
| 15 | M3 Threaded rear spacer PCB clip | 242A16520X |
| 25 | M3 Threaded rear spacer PCB clip | 242A16530X |
| 37 | M3 Threaded rear spacer PCB clip | 242A16540X |
| 50 | M3 Threaded rear spacer PCB clip | 242A16550X |
| 09 | 4-40 UNC Front / Threaded rear spacer PCB clip | 242A16560X |
| 15 | 4-40 UNC Front / Threaded rear spacer PCB clip | 242A16570X |
| 25 | 4-40 UNC Front / Threaded rear spacer PCB clip | 242A16580X |
| 37 | 4-40 UNC Front / Threaded rear spacer PCB clip | 242A16590X |
| 50 | 4-40 UNC Front / Threaded rear spacer PCB clip | 242A16600X |
| 09 | M3 Front / Threaded rear spacer PCB clip | 242A16610X |
| 15 | M3 Front / Threaded rear spacer PCB clip | 242A16620X |
| 25 | M3 Front / Threaded rear spacer PCB clip | 242A16630X |
| 37 | M3 Front / Threaded rear spacer PCB clip | 242A16640X |
| 50 | M3 Front / Threaded rear spacer PCB clip | 242A16650X |

**PLUG CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer PCB clip | 241A19080X |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 241A19090X |
| 25 | 4-40 UNC Threaded rear spacer PCB clip | 241A19100X |
| 37 | 4-40 UNC Threaded rear spacer PCB clip | 241A19110X |
| 50 | 4-40 UNC Threaded rear spacer PCB clip | 241A19120X |
| 09 | M3 Threaded rear spacer PCB clip | 241A19130X |
| 15 | M3 Threaded rear spacer PCB clip | 241A19140X |
| 25 | M3 Threaded rear spacer PCB clip | 241A19150X |
| 37 | M3 Threaded rear spacer PCB clip | 241A19160X |
| 50 | M3 Threaded rear spacer PCB clip | 241A19170X |
| 09 | 4-40 UNC Front / Threaded rear spacer PCB clip | 241A19180X |
| 15 | 4-40 UNC Front / Threaded rear spacer PCB clip | 241A19190X |
| 25 | 4-40 UNC Front / Threaded rear spacer PCB clip | 241A19200X |
| 37 | 4-40 UNC Front / Threaded rear spacer PCB clip | 241A19210X |
| 50 | 4-40 UNC Front / Threaded rear spacer PCB clip | 241A19220X |
| 09 | M3 Front / Threaded rear spacer PCB clip | 241A19230X |
| 15 | M3 Front / Threaded rear spacer PCB clip | 241A19240X |
| 25 | M3 Front / Threaded rear spacer PCB clip | 241A19250X |
| 37 | M3 Front / Threaded rear spacer PCB clip | 241A19260X |
| 50 | M3 Front / Threaded rear spacer PCB clip | 241A19270X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# C-Filter D-SUB Standard

## Solder pin – Straight – Precision machined contacts

### Order data

## Capacitance 370 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer PCB clip | 242A14980X |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 242A14990X |
| 25 | 4-40 UNC Threaded rear spacer PCB clip | 242A15000X |
| 37 | 4-40 UNC Threaded rear spacer PCB clip | 242A15010X |
| 50 | 4-40 UNC Threaded rear spacer PCB clip | 242A15020X |
| 09 | M3 Threaded rear spacer PCB clip | 242A15130X |
| 15 | M3 Threaded rear spacer PCB clip | 242A15140X |
| 25 | M3 Threaded rear spacer PCB clip | 242A15150X |
| 37 | M3 Threaded rear spacer PCB clip | 242A15160X |
| 50 | M3 Threaded rear spacer PCB clip | 242A15170X |
| 09 | 4-40 UNC Front / Threaded rear spacer PCB clip | 242A15280X |
| 15 | 4-40 UNC Front / Threaded rear spacer PCB clip | 242A15290X |
| 25 | 4-40 UNC Front / Threaded rear spacer PCB clip | 242A15300X |
| 37 | 4-40 UNC Front / Threaded rear spacer PCB clip | 242A15310X |
| 50 | 4-40 UNC Front / Threaded rear spacer PCB clip | 242A15320X |
| 09 | M3 Front / Threaded rear spacer PCB clip | 242A15430X |
| 15 | M3 Front / Threaded rear spacer PCB clip | 242A15440X |
| 25 | M3 Front / Threaded rear spacer PCB clip | 242A15450X |
| 37 | M3 Front / Threaded rear spacer PCB clip | 242A15460X |
| 50 | M3 Front / Threaded rear spacer PCB clip | 242A15470X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer PCB clip | 241A15090X |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 241A15100X |
| 25 | 4-40 UNC Threaded rear spacer PCB clip | 241A15110X |
| 37 | 4-40 UNC Threaded rear spacer PCB clip | 241A15120X |
| 50 | 4-40 UNC Threaded rear spacer PCB clip | 241A15130X |
| 09 | M3 Threaded rear spacer PCB clip | 241A15240X |
| 15 | M3 Threaded rear spacer PCB clip | 241A15250X |
| 25 | M3 Threaded rear spacer PCB clip | 241A15260X |
| 37 | M3 Threaded rear spacer PCB clip | 241A15270X |
| 50 | M3 Threaded rear spacer PCB clip | 241A15280X |
| 09 | 4-40 UNC Front / Threaded rear spacer PCB clip | 241A15390X |
| 15 | 4-40 UNC Front / Threaded rear spacer PCB clip | 241A15400X |
| 25 | 4-40 UNC Front / Threaded rear spacer PCB clip | 241A15410X |
| 37 | 4-40 UNC Front / Threaded rear spacer PCB clip | 241A15420X |
| 50 | 4-40 UNC Front / Threaded rear spacer PCB clip | 241A15430X |
| 09 | M3 Front / Threaded rear spacer PCB clip | 241A15540X |
| 15 | M3 Front / Threaded rear spacer PCB clip | 241A15550X |
| 25 | M3 Front / Threaded rear spacer PCB clip | 241A15560X |
| 37 | M3 Front / Threaded rear spacer PCB clip | 241A15570X |
| 50 | M3 Front / Threaded rear spacer PCB clip | 241A15580X |

## Capacitance 830 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer PCB clip | 242A15080X |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 242A15090X |
| 25 | 4-40 UNC Threaded rear spacer PCB clip | 242A15100X |
| 37 | 4-40 UNC Threaded rear spacer PCB clip | 242A15110X |
| 50 | 4-40 UNC Threaded rear spacer PCB clip | 242A15120X |
| 09 | M3 Threaded rear spacer PCB clip | 242A15230X |
| 15 | M3 Threaded rear spacer PCB clip | 242A15240X |
| 25 | M3 Threaded rear spacer PCB clip | 242A15250X |
| 37 | M3 Threaded rear spacer PCB clip | 242A15260X |
| 50 | M3 Threaded rear spacer PCB clip | 242A15270X |
| 09 | 4-40 UNC Front / Threaded rear spacer PCB clip | 242A15380X |
| 15 | 4-40 UNC Front / Threaded rear spacer PCB clip | 242A15390X |
| 25 | 4-40 UNC Front / Threaded rear spacer PCB clip | 242A15400X |
| 37 | 4-40 UNC Front / Threaded rear spacer PCB clip | 242A15410X |
| 50 | 4-40 UNC Front / Threaded rear spacer PCB clip | 242A15420X |
| 09 | M3 Front / Threaded rear spacer PCB clip | 242A15530X |
| 15 | M3 Front / Threaded rear spacer PCB clip | 242A15540X |
| 25 | M3 Front / Threaded rear spacer PCB clip | 242A15550X |
| 37 | M3 Front / Threaded rear spacer PCB clip | 242A15560X |
| 50 | M3 Front / Threaded rear spacer PCB clip | 242A15570X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer PCB clip | 241A15190X |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 241A15200X |
| 25 | 4-40 UNC Threaded rear spacer PCB clip | 241A15210X |
| 37 | 4-40 UNC Threaded rear spacer PCB clip | 241A15220X |
| 50 | 4-40 UNC Threaded rear spacer PCB clip | 241A15230X |
| 09 | M3 Threaded rear spacer PCB clip | 241A15340X |
| 15 | M3 Threaded rear spacer PCB clip | 241A15350X |
| 25 | M3 Threaded rear spacer PCB clip | 241A15360X |
| 37 | M3 Threaded rear spacer PCB clip | 241A15370X |
| 50 | M3 Threaded rear spacer PCB clip | 241A15380X |
| 09 | 4-40 UNC Front / Threaded rear spacer PCB clip | 241A15490X |
| 15 | 4-40 UNC Front / Threaded rear spacer PCB clip | 241A15500X |
| 25 | 4-40 UNC Front / Threaded rear spacer PCB clip | 241A15510X |
| 37 | 4-40 UNC Front / Threaded rear spacer PCB clip | 241A15520X |
| 50 | 4-40 UNC Front / Threaded rear spacer PCB clip | 241A15530X |
| 09 | M3 Front / Threaded rear spacer PCB clip | 241A15640X |
| 15 | M3 Front / Threaded rear spacer PCB clip | 241A15650X |
| 25 | M3 Front / Threaded rear spacer PCB clip | 241A15660X |
| 37 | M3 Front / Threaded rear spacer PCB clip | 241A15670X |
| 50 | M3 Front / Threaded rear spacer PCB clip | 241A15680X |

## Capacitance 1300 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer PCB clip | 242A15030X |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 242A15040X |
| 25 | 4-40 UNC Threaded rear spacer PCB clip | 242A15050X |
| 37 | 4-40 UNC Threaded rear spacer PCB clip | 242A15060X |
| 50 | 4-40 UNC Threaded rear spacer PCB clip | 242A15070X |
| 09 | M3 Threaded rear spacer PCB clip | 242A15180X |
| 15 | M3 Threaded rear spacer PCB clip | 242A15190X |
| 25 | M3 Threaded rear spacer PCB clip | 242A15200X |
| 37 | M3 Threaded rear spacer PCB clip | 242A15210X |
| 50 | M3 Threaded rear spacer PCB clip | 242A15220X |
| 09 | 4-40 UNC Front / Threaded rear spacer PCB clip | 242A15330X |
| 15 | 4-40 UNC Front / Threaded rear spacer PCB clip | 242A15340X |
| 25 | 4-40 UNC Front / Threaded rear spacer PCB clip | 242A15350X |
| 37 | 4-40 UNC Front / Threaded rear spacer PCB clip | 242A15360X |
| 50 | 4-40 UNC Front / Threaded rear spacer PCB clip | 242A15370X |
| 09 | M3 Front / Threaded rear spacer PCB clip | 242A15480X |
| 15 | M3 Front / Threaded rear spacer PCB clip | 242A15490X |
| 25 | M3 Front / Threaded rear spacer PCB clip | 242A15500X |
| 37 | M3 Front / Threaded rear spacer PCB clip | 242A15510X |
| 50 | M3 Front / Threaded rear spacer PCB clip | 242A15520X |

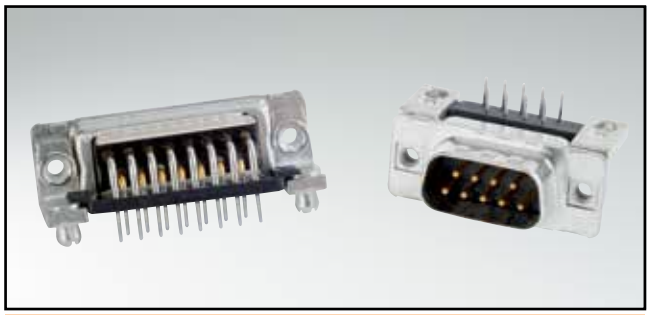
**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer PCB clip | 241A15140X |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 241A15150X |
| 25 | 4-40 UNC Threaded rear spacer PCB clip | 241A15160X |
| 37 | 4-40 UNC Threaded rear spacer PCB clip | 241A15170X |
| 50 | 4-40 UNC Threaded rear spacer PCB clip | 241A15180X |
| 09 | M3 Threaded rear spacer PCB clip | 241A15290X |
| 15 | M3 Threaded rear spacer PCB clip | 241A15300X |
| 25 | M3 Threaded rear spacer PCB clip | 241A15310X |
| 37 | M3 Threaded rear spacer PCB clip | 241A15320X |
| 50 | M3 Threaded rear spacer PCB clip | 241A15330X |
| 09 | 4-40 UNC Front / Threaded rear spacer PCB clip | 241A15440X |
| 15 | 4-40 UNC Front / Threaded rear spacer PCB clip | 241A15450X |
| 25 | 4-40 UNC Front / Threaded rear spacer PCB clip | 241A15460X |
| 37 | 4-40 UNC Front / Threaded rear spacer PCB clip | 241A15470X |
| 50 | 4-40 UNC Front / Threaded rear spacer PCB clip | 241A15480X |
| 09 | M3 Front / Threaded rear spacer PCB clip | 241A15590X |
| 15 | M3 Front / Threaded rear spacer PCB clip | 241A15600X |
| 25 | M3 Front / Threaded rear spacer PCB clip | 241A15610X |
| 37 | M3 Front / Threaded rear spacer PCB clip | 241A15620X |
| 50 | M3 Front / Threaded rear spacer PCB clip | 241A15630X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# C-FILTER D-SUB STANDARD

## Solder pin – Angled – .318"/7.19 mm – Precision machined contacts – Metal Bracket

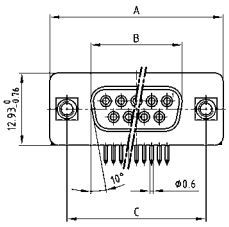


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### DESCRIPTION

- Mounting styles:
  - with mounting bracket and 4-40 UNC threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated on request)

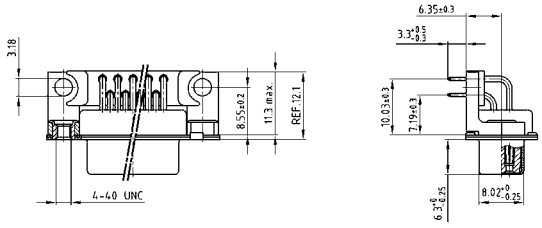
### SOCKET CONNECTOR



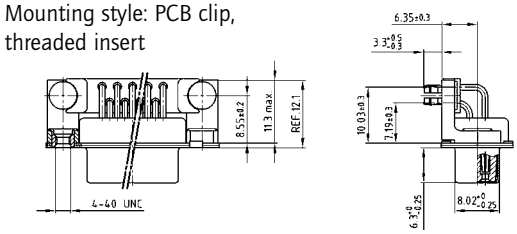
| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 15 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |

PCB-Layout: Kat1kGEA

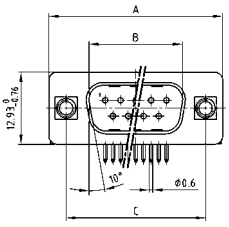
Mounting style: Threaded insert



Mounting style: PCB clip, threaded insert



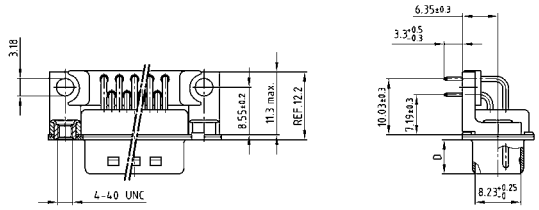
### PLUG CONNECTOR



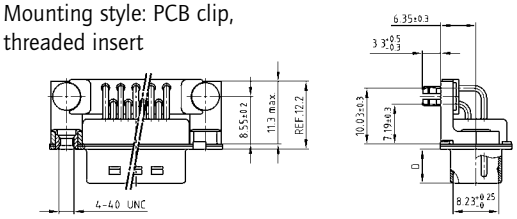
| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

PCB-Layout: Kat1kGFA

Mounting style: Threaded insert



Mounting style: PCB clip, threaded insert



### ORDER DATA

## Capacitance 180 pF

**SOCKET CONNECTOR**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 242A17180X |
| 15 | Threaded insert | 242A17190X |
| 25 | Threaded insert | 242A17200X |
| 37 | Threaded insert | 242A17210X |
| 09 | PCB clip / Threaded insert | 242A17780X |
| 15 | PCB clip / Threaded insert | 242A17790X |
| 25 | PCB clip / Threaded insert | 242A17800X |
| 37 | PCB clip / Threaded insert | 242A17810X |

**PLUG CONNECTOR**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 241A19800X |
| 15 | Threaded insert | 241A19810X |
| 25 | Threaded insert | 241A19820X |
| 37 | Threaded insert | 241A19830X |
| 09 | PCB clip / Threaded insert | 241A16180X |
| 15 | PCB clip / Threaded insert | 241A16190X |
| 25 | PCB clip / Threaded insert | 241A16200X |
| 37 | PCB clip / Threaded insert | 241A16210X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# C-Filter D-SUB Standard

## Solder pin – Angled – .318"/7.19 mm – Precision machined contacts – Metal Bracket

### Order data

### Capacitance 370 pF

**Socket connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 242A12340X |
| 15 | Threaded insert | 242A12350X |
| 25 | Threaded insert | 242A12360X |
| 37 | Threaded insert | 242A12370X |
| 09 | PCB clip / Threaded insert | 242A17740X |
| 15 | PCB clip / Threaded insert | 242A17750X |
| 25 | PCB clip / Threaded insert | 242A17760X |
| 37 | PCB clip / Threaded insert | 242A17770X |

**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 241A12320X |
| 15 | Threaded insert | 241A12330X |
| 25 | Threaded insert | 241A12340X |
| 37 | Threaded insert | 241A12350X |
| 09 | PCB clip / Threaded insert | 241A16140X |
| 15 | PCB clip / Threaded insert | 241A16150X |
| 25 | PCB clip / Threaded insert | 241A16160X |
| 37 | PCB clip / Threaded insert | 241A16170X |

### Capacitance 830 pF

**Socket connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 242A12420X |
| 15 | Threaded insert | 242A12430X |
| 25 | Threaded insert | 242A12440X |
| 37 | Threaded insert | 242A12450X |
| 09 | PCB clip / Threaded insert | 242A17700X |
| 15 | PCB clip / Threaded insert | 242A17710X |
| 25 | PCB clip / Threaded insert | 242A17720X |
| 37 | PCB clip / Threaded insert | 242A17730X |

**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 241A12400X |
| 15 | Threaded insert | 241A12410X |
| 25 | Threaded insert | 241A12420X |
| 37 | Threaded insert | 241A12430X |
| 09 | PCB clip / Threaded insert | 241A16100X |
| 15 | PCB clip / Threaded insert | 241A16110X |
| 25 | PCB clip / Threaded insert | 241A16120X |
| 37 | PCB clip / Threaded insert | 241A16130X |

### Capacitance 1300 pF

**Socket connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 242A12380X |
| 15 | Threaded insert | 242A12390X |
| 25 | Threaded insert | 242A12400X |
| 37 | Threaded insert | 242A12410X |
| 09 | PCB clip / Threaded insert | 242A17660X |
| 15 | PCB clip / Threaded insert | 242A17670X |
| 25 | PCB clip / Threaded insert | 242A17680X |
| 37 | PCB clip / Threaded insert | 242A17690X |

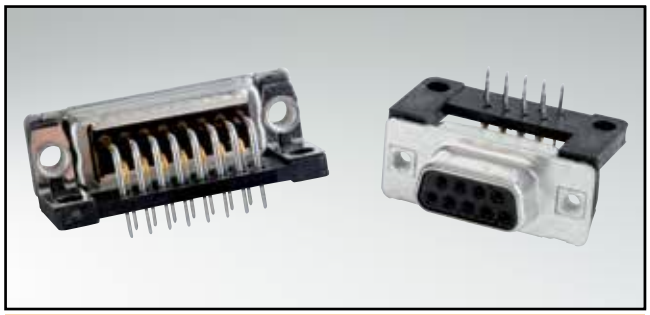
**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 241A12360X |
| 15 | Threaded insert | 241A12370X |
| 25 | Threaded insert | 241A12380X |
| 37 | Threaded insert | 241A12390X |
| 09 | PCB clip / Threaded insert | 241A16060X |
| 15 | PCB clip / Threaded insert | 241A16070X |
| 25 | PCB clip / Threaded insert | 241A16080X |
| 37 | PCB clip / Threaded insert | 241A16090X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# C-FILTER D-SUB STANDARD

## Solder pin – Angled – .370"/9.4 mm – Precision machined contacts – Plastic bracket

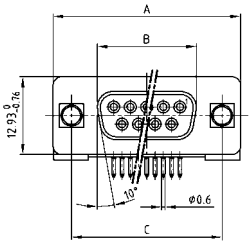


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### DESCRIPTION

- Mounting styles:
  - Mounting bracket, grounding strap with through-hole Ø .118"/3.0 mm
  - Mounting bracket, grounding strap with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated on request)

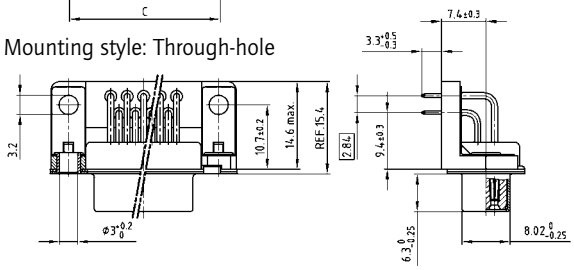
### SOCKET CONNECTOR



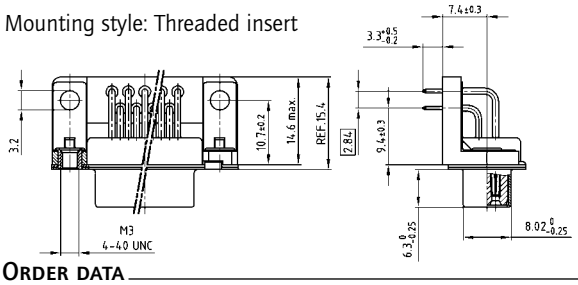
| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 15 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |

PCB-Layout: Kat1kGGA

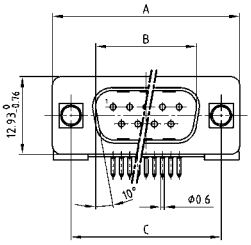
Mounting style: Through-hole



Mounting style: Threaded insert



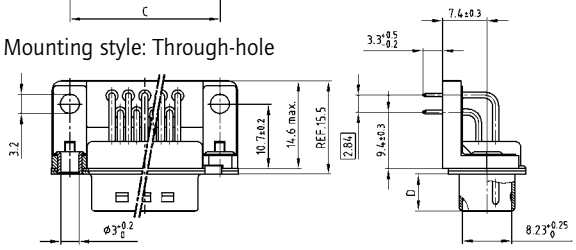
### PLUG CONNECTOR



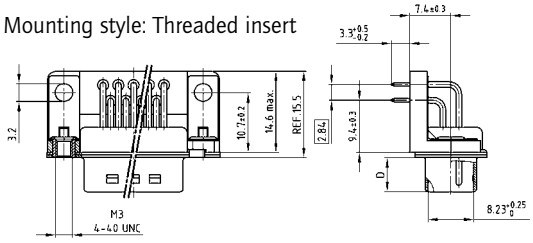
| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

PCB-Layout: Kat1kGHA

Mounting style: Through-hole



Mounting style: Threaded insert



### ORDER DATA

## Capacitance 180 pF

**SOCKET CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 242A16780X |
| 15 | Through-hole | 242A16790X |
| 25 | Through-hole | 242A16800X |
| 37 | Through-hole | 242A16810X |
| 09 | Grounding strap/4-40 UNC Threaded insert | 242A16820X |
| 15 | Grounding strap/4-40 UNC Threaded insert | 242A16830X |
| 25 | Grounding strap/4-40 UNC Threaded insert | 242A16840X |
| 37 | Grounding strap/4-40 UNC Threaded insert | 242A16850X |
| 09 | Grounding strap/M3 Threaded insert | 242A16860X |
| 15 | Grounding strap/M3 Threaded insert | 242A16870X |
| 25 | Grounding strap/M3 Threaded insert | 242A16880X |
| 37 | Grounding strap/M3 Threaded insert | 242A16890X |

**PLUG CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 241A19400X |
| 15 | Through-hole | 241A19410X |
| 25 | Through-hole | 241A19420X |
| 37 | Through-hole | 241A19430X |
| 09 | Grounding strap/4-40 UNC Threaded insert | 241A19440X |
| 15 | Grounding strap/4-40 UNC Threaded insert | 241A19450X |
| 25 | Grounding strap/4-40 UNC Threaded insert | 241A19460X |
| 37 | Grounding strap/4-40 UNC Threaded insert | 241A19470X |
| 09 | Grounding strap/M3 Threaded insert | 241A19480X |
| 15 | Grounding strap/M3 Threaded insert | 241A19490X |
| 25 | Grounding strap/M3 Threaded insert | 241A19500X |
| 37 | Grounding strap/M3 Threaded insert | 241A19510X |

# C-Filter D-SUB Standard

## Solder pin – Angled – .370"/9.4 mm – Precision machined contacts – Plastic bracket

### Order data

### Capacitance 370 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 242A10970X |
| 15 | Through-hole | 242A10980X |
| 25 | Through-hole | 242A10990X |
| 37 | Through-hole | 242A11000X |
| 09 | Grounding strap/4-40 UNC Threaded insert | 242A11090X |
| 15 | Grounding strap/4-40 UNC Threaded insert | 242A11100X |
| 25 | Grounding strap/4-40 UNC Threaded insert | 242A11110X |
| 37 | Grounding strap/4-40 UNC Threaded insert | 242A11120X |
| 09 | Grounding strap/M3 Threaded insert | 242A11210X |
| 15 | Grounding strap/M3 Threaded insert | 242A11220X |
| 25 | Grounding strap/M3 Threaded insert | 242A11230X |
| 37 | Grounding strap/M3 Threaded insert | 242A11240X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 241A10970X |
| 15 | Through-hole | 241A10980X |
| 25 | Through-hole | 241A10990X |
| 37 | Through-hole | 241A11000X |
| 09 | Grounding strap/4-40 UNC Threaded insert | 241A11090X |
| 15 | Grounding strap/4-40 UNC Threaded insert | 241A11100X |
| 25 | Grounding strap/4-40 UNC Threaded insert | 241A11110X |
| 37 | Grounding strap/4-40 UNC Threaded insert | 241A11120X |
| 09 | Grounding strap/M3 Threaded insert | 241A11210X |
| 15 | Grounding strap/M3 Threaded insert | 241A11220X |
| 25 | Grounding strap/M3 Threaded insert | 241A11230X |
| 37 | Grounding strap/M3 Threaded insert | 241A11240X |

### Capacitance 830 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 242A11050X |
| 15 | Through-hole | 242A11060X |
| 25 | Through-hole | 242A11070X |
| 37 | Through-hole | 242A11080X |
| 09 | Grounding strap/4-40 UNC Threaded insert | 242A11170X |
| 15 | Grounding strap/4-40 UNC Threaded insert | 242A11180X |
| 25 | Grounding strap/4-40 UNC Threaded insert | 242A11190X |
| 37 | Grounding strap/4-40 UNC Threaded insert | 242A11200X |
| 09 | Grounding strap/M3 Threaded insert | 242A11290X |
| 15 | Grounding strap/M3 Threaded insert | 242A11300X |
| 25 | Grounding strap/M3 Threaded insert | 242A11310X |
| 37 | Grounding strap/M3 Threaded insert | 242A11320X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 241A11050X |
| 15 | Through-hole | 241A11060X |
| 25 | Through-hole | 241A11070X |
| 37 | Through-hole | 241A11080X |
| 09 | Grounding strap/4-40 UNC Threaded insert | 241A11170X |
| 15 | Grounding strap/4-40 UNC Threaded insert | 241A11180X |
| 25 | Grounding strap/4-40 UNC Threaded insert | 241A11190X |
| 37 | Grounding strap/4-40 UNC Threaded insert | 241A11200X |
| 09 | Grounding strap/M3 Threaded insert | 241A11290X |
| 15 | Grounding strap/M3 Threaded insert | 241A11300X |
| 25 | Grounding strap/M3 Threaded insert | 241A11310X |
| 37 | Grounding strap/M3 Threaded insert | 241A11320X |

### Capacitance 1300 pF

**Socket connector**

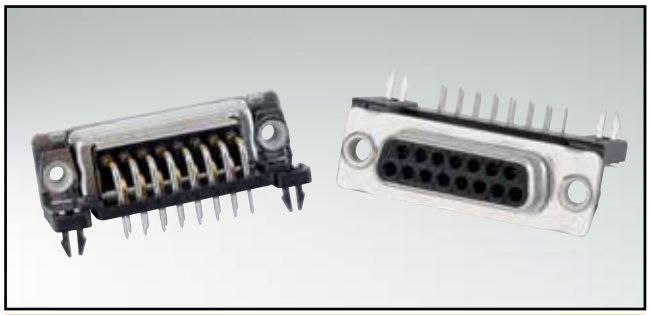
| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 242A11010X |
| 15 | Through-hole | 242A11020X |
| 25 | Through-hole | 242A11030X |
| 37 | Through-hole | 242A11040X |
| 09 | Grounding strap/4-40 UNC Threaded insert | 242A11130X |
| 15 | Grounding strap/4-40 UNC Threaded insert | 242A11140X |
| 25 | Grounding strap/4-40 UNC Threaded insert | 242A11150X |
| 37 | Grounding strap/4-40 UNC Threaded insert | 242A11160X |
| 09 | Grounding strap/M3 Threaded insert | 242A11250X |
| 15 | Grounding strap/M3 Threaded insert | 242A11260X |
| 25 | Grounding strap/M3 Threaded insert | 242A11270X |
| 37 | Grounding strap/M3 Threaded insert | 242A11280X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 241A11010X |
| 15 | Through-hole | 241A11020X |
| 25 | Through-hole | 241A11030X |
| 37 | Through-hole | 241A11040X |
| 09 | Grounding strap/4-40 UNC Threaded insert | 241A11130X |
| 15 | Grounding strap/4-40 UNC Threaded insert | 241A11140X |
| 25 | Grounding strap/4-40 UNC Threaded insert | 241A11150X |
| 37 | Grounding strap/4-40 UNC Threaded insert | 241A11160X |
| 09 | Grounding strap/M3 Threaded insert | 241A11250X |
| 15 | Grounding strap/M3 Threaded insert | 241A11260X |
| 25 | Grounding strap/M3 Threaded insert | 241A11270X |
| 37 | Grounding strap/M3 Threaded insert | 241A11280X |

# C-FILTER D-SUB STANDARD

## Solder pin – Angled – .370"/9.4 mm – Precision machined contacts – Plastic bracket

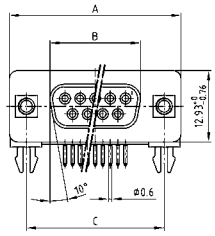


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### DESCRIPTION

- Mounting styles:
  - Mounting bracket with PCB clip and 4-40 UNC or M3 threaded insert
  - Mounting bracket with PCB clip and through-hole Ø .118"/3.0 mm
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated on request)

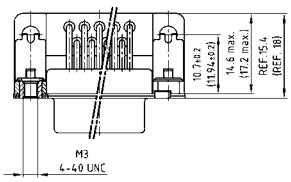
### SOCKET CONNECTOR

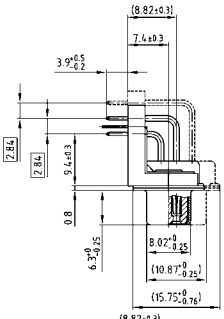


| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 15 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |
| 50 | 67.31 | 52.55 | 61.10 $^{+0.14}_{-0.11}$ |

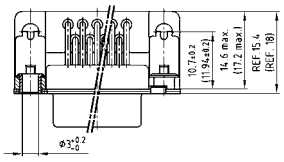
PCB-Layout: Kat1kGGA

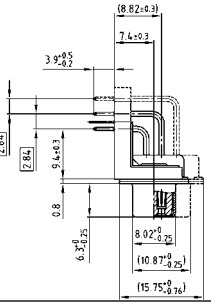
Mounting style:
PCB clip, threaded insert





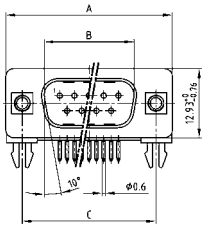
Mounting style:
PCB clip, through-hole





50 pos. = Dim. in (_ _)

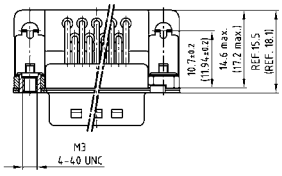
### PLUG CONNECTOR

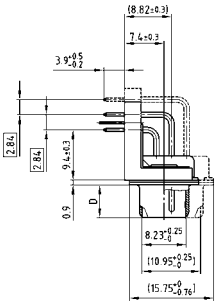


| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 50 | 67.31 | 52.68 | 61.10 $^{+0.14}_{-0.11}$ | 5.99 |

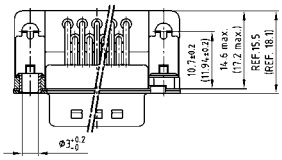
PCB-Layout: Kat1kGHA

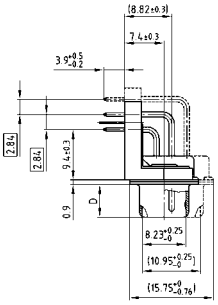
Mounting style:
PCB clip, threaded insert





Mounting style:
PCB clip, through-hole





50 pos. = Dim. in (_ _)

### ORDER DATA

## Capacitance 180 pF

**SOCKET CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip / 4-40 UNC Threaded insert | 242A17020X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 242A17030X |
| 25 | PCB clip / 4-40 UNC Threaded insert | 242A17040X |
| 37 | PCB clip / 4-40 UNC Threaded insert | 242A17050X |
| 50 | PCB clip / 4-40 UNC Threaded insert | 242A24020X |
| 09 | PCB clip / M3 Threaded insert | 242A17060X |
| 15 | PCB clip / M3 Threaded insert | 242A17070X |
| 25 | PCB clip / M3 Threaded insert | 242A17080X |
| 37 | PCB clip / M3 Threaded insert | 242A17090X |
| 50 | PCB clip / M3 Threaded insert | 242A24060X |
| 09 | PCB clip / Through-hole | 242A16980X |
| 15 | PCB clip / Through-hole | 242A16990X |
| 25 | PCB clip / Through-hole | 242A17000X |
| 37 | PCB clip / Through-hole | 242A17010X |
| 50 | PCB clip / Through-hole | 242A23980X |

**PLUG CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip / 4-40 UNC Threaded insert | 241A19640X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 241A19650X |
| 25 | PCB clip / 4-40 UNC Threaded insert | 241A19660X |
| 37 | PCB clip / 4-40 UNC Threaded insert | 241A19670X |
| 50 | PCB clip / 4-40 UNC Threaded insert | 241A24120X |
| 09 | PCB clip / M3 Threaded insert | 241A19680X |
| 15 | PCB clip / M3 Threaded insert | 241A19690X |
| 25 | PCB clip / M3 Threaded insert | 241A19700X |
| 37 | PCB clip / M3 Threaded insert | 241A19710X |
| 50 | PCB clip / M3 Threaded insert | 241A24160X |
| 09 | PCB clip / Through-hole | 241A19600X |
| 15 | PCB clip / Through-hole | 241A19610X |
| 25 | PCB clip / Through-hole | 241A19620X |
| 37 | PCB clip / Through-hole | 241A19630X |
| 50 | PCB clip / Through-hole | 241A24080X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# C-Filter D-SUB Standard

## Solder pin – Angled – .370"/9.4 mm – Precision machined contacts – Plastic bracket

### Order data

### Capacitance 370 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip / 4-40 UNC Threaded insert | 242A12820X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 242A12830X |
| 25 | PCB clip / 4-40 UNC Threaded insert | 242A12840X |
| 37 | PCB clip / 4-40 UNC Threaded insert | 242A12850X |
| 50 | PCB clip / 4-40 UNC Threaded insert | 242A24030X |
| 09 | PCB clip / M3 Threaded insert | 242A12940X |
| 15 | PCB clip / M3 Threaded insert | 242A12950X |
| 25 | PCB clip / M3 Threaded insert | 242A12960X |
| 37 | PCB clip / M3 Threaded insert | 242A12970X |
| 50 | PCB clip / M3 Threaded insert | 242A24070X |
| 09 | PCB clip / Through-hole | 242A12700X |
| 15 | PCB clip / Through-hole | 242A12710X |
| 25 | PCB clip / Through-hole | 242A12720X |
| 37 | PCB clip / Through-hole | 242A12730X |
| 50 | PCB clip / Through-hole | 242A23990X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip / 4-40 UNC Threaded insert | 241A12800X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 241A12810X |
| 25 | PCB clip / 4-40 UNC Threaded insert | 241A12820X |
| 37 | PCB clip / 4-40 UNC Threaded insert | 241A12830X |
| 50 | PCB clip / 4-40 UNC Threaded insert | 241A24130X |
| 09 | PCB clip / M3 Threaded insert | 241A12920X |
| 15 | PCB clip / M3 Threaded insert | 241A12930X |
| 25 | PCB clip / M3 Threaded insert | 241A12940X |
| 37 | PCB clip / M3 Threaded insert | 241A12950X |
| 50 | PCB clip / M3 Threaded insert | 241A24170X |
| 09 | PCB clip / Through-hole | 241A12680X |
| 15 | PCB clip / Through-hole | 241A12690X |
| 25 | PCB clip / Through-hole | 241A12700X |
| 37 | PCB clip / Through-hole | 241A12710X |
| 50 | PCB clip / Through-hole | 241A24090X |

### Capacitance 830 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip / 4-40 UNC Threaded insert | 242A12900X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 242A12910X |
| 25 | PCB clip / 4-40 UNC Threaded insert | 242A12920X |
| 37 | PCB clip / 4-40 UNC Threaded insert | 242A12930X |
| 50 | PCB clip / 4-40 UNC Threaded insert | 242A24040X |
| 09 | PCB clip / M3 Threaded insert | 242A13020X |
| 15 | PCB clip / M3 Threaded insert | 242A13030X |
| 25 | PCB clip / M3 Threaded insert | 242A13040X |
| 37 | PCB clip / M3 Threaded insert | 242A13050X |
| 50 | PCB clip / M3 Threaded insert | 242A24080X |
| 09 | PCB clip / Through-hole | 242A12780X |
| 15 | PCB clip / Through-hole | 242A12790X |
| 25 | PCB clip / Through-hole | 242A12800X |
| 37 | PCB clip / Through-hole | 242A12810X |
| 50 | PCB clip / Through-hole | 242A24000X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip / 4-40 UNC Threaded insert | 241A12880X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 241A12890X |
| 25 | PCB clip / 4-40 UNC Threaded insert | 241A12900X |
| 37 | PCB clip / 4-40 UNC Threaded insert | 241A12910X |
| 50 | PCB clip / 4-40 UNC Threaded insert | 241A24140X |
| 09 | PCB clip / M3 Threaded insert | 241A13000X |
| 15 | PCB clip / M3 Threaded insert | 241A13010X |
| 25 | PCB clip / M3 Threaded insert | 241A13020X |
| 37 | PCB clip / M3 Threaded insert | 241A13030X |
| 50 | PCB clip / M3 Threaded insert | 241A24180X |
| 09 | PCB clip / Through-hole | 241A12760X |
| 15 | PCB clip / Through-hole | 241A12770X |
| 25 | PCB clip / Through-hole | 241A12780X |
| 37 | PCB clip / Through-hole | 241A12790X |
| 50 | PCB clip / Through-hole | 241A24100X |

### Capacitance 1300 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip / 4-40 UNC Threaded insert | 242A12860X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 242A12870X |
| 25 | PCB clip / 4-40 UNC Threaded insert | 242A12880X |
| 37 | PCB clip / 4-40 UNC Threaded insert | 242A12890X |
| 50 | PCB clip / 4-40 UNC Threaded insert | 242A24050X |
| 09 | PCB clip / M3 Threaded insert | 242A12980X |
| 15 | PCB clip / M3 Threaded insert | 242A12990X |
| 25 | PCB clip / M3 Threaded insert | 242A13000X |
| 37 | PCB clip / M3 Threaded insert | 242A13010X |
| 50 | PCB clip / M3 Threaded insert | 242A24090X |
| 09 | PCB clip / Through-hole | 242A12740X |
| 15 | PCB clip / Through-hole | 242A12750X |
| 25 | PCB clip / Through-hole | 242A12760X |
| 37 | PCB clip / Through-hole | 242A12770X |
| 50 | PCB clip / Through-hole | 242A24010X |

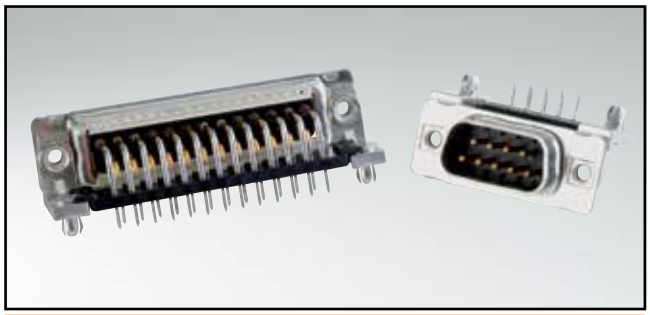
**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip / 4-40 UNC Threaded insert | 241A12840X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 241A12850X |
| 25 | PCB clip / 4-40 UNC Threaded insert | 241A12860X |
| 37 | PCB clip / 4-40 UNC Threaded insert | 241A12870X |
| 50 | PCB clip / 4-40 UNC Threaded insert | 241A24150X |
| 09 | PCB clip / M3 Threaded insert | 241A12960X |
| 15 | PCB clip / M3 Threaded insert | 241A12970X |
| 25 | PCB clip / M3 Threaded insert | 241A12980X |
| 37 | PCB clip / M3 Threaded insert | 241A12990X |
| 50 | PCB clip / M3 Threaded insert | 241A24190X |
| 09 | PCB clip / Through-hole | 241A12720X |
| 15 | PCB clip / Through-hole | 241A12730X |
| 25 | PCB clip / Through-hole | 241A12740X |
| 37 | PCB clip / Through-hole | 241A12750X |
| 50 | PCB clip / Through-hole | 241A24110X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# C-FILTER D-SUB STANDARD

## Solder pin – Angled – .370"/9.4 mm – Precision machined contacts – Metal bracket

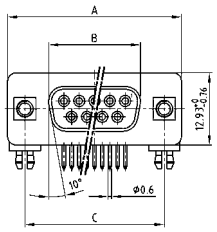


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### DESCRIPTION

- Mounting styles:
  - Mounting bracket with PCB clip and 4-40 UNC or M3 threaded insert
  - Mounting bracket with PCB clip and 4-40 UNC or M3 front spacer
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated on request)

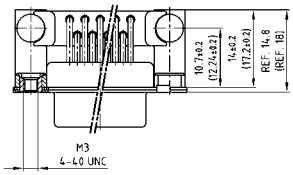
### SOCKET CONNECTOR

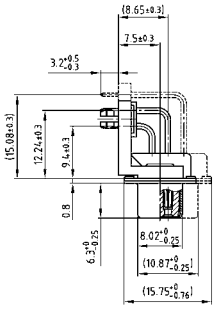


| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 15 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |
| 50 | 67.31 | 52.55 | 61.10 $^{+0.14}_{-0.11}$ |

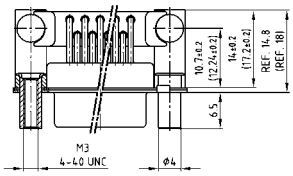
PCB-Layout: Kat1kGGA

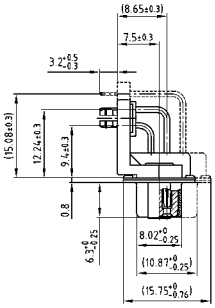
Mounting style:
PCB clip, threaded insert





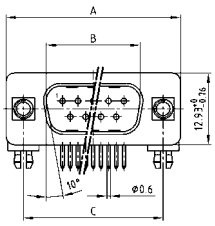
Mounting style:
PCB clip, front spacer





50 pos. = Dim. in (_ _)

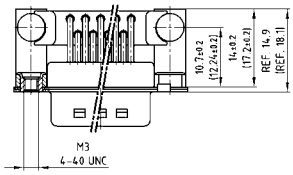
### PLUG CONNECTOR

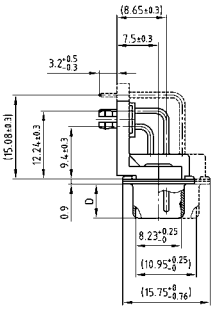


| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 50 | 67.31 | 52.68 | 61.10 $^{+0.14}_{-0.11}$ | 5.99 |

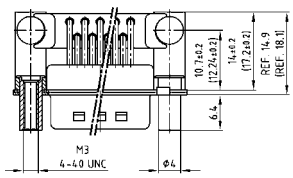
PCB-Layout: Kat1kGHA

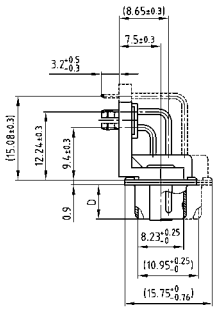
Mounting style:
PCB clip, threaded insert





Mounting style:
PCB clip, front spacer





50 pos. = Dim. in (_ _)

### ORDER DATA

## Capacitance 180 pF

**SOCKET CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip / 4-40 UNC Threaded insert | 242A21410X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 242A21420X |
| 25 | PCB clip / 4-40 UNC Threaded insert | 242A21430X |
| 37 | PCB clip / 4-40 UNC Threaded insert | 242A21440X |
| 50 | PCB clip / 4-40 UNC Threaded insert | 242A27220X |
| 09 | PCB clip / M3 Threaded insert | 242A21570X |
| 15 | PCB clip / M3 Threaded insert | 242A21580X |
| 25 | PCB clip / M3 Threaded insert | 242A21590X |
| 37 | PCB clip / M3 Threaded insert | 242A21600X |
| 50 | PCB clip / M3 Threaded insert | 242A27260X |
| 09 | PCB clip / 4-40 UNC Front spacer | 242A22400X |
| 15 | PCB clip / 4-40 UNC Front spacer | 242A22410X |
| 25 | PCB clip / 4-40 UNC Front spacer | 242A22420X |
| 37 | PCB clip / 4-40 UNC Front spacer | 242A22430X |
| 50 | PCB clip / 4-40 UNC Front spacer | 242A27300X |
| 09 | PCB clip / M3 Front spacer | 242A22560X |
| 15 | PCB clip / M3 Front spacer | 242A22570X |
| 25 | PCB clip / M3 Front spacer | 242A22580X |
| 37 | PCB clip / M3 Front spacer | 242A22590X |
| 50 | PCB clip / M3 Front spacer | 242A27340X |

**PLUG CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip / 4-40 UNC Threaded insert | 241A21560X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 241A21570X |
| 25 | PCB clip / 4-40 UNC Threaded insert | 241A21580X |
| 37 | PCB clip / 4-40 UNC Threaded insert | 241A21590X |
| 50 | PCB clip / 4-40 UNC Threaded insert | 241A27320X |
| 09 | PCB clip / M3 Threaded insert | 241A21720X |
| 15 | PCB clip / M3 Threaded insert | 241A21730X |
| 25 | PCB clip / M3 Threaded insert | 241A21740X |
| 37 | PCB clip / M3 Threaded insert | 241A21750X |
| 50 | PCB clip / M3 Threaded insert | 241A27360X |
| 09 | PCB clip / 4-40 UNC Front spacer | 241A22500X |
| 15 | PCB clip / 4-40 UNC Front spacer | 241A22510X |
| 25 | PCB clip / 4-40 UNC Front spacer | 241A22520X |
| 37 | PCB clip / 4-40 UNC Front spacer | 241A22530X |
| 50 | PCB clip / 4-40 UNC Front spacer | 241A27400X |
| 09 | PCB clip / M3 Front spacer | 241A22660X |
| 15 | PCB clip / M3 Front spacer | 241A22670X |
| 25 | PCB clip / M3 Front spacer | 241A22680X |
| 37 | PCB clip / M3 Front spacer | 241A22690X |
| 50 | PCB clip / M3 Front spacer | 241A27440X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# C-Filter D-SUB Standard

## Solder pin – Angled – .370"/9.4 mm – Precision machined contacts – Metal bracket

### Order data

## Capacitance 370 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip / 4-40 UNC Threaded insert | 242A21450X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 242A21460X |
| 25 | PCB clip / 4-40 UNC Threaded insert | 242A21470X |
| 37 | PCB clip / 4-40 UNC Threaded insert | 242A21480X |
| 50 | PCB clip / 4-40 UNC Threaded insert | 242A27230X |
| 09 | PCB clip / M3 Threaded insert | 242A21610X |
| 15 | PCB clip / M3 Threaded insert | 242A21620X |
| 25 | PCB clip / M3 Threaded insert | 242A21630X |
| 37 | PCB clip / M3 Threaded insert | 242A21640X |
| 50 | PCB clip / M3 Threaded insert | 242A27270X |
| 09 | PCB clip / 4-40 UNC Front spacer | 242A22440X |
| 15 | PCB clip / 4-40 UNC Front spacer | 242A22450X |
| 25 | PCB clip / 4-40 UNC Front spacer | 242A22460X |
| 37 | PCB clip / 4-40 UNC Front spacer | 242A22470X |
| 50 | PCB clip / 4-40 UNC Front spacer | 242A27310X |
| 09 | PCB clip / M3 Front spacer | 242A22600X |
| 15 | PCB clip / M3 Front spacer | 242A22610X |
| 25 | PCB clip / M3 Front spacer | 242A22620X |
| 37 | PCB clip / M3 Front spacer | 242A22630X |
| 50 | PCB clip / M3 Front spacer | 242A27350X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip / 4-40 UNC Threaded insert | 241A21600X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 241A21610X |
| 25 | PCB clip / 4-40 UNC Threaded insert | 241A21620X |
| 37 | PCB clip / 4-40 UNC Threaded insert | 241A21630X |
| 50 | PCB clip / 4-40 UNC Threaded insert | 241A27330X |
| 09 | PCB clip / M3 Threaded insert | 241A21760X |
| 15 | PCB clip / M3 Threaded insert | 241A21770X |
| 25 | PCB clip / M3 Threaded insert | 241A21780X |
| 37 | PCB clip / M3 Threaded insert | 241A21790X |
| 50 | PCB clip / M3 Threaded insert | 241A27370X |
| 09 | PCB clip / 4-40 UNC Front spacer | 241A22540X |
| 15 | PCB clip / 4-40 UNC Front spacer | 241A22550X |
| 25 | PCB clip / 4-40 UNC Front spacer | 241A22560X |
| 37 | PCB clip / 4-40 UNC Front spacer | 241A22570X |
| 50 | PCB clip / 4-40 UNC Front spacer | 241A27410X |
| 09 | PCB clip / M3 Front spacer | 241A22700X |
| 15 | PCB clip / M3 Front spacer | 241A22710X |
| 25 | PCB clip / M3 Front spacer | 241A22720X |
| 37 | PCB clip / M3 Front spacer | 241A22730X |
| 50 | PCB clip / M3 Front spacer | 241A27450X |

## Capacitance 830 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip / 4-40 UNC Threaded insert | 242A21490X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 242A21500X |
| 25 | PCB clip / 4-40 UNC Threaded insert | 242A21510X |
| 37 | PCB clip / 4-40 UNC Threaded insert | 242A21520X |
| 50 | PCB clip / 4-40 UNC Threaded insert | 242A27240X |
| 09 | PCB clip / M3 Threaded insert | 242A21650X |
| 15 | PCB clip / M3 Threaded insert | 242A21660X |
| 25 | PCB clip / M3 Threaded insert | 242A21670X |
| 37 | PCB clip / M3 Threaded insert | 242A21680X |
| 50 | PCB clip / M3 Threaded insert | 242A27280X |
| 09 | PCB clip / 4-40 UNC Front spacer | 242A22480X |
| 15 | PCB clip / 4-40 UNC Front spacer | 242A22490X |
| 25 | PCB clip / 4-40 UNC Front spacer | 242A22500X |
| 37 | PCB clip / 4-40 UNC Front spacer | 242A22510X |
| 50 | PCB clip / 4-40 UNC Front spacer | 242A27320X |
| 09 | PCB clip / M3 Front spacer | 242A22640X |
| 15 | PCB clip / M3 Front spacer | 242A22650X |
| 25 | PCB clip / M3 Front spacer | 242A22660X |
| 37 | PCB clip / M3 Front spacer | 242A22670X |
| 50 | PCB clip / M3 Front spacer | 242A27360X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip / 4-40 UNC Threaded insert | 241A21640X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 241A21650X |
| 25 | PCB clip / 4-40 UNC Threaded insert | 241A21660X |
| 37 | PCB clip / 4-40 UNC Threaded insert | 241A21670X |
| 50 | PCB clip / 4-40 UNC Threaded insert | 241A27340X |
| 09 | PCB clip / M3 Threaded insert | 241A21800X |
| 15 | PCB clip / M3 Threaded insert | 241A21810X |
| 25 | PCB clip / M3 Threaded insert | 241A21820X |
| 37 | PCB clip / M3 Threaded insert | 241A21830X |
| 50 | PCB clip / M3 Threaded insert | 241A27380X |
| 09 | PCB clip / 4-40 UNC Front spacer | 241A22580X |
| 15 | PCB clip / 4-40 UNC Front spacer | 241A22590X |
| 25 | PCB clip / 4-40 UNC Front spacer | 241A22600X |
| 37 | PCB clip / 4-40 UNC Front spacer | 241A22610X |
| 50 | PCB clip / 4-40 UNC Front spacer | 241A27420X |
| 09 | PCB clip / M3 Front spacer | 241A22740X |
| 15 | PCB clip / M3 Front spacer | 241A22750X |
| 25 | PCB clip / M3 Front spacer | 241A22760X |
| 37 | PCB clip / M3 Front spacer | 241A22770X |
| 50 | PCB clip / M3 Front spacer | 241A27460X |

## Capacitance 1300 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip / 4-40 UNC Threaded insert | 242A21530X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 242A21540X |
| 25 | PCB clip / 4-40 UNC Threaded insert | 242A21550X |
| 37 | PCB clip / 4-40 UNC Threaded insert | 242A21560X |
| 50 | PCB clip / 4-40 UNC Threaded insert | 242A27250X |
| 09 | PCB clip / M3 Threaded insert | 242A21690X |
| 15 | PCB clip / M3 Threaded insert | 242A21700X |
| 25 | PCB clip / M3 Threaded insert | 242A21710X |
| 37 | PCB clip / M3 Threaded insert | 242A21720X |
| 50 | PCB clip / M3 Threaded insert | 242A27290X |
| 09 | PCB clip / 4-40 UNC Front spacer | 242A22520X |
| 15 | PCB clip / 4-40 UNC Front spacer | 242A22530X |
| 25 | PCB clip / 4-40 UNC Front spacer | 242A22540X |
| 37 | PCB clip / 4-40 UNC Front spacer | 242A22550X |
| 50 | PCB clip / 4-40 UNC Front spacer | 242A27330X |
| 09 | PCB clip / M3 Front spacer | 242A22680X |
| 15 | PCB clip / M3 Front spacer | 242A22690X |
| 25 | PCB clip / M3 Front spacer | 242A22700X |
| 37 | PCB clip / M3 Front spacer | 242A22710X |
| 50 | PCB clip / M3 Front spacer | 242A27370X |

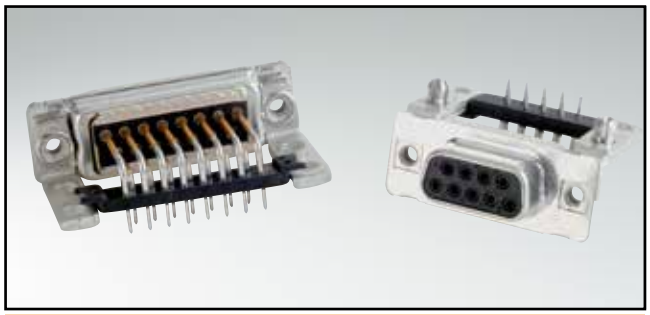
**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip / 4-40 UNC Threaded insert | 241A21680X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 241A21690X |
| 25 | PCB clip / 4-40 UNC Threaded insert | 241A21700X |
| 37 | PCB clip / 4-40 UNC Threaded insert | 241A21710X |
| 50 | PCB clip / 4-40 UNC Threaded insert | 241A27350X |
| 09 | PCB clip / M3 Threaded insert | 241A21840X |
| 15 | PCB clip / M3 Threaded insert | 241A21850X |
| 25 | PCB clip / M3 Threaded insert | 241A21860X |
| 37 | PCB clip / M3 Threaded insert | 241A21870X |
| 50 | PCB clip / M3 Threaded insert | 241A27390X |
| 09 | PCB clip / 4-40 UNC Front spacer | 241A22620X |
| 15 | PCB clip / 4-40 UNC Front spacer | 241A22630X |
| 25 | PCB clip / 4-40 UNC Front spacer | 241A22640X |
| 37 | PCB clip / 4-40 UNC Front spacer | 241A22650X |
| 50 | PCB clip / 4-40 UNC Front spacer | 241A27430X |
| 09 | PCB clip / M3 Front spacer | 241A22780X |
| 15 | PCB clip / M3 Front spacer | 241A22790X |
| 25 | PCB clip / M3 Front spacer | 241A22800X |
| 37 | PCB clip / M3 Front spacer | 241A22810X |
| 50 | PCB clip / M3 Front spacer | 241A27470X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# C-FILTER D-SUB STANDARD

## Solder pin – Angled – .590"/14.19 mm – Precision machined contacts – Metal Bracket

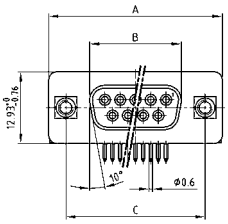


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### DESCRIPTION

- Mounting styles:
  - with mounting bracket and 4-40 UNC threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated on request)

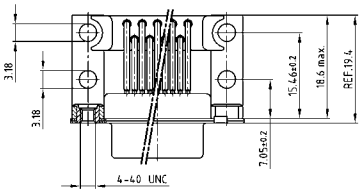
### SOCKET CONNECTOR

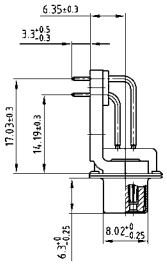


| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 15 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |

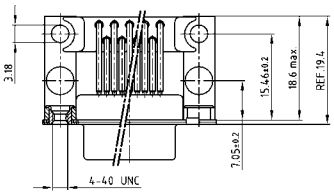
PCB-Layout: Kat1kGIA

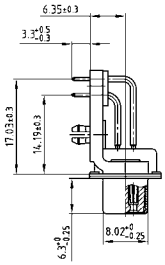
Mounting style: Threaded insert



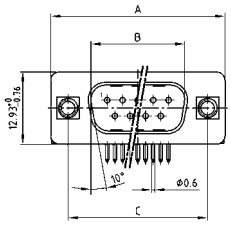


Mounting style:
PCB clip, threaded insert





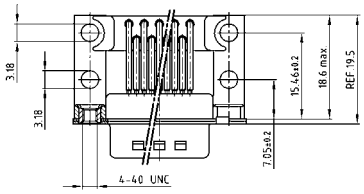
### PLUG CONNECTOR

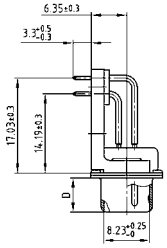


| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

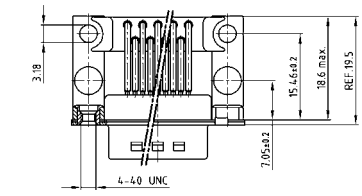
PCB-Layout: Kat1kGJA

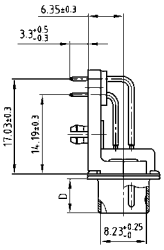
Mounting style: Threaded insert





Mounting style:
PCB clip, threaded insert





### ORDER DATA

## Capacitance 180 pF

**SOCKET CONNECTOR**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 242A17260X |
| 15 | Threaded insert | 242A17270X |
| 25 | Threaded insert | 242A17280X |
| 37 | Threaded insert | 242A17290X |
| 09 | PCB clip / Threaded insert | 242A19290X |
| 15 | PCB clip / Threaded insert | 242A19300X |
| 25 | PCB clip / Threaded insert | 242A19310X |
| 37 | PCB clip / Threaded insert | 242A19320X |

**PLUG CONNECTOR**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 241A19880X |
| 15 | Threaded insert | 241A19890X |
| 25 | Threaded insert | 241A19900X |
| 37 | Threaded insert | 241A19910X |
| 09 | PCB clip / Threaded insert | 241A17700X |
| 15 | PCB clip / Threaded insert | 241A17710X |
| 25 | PCB clip / Threaded insert | 241A17720X |
| 37 | PCB clip / Threaded insert | 241A17730X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# C-Filter D-SUB Standard

## Solder pin – Angled – .590"/14.19 mm – Precision machined contacts – Metal Bracket

### Order data

### Capacitance 370 pF

**Socket connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 242A12580X |
| 15 | Threaded insert | 242A12590X |
| 25 | Threaded insert | 242A12600X |
| 37 | Threaded insert | 242A12610X |
| 09 | PCB clip / Threaded insert | 242A19250X |
| 15 | PCB clip / Threaded insert | 242A19260X |
| 25 | PCB clip / Threaded insert | 242A19270X |
| 37 | PCB clip / Threaded insert | 242A19280X |

**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 241A12560X |
| 15 | Threaded insert | 241A12570X |
| 25 | Threaded insert | 241A12580X |
| 37 | Threaded insert | 241A12590X |
| 09 | PCB clip / Threaded insert | 241A17660X |
| 15 | PCB clip / Threaded insert | 241A17670X |
| 25 | PCB clip / Threaded insert | 241A17680X |
| 37 | PCB clip / Threaded insert | 241A17690X |

### Capacitance 830 pF

**Socket connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 242A12660X |
| 15 | Threaded insert | 242A12670X |
| 25 | Threaded insert | 242A12680X |
| 37 | Threaded insert | 242A12690X |
| 09 | PCB clip / Threaded insert | 242A19210X |
| 15 | PCB clip / Threaded insert | 242A19220X |
| 25 | PCB clip / Threaded insert | 242A19230X |
| 37 | PCB clip / Threaded insert | 242A19240X |

**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 241A12640X |
| 15 | Threaded insert | 241A12650X |
| 25 | Threaded insert | 241A12660X |
| 37 | Threaded insert | 241A12670X |
| 09 | PCB clip / Threaded insert | 241A17620X |
| 15 | PCB clip / Threaded insert | 241A17630X |
| 25 | PCB clip / Threaded insert | 241A17640X |
| 37 | PCB clip / Threaded insert | 241A17650X |

### Capacitance 1300 pF

**Socket connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 242A12620X |
| 15 | Threaded insert | 242A12630X |
| 25 | Threaded insert | 242A12640X |
| 37 | Threaded insert | 242A12650X |
| 09 | PCB clip / Threaded insert | 242A19170X |
| 15 | PCB clip / Threaded insert | 242A19180X |
| 25 | PCB clip / Threaded insert | 242A19190X |
| 37 | PCB clip / Threaded insert | 242A19200X |

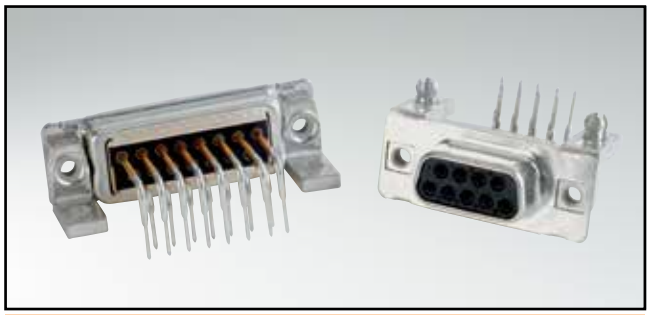
**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 241A12600X |
| 15 | Threaded insert | 241A12610X |
| 25 | Threaded insert | 241A12620X |
| 37 | Threaded insert | 241A12630X |
| 09 | PCB clip / Threaded insert | 241A17580X |
| 15 | PCB clip / Threaded insert | 241A17590X |
| 25 | PCB clip / Threaded insert | 241A17600X |
| 37 | PCB clip / Threaded insert | 241A17610X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# C-FILTER D-SUB STANDARD

## Solder pin – Angled – .590"/14.19 mm – Precision machined contacts – Short metal bracket

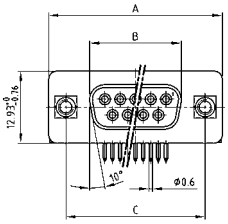


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### DESCRIPTION

- Mounting styles:
  - Mounting bracket, 4-40 UNC threaded insert
  - Mounting bracket, PCB clip and 4-40 UNC threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated on request)

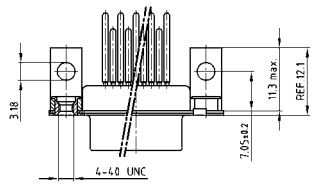
### SOCKET CONNECTOR

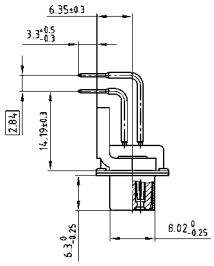


| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 15 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |

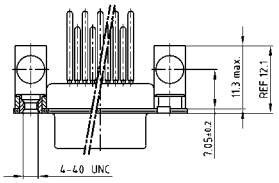
PCB-Layout: Kat1kGXA

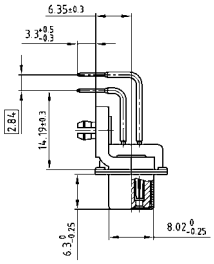
Mounting style: Threaded insert



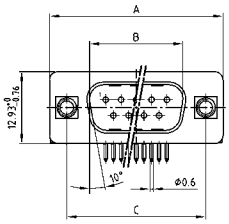


Mounting style:
PCB clip, threaded insert





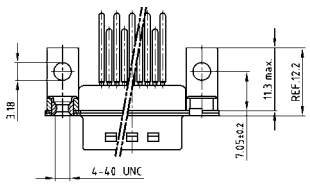
### PLUG CONNECTOR

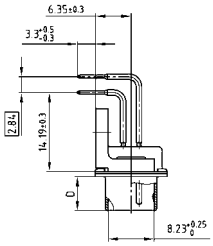


| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

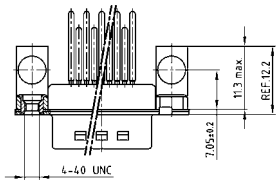
PCB-Layout: Kat1kGYA

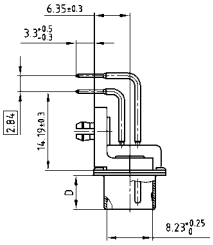
Mounting style: Threaded insert





Mounting style:
PCB clip, threaded insert





### ORDER DATA

## Capacitance 180 pF

**SOCKET CONNECTOR**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 242A20290X |
| 15 | Threaded insert | 242A20300X |
| 25 | Threaded insert | 242A20310X |
| 37 | Threaded insert | 242A20320X |
| 09 | PCB clip / Threaded insert | 242A20450X |
| 15 | PCB clip / Threaded insert | 242A20460X |
| 25 | PCB clip / Threaded insert | 242A20470X |
| 37 | PCB clip / Threaded insert | 242A20480X |

**PLUG CONNECTOR**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 241A20440X |
| 15 | Threaded insert | 241A20450X |
| 25 | Threaded insert | 241A20460X |
| 37 | Threaded insert | 241A20470X |
| 09 | PCB clip / Threaded insert | 241A20600X |
| 15 | PCB clip / Threaded insert | 241A20610X |
| 25 | PCB clip / Threaded insert | 241A20620X |
| 37 | PCB clip / Threaded insert | 241A20630X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# C-Filter D-SUB Standard

Solder pin – Angled – .590"/14.19 mm – Precision machined contacts – Short metal bracket

## Order data

### Capacitance 370 pF

**Socket connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 242A20330X |
| 15 | Threaded insert | 242A20340X |
| 25 | Threaded insert | 242A20350X |
| 37 | Threaded insert | 242A20360X |
| 09 | PCB clip / Threaded insert | 242A20490X |
| 15 | PCB clip / Threaded insert | 242A20500X |
| 25 | PCB clip / Threaded insert | 242A20510X |
| 37 | PCB clip / Threaded insert | 242A20520X |

**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 241A20480X |
| 15 | Threaded insert | 241A20490X |
| 25 | Threaded insert | 241A20500X |
| 37 | Threaded insert | 241A20510X |
| 09 | PCB clip / Threaded insert | 241A20640X |
| 15 | PCB clip / Threaded insert | 241A20650X |
| 25 | PCB clip / Threaded insert | 241A20660X |
| 37 | PCB clip / Threaded insert | 241A20670X |

### Capacitance 830 pF

**Socket connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 242A20370X |
| 15 | Threaded insert | 242A20380X |
| 25 | Threaded insert | 242A20390X |
| 37 | Threaded insert | 242A20400X |
| 09 | PCB clip / Threaded insert | 242A20530X |
| 15 | PCB clip / Threaded insert | 242A20540X |
| 25 | PCB clip / Threaded insert | 242A20550X |
| 37 | PCB clip / Threaded insert | 242A20560X |

**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 241A20520X |
| 15 | Threaded insert | 241A20530X |
| 25 | Threaded insert | 241A20540X |
| 37 | Threaded insert | 241A20550X |
| 09 | PCB clip / Threaded insert | 241A20680X |
| 15 | PCB clip / Threaded insert | 241A20690X |
| 25 | PCB clip / Threaded insert | 241A20700X |
| 37 | PCB clip / Threaded insert | 241A20710X |

### Capacitance 1300 pF

**Socket connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 242A20410X |
| 15 | Threaded insert | 242A20420X |
| 25 | Threaded insert | 242A20430X |
| 37 | Threaded insert | 242A20440X |
| 09 | PCB clip / Threaded insert | 242A20570X |
| 15 | PCB clip / Threaded insert | 242A20580X |
| 25 | PCB clip / Threaded insert | 242A20590X |
| 37 | PCB clip / Threaded insert | 242A20600X |

**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 241A20560X |
| 15 | Threaded insert | 241A20570X |
| 25 | Threaded insert | 241A20580X |
| 37 | Threaded insert | 241A20590X |
| 09 | PCB clip / Threaded insert | 241A20720X |
| 15 | PCB clip / Threaded insert | 241A20730X |
| 25 | PCB clip / Threaded insert | 241A20740X |
| 37 | PCB clip / Threaded insert | 241A20750X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# C-FILTER D-SUB STANDARD – DUAL PORT

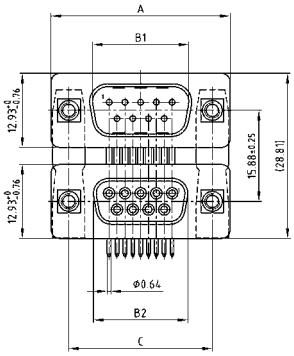
## Solder pin – Angled – Precision machined contacts – .625"/15.88 mm connector spacing

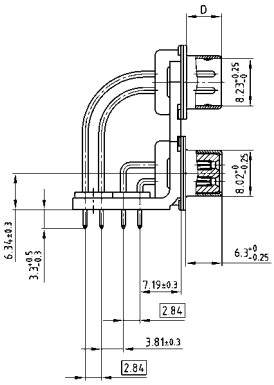
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### DESCRIPTION

- Variations: plug – plug; socket – socket; plug – socket
- Mounting styles:
  - with mounting bracket and 4-40 UNC threaded insert
  - with mounting bracket and 4-40 UNC front spacer
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated on request)

### PRODUCT DRAWING



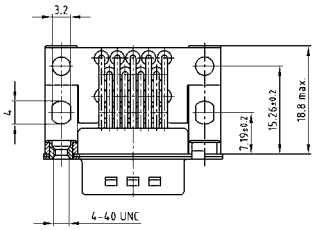




| No. of pos. | A -0.76 | B1 +0.25 | B2 -0.25 | C | D -0.30 |
|---|---|---|---|---|---|
| 2X 09 | 31.19 | 16.79 | 16.46 | 25.00 +0.12 -0.13 | 6.12 |
| 2X 15 | 39.52 | 25.12 | 24.79 | 33.30 +0.15 -0.10 | 6.12 |
| 2X 25 | 53.42 | 38.84 | 38.50 | 47.04 ±0.13 | 5.99 |
| 2X 37 | 69.70 | 55.30 | 54.96 | 63.50 ±0.13 | 5.99 |

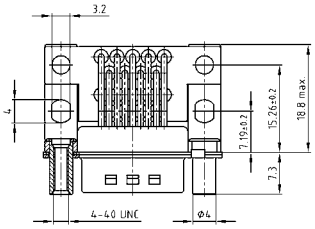
**Graphically representation of only one variant!**

PCB-Layout: Kat1iU5A / Kat1iU6A

Mounting style: Threaded insert

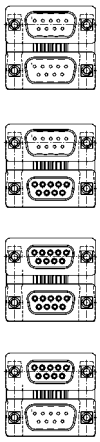



Mounting style: Front spacer




### ORDER DATA

## Capacitance 180 pF



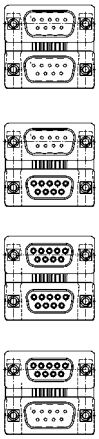
| Version with 4-40 UNC Threaded insert | | | Version with 4-40 UNC Front spacer | | |
|---|---|---|---|---|---|
| No. of pos. | Design | Part Number | No. of pos. | Design | Part Number |
| 09/09 | Plug upper / Plug bottom | 241A22300X | 09/09 | Plug upper / Plug bottom | 241A17420X |
| 15/15 | Plug upper / Plug bottom | 241A22310X | 15/15 | Plug upper / Plug bottom | 241A17430X |
| 25/25 | Plug upper / Plug bottom | 241A22320X | 25/25 | Plug upper / Plug bottom | 241A17440X |
| 37/37 | Plug upper / Plug bottom | 241A22330X | 37/37 | Plug upper / Plug bottom | 241A17450X |
| 09/09 | Plug upper / Socket bottom | 241A22340X | 09/09 | Plug upper / Socket bottom | 241A17460X |
| 15/15 | Plug upper / Socket bottom | 241A22350X | 15/15 | Plug upper / Socket bottom | 241A17470X |
| 25/25 | Plug upper / Socket bottom | 241A22360X | 25/25 | Plug upper / Socket bottom | 241A17480X |
| 37/37 | Plug upper / Socket bottom | 241A22370X | 37/37 | Plug upper / Socket bottom | 241A17490X |
| 09/09 | Socket upper / Socket bottom | 242A22000X | 09/09 | Socket upper / Socket bottom | 242A22080X |
| 15/15 | Socket upper / Socket bottom | 242A22010X | 15/15 | Socket upper / Socket bottom | 242A22090X |
| 25/25 | Socket upper / Socket bottom | 242A22020X | 25/25 | Socket upper / Socket bottom | 242A22100X |
| 37/37 | Socket upper / Socket bottom | 242A22030X | 37/37 | Socket upper / Socket bottom | 242A22110X |
| 09/09 | Socket upper / Plug bottom | 242A22040X | 09/09 | Socket upper / Plug bottom | 242A22120X |
| 15/15 | Socket upper / Plug bottom | 242A22050X | 15/15 | Socket upper / Plug bottom | 242A22130X |
| 25/25 | Socket upper / Plug bottom | 242A22060X | 25/25 | Socket upper / Plug bottom | 242A22140X |
| 37/37 | Socket upper / Plug bottom | 242A22070X | 37/37 | Socket upper / Plug bottom | 242A22150X |

# C-Filter D-SUB Standard – Dual port

## Solder pin – Angled – Precision machined contacts – .625"/15.88 mm connector spacing

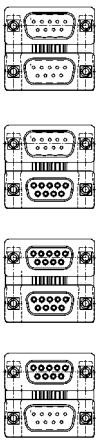
### Order data

### Capacitance 370 pF



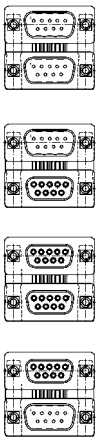
| Version with 4-40 UNC Threaded insert | | | Version with 4-40 UNC Front spacer | | |
|---|---|---|---|---|---|
| No. of pos. | Design | Part Number | No. of pos. | Design | Part Number |
| 09/09 | Plug upper / Plug bottom | 241A14130X | 09/09 | Plug upper / Plug bottom | 241A14370X |
| 15/15 | Plug upper / Plug bottom | 241A14140X | 15/15 | Plug upper / Plug bottom | 241A14380X |
| 25/25 | Plug upper / Plug bottom | 241A14150X | 25/25 | Plug upper / Plug bottom | 241A14390X |
| 37/37 | Plug upper / Plug bottom | 241A14160X | 37/37 | Plug upper / Plug bottom | 241A14400X |
| 09/09 | Plug upper / Socket bottom | 241A14250X | 09/09 | Plug upper / Socket bottom | 241A14490X |
| 15/15 | Plug upper / Socket bottom | 241A14260X | 15/15 | Plug upper / Socket bottom | 241A14500X |
| 25/25 | Plug upper / Socket bottom | 241A14270X | 25/25 | Plug upper / Socket bottom | 241A14510X |
| 37/37 | Plug upper / Socket bottom | 241A14280X | 37/37 | Plug upper / Socket bottom | 241A14520X |
| 09/09 | Socket upper / Socket bottom | 242A14020X | 09/09 | Socket upper / Socket bottom | 242A14260X |
| 15/15 | Socket upper / Socket bottom | 242A14030X | 15/15 | Socket upper / Socket bottom | 242A14270X |
| 25/25 | Socket upper / Socket bottom | 242A14040X | 25/25 | Socket upper / Socket bottom | 242A14280X |
| 37/37 | Socket upper / Socket bottom | 242A14050X | 37/37 | Socket upper / Socket bottom | 242A14290X |
| 09/09 | Socket upper / Plug bottom | 242A14140X | 09/09 | Socket upper / Plug bottom | 242A14380X |
| 15/15 | Socket upper / Plug bottom | 242A14150X | 15/15 | Socket upper / Plug bottom | 242A14390X |
| 25/25 | Socket upper / Plug bottom | 242A14160X | 25/25 | Socket upper / Plug bottom | 242A14400X |
| 37/37 | Socket upper / Plug bottom | 242A14170X | 37/37 | Socket upper / Plug bottom | 242A14410X |

### Capacitance 830 pF



| Version with 4-40 UNC Threaded insert | | | Version with 4-40 UNC Front spacer | | |
|---|---|---|---|---|---|
| No. of pos. | Design | Part Number | No. of pos. | Design | Part Number |
| 09/09 | Plug upper / Plug bottom | 241A14210X | 09/09 | Plug upper / Plug bottom | 241A14450X |
| 15/15 | Plug upper / Plug bottom | 241A14220X | 15/15 | Plug upper / Plug bottom | 241A14460X |
| 25/25 | Plug upper / Plug bottom | 241A14230X | 25/25 | Plug upper / Plug bottom | 241A14470X |
| 37/37 | Plug upper / Plug bottom | 241A14240X | 37/37 | Plug upper / Plug bottom | 241A14480X |
| 09/09 | Plug upper / Socket bottom | 241A14330X | 09/09 | Plug upper / Socket bottom | 241A14570X |
| 15/15 | Plug upper / Socket bottom | 241A14340X | 15/15 | Plug upper / Socket bottom | 241A14580X |
| 25/25 | Plug upper / Socket bottom | 241A14350X | 25/25 | Plug upper / Socket bottom | 241A14590X |
| 37/37 | Plug upper / Socket bottom | 241A14360X | 37/37 | Plug upper / Socket bottom | 241A14600X |
| 09/09 | Socket upper / Socket bottom | 242A14100X | 09/09 | Socket upper / Socket bottom | 242A14340X |
| 15/15 | Socket upper / Socket bottom | 242A14110X | 15/15 | Socket upper / Socket bottom | 242A14350X |
| 25/25 | Socket upper / Socket bottom | 242A14120X | 25/25 | Socket upper / Socket bottom | 242A14360X |
| 37/37 | Socket upper / Socket bottom | 242A14130X | 37/37 | Socket upper / Socket bottom | 242A14370X |
| 09/09 | Socket upper / Plug bottom | 242A14220X | 09/09 | Socket upper / Plug bottom | 242A14460X |
| 15/15 | Socket upper / Plug bottom | 242A14230X | 15/15 | Socket upper / Plug bottom | 242A14470X |
| 25/25 | Socket upper / Plug bottom | 242A14240X | 25/25 | Socket upper / Plug bottom | 242A14480X |
| 37/37 | Socket upper / Plug bottom | 242A14250X | 37/37 | Socket upper / Plug bottom | 242A14490X |

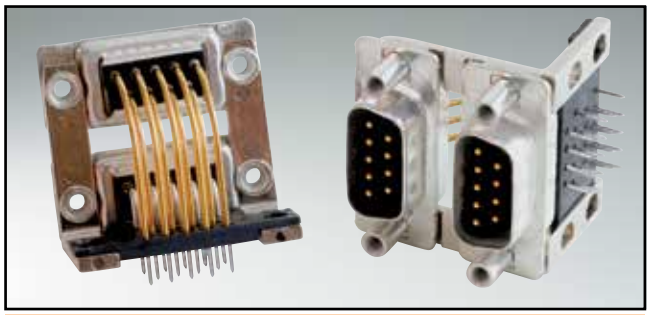
### Capacitance 1300 pF



| Version with 4-40 UNC Threaded insert | | | Version with 4-40 UNC Front spacer | | |
|---|---|---|---|---|---|
| No. of pos. | Design | Part Number | No. of pos. | Design | Part Number |
| 09/09 | Plug upper / Plug bottom | 241A14170X | 09/09 | Plug upper / Plug bottom | 241A14410X |
| 15/15 | Plug upper / Plug bottom | 241A14180X | 15/15 | Plug upper / Plug bottom | 241A14420X |
| 25/25 | Plug upper / Plug bottom | 241A14190X | 25/25 | Plug upper / Plug bottom | 241A14430X |
| 37/37 | Plug upper / Plug bottom | 241A14200X | 37/37 | Plug upper / Plug bottom | 241A14440X |
| 09/09 | Plug upper / Socket bottom | 241A14290X | 09/09 | Plug upper / Socket bottom | 241A14530X |
| 15/15 | Plug upper / Socket bottom | 241A14300X | 15/15 | Plug upper / Socket bottom | 241A14540X |
| 25/25 | Plug upper / Socket bottom | 241A14310X | 25/25 | Plug upper / Socket bottom | 241A14550X |
| 37/37 | Plug upper / Socket bottom | 241A14320X | 37/37 | Plug upper / Socket bottom | 241A14560X |
| 09/09 | Socket upper / Socket bottom | 242A14060X | 09/09 | Socket upper / Socket bottom | 242A14300X |
| 15/15 | Socket upper / Socket bottom | 242A14070X | 15/15 | Socket upper / Socket bottom | 242A14310X |
| 25/25 | Socket upper / Socket bottom | 242A14080X | 25/25 | Socket upper / Socket bottom | 242A14320X |
| 37/37 | Socket upper / Socket bottom | 242A14090X | 37/37 | Socket upper / Socket bottom | 242A14330X |
| 09/09 | Socket upper / Plug bottom | 242A14180X | 09/09 | Socket upper / Plug bottom | 242A14420X |
| 15/15 | Socket upper / Plug bottom | 242A14190X | 15/15 | Socket upper / Plug bottom | 242A14430X |
| 25/25 | Socket upper / Plug bottom | 242A14200X | 25/25 | Socket upper / Plug bottom | 242A14440X |
| 37/37 | Socket upper / Plug bottom | 242A14210X | 37/37 | Socket upper / Plug bottom | 242A14450X |

# C-FILTER D-SUB STANDARD – DUAL PORT

## Solder pin – Angled – Precision machined contacts – .750"/19.05 mm connector spacing

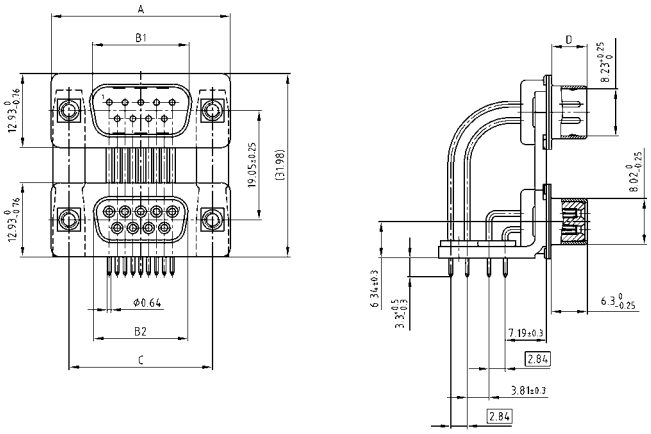


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### DESCRIPTION

- Variations: plug – plug; socket – socket; plug – socket
- Mounting styles:
  - with mounting bracket and 4-40 UNC threaded insert
  - with mounting bracket and 4-40 UNC front spacer
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated on request)

### PRODUCT DRAWING

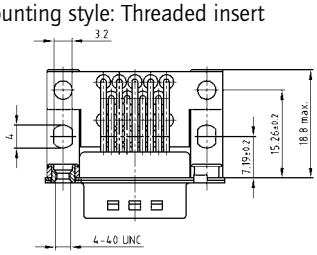



| No. of pos. | A -0.76 | B1 +0.25 | B2 -0.25 | C | D -0.30 |
|---|---|---|---|---|---|
| 2X 09 | 31.19 | 16.79 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 2X 15 | 39.52 | 25.12 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 2X 25 | 53.42 | 38.84 | 38.50 | 47.04 ±0.13 | 5.99 |
| 2X 37 | 69.70 | 55.30 | 54.96 | 63.50 ±0.13 | 5.99 |

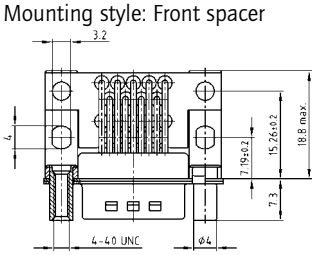
**Graphically representation of only one variant!**

PCB-Layout: Kat1iU5A / Kat1iU6A

Mounting style: Threaded insert

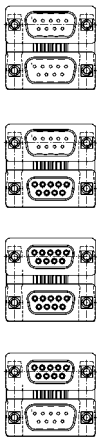



Mounting style: Front spacer




### ORDER DATA

## Capacitance 180 pF



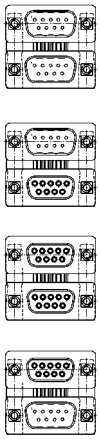
| VERSION WITH 4-40 UNC THREADED INSERT | | | VERSION WITH 4-40 UNC FRONT SPACER | | |
|---|---|---|---|---|---|
| No. of pos. | Design | Part Number | No. of pos. | Design | Part Number |
| 09/09 | Plug upper / Plug bottom | 241A17500X | 09/09 | Plug upper / Plug bottom | 241A22380X |
| 15/15 | Plug upper / Plug bottom | 241A17510X | 15/15 | Plug upper / Plug bottom | 241A22390X |
| 25/25 | Plug upper / Plug bottom | 241A17520X | 25/25 | Plug upper / Plug bottom | 241A22400X |
| 37/37 | Plug upper / Plug bottom | 241A17530X | 37/37 | Plug upper / Plug bottom | 241A22410X |
| 09/09 | Plug upper / Socket bottom | 241A17540X | 09/09 | Plug upper / Socket bottom | 241A22420X |
| 15/15 | Plug upper / Socket bottom | 241A17550X | 15/15 | Plug upper / Socket bottom | 241A22430X |
| 25/25 | Plug upper / Socket bottom | 241A17560X | 25/25 | Plug upper / Socket bottom | 241A22440X |
| 37/37 | Plug upper / Socket bottom | 241A17570X | 37/37 | Plug upper / Socket bottom | 241A22450X |
| 09/09 | Socket upper / Socket bottom | 242A22160X | 09/09 | Socket upper / Socket bottom | 242A22240X |
| 15/15 | Socket upper / Socket bottom | 242A22170X | 15/15 | Socket upper / Socket bottom | 242A22250X |
| 25/25 | Socket upper / Socket bottom | 242A22180X | 25/25 | Socket upper / Socket bottom | 242A22260X |
| 37/37 | Socket upper / Socket bottom | 242A22190X | 37/37 | Socket upper / Socket bottom | 242A22270X |
| 09/09 | Socket upper / Plug bottom | 242A22200X | 09/09 | Socket upper / Plug bottom | 242A22280X |
| 15/15 | Socket upper / Plug bottom | 242A22210X | 15/15 | Socket upper / Plug bottom | 242A22290X |
| 25/25 | Socket upper / Plug bottom | 242A22220X | 25/25 | Socket upper / Plug bottom | 242A22300X |
| 37/37 | Socket upper / Plug bottom | 242A22230X | 37/37 | Socket upper / Plug bottom | 242A22310X |

# C-Filter D-SUB Standard – Dual port

## Solder pin – Angled – Precision machined contacts – .750"/19.05 mm connector spacing

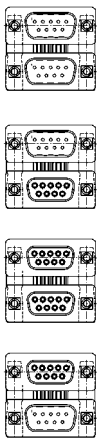
### Order data

### Capacitance 370 pF



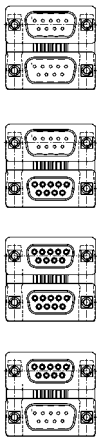
| Version with 4-40 UNC Threaded insert | | | Version with 4-40 UNC Front spacer | | |
|---|---|---|---|---|---|
| No. of pos. | Design | Part Number | No. of pos. | Design | Part Number |
| 09/09 | Plug upper / Plug bottom | 241A14610X | 09/09 | Plug upper / Plug bottom | 241A14850X |
| 15/15 | Plug upper / Plug bottom | 241A14620X | 15/15 | Plug upper / Plug bottom | 241A14860X |
| 25/25 | Plug upper / Plug bottom | 241A14630X | 25/25 | Plug upper / Plug bottom | 241A14870X |
| 37/37 | Plug upper / Plug bottom | 241A14640X | 37/37 | Plug upper / Plug bottom | 241A14880X |
| 09/09 | Plug upper / Socket bottom | 241A14730X | 09/09 | Plug upper / Socket bottom | 241A14970X |
| 15/15 | Plug upper / Socket bottom | 241A14740X | 15/15 | Plug upper / Socket bottom | 241A14980X |
| 25/25 | Plug upper / Socket bottom | 241A14750X | 25/25 | Plug upper / Socket bottom | 241A14990X |
| 37/37 | Plug upper / Socket bottom | 241A14760X | 37/37 | Plug upper / Socket bottom | 241A15000X |
| 09/09 | Socket upper / Socket bottom | 242A14500X | 09/09 | Socket upper / Socket bottom | 242A14740X |
| 15/15 | Socket upper / Socket bottom | 242A14510X | 15/15 | Socket upper / Socket bottom | 242A14750X |
| 25/25 | Socket upper / Socket bottom | 242A14520X | 25/25 | Socket upper / Socket bottom | 242A14760X |
| 37/37 | Socket upper / Socket bottom | 242A14530X | 37/37 | Socket upper / Socket bottom | 242A14770X |
| 09/09 | Socket upper / Plug bottom | 242A14620X | 09/09 | Socket upper / Plug bottom | 242A14860X |
| 15/15 | Socket upper / Plug bottom | 242A14630X | 15/15 | Socket upper / Plug bottom | 242A14870X |
| 25/25 | Socket upper / Plug bottom | 242A14640X | 25/25 | Socket upper / Plug bottom | 242A14880X |
| 37/37 | Socket upper / Plug bottom | 242A14650X | 37/37 | Socket upper / Plug bottom | 242A14890X |

### Capacitance 830 pF



| Version with 4-40 UNC Threaded insert | | | Version with 4-40 UNC Front spacer | | |
|---|---|---|---|---|---|
| No. of pos. | Design | Part Number | No. of pos. | Design | Part Number |
| 09/09 | Plug upper / Plug bottom | 241A14690X | 09/09 | Plug upper / Plug bottom | 241A14930X |
| 15/15 | Plug upper / Plug bottom | 241A14700X | 15/15 | Plug upper / Plug bottom | 241A14940X |
| 25/25 | Plug upper / Plug bottom | 241A14710X | 25/25 | Plug upper / Plug bottom | 241A14950X |
| 37/37 | Plug upper / Plug bottom | 241A14720X | 37/37 | Plug upper / Plug bottom | 241A14960X |
| 09/09 | Plug upper / Socket bottom | 241A14810X | 09/09 | Plug upper / Socket bottom | 241A15050X |
| 15/15 | Plug upper / Socket bottom | 241A14820X | 15/15 | Plug upper / Socket bottom | 241A15060X |
| 25/25 | Plug upper / Socket bottom | 241A14830X | 25/25 | Plug upper / Socket bottom | 241A15070X |
| 37/37 | Plug upper / Socket bottom | 241A14840X | 37/37 | Plug upper / Socket bottom | 241A15080X |
| 09/09 | Socket upper / Socket bottom | 242A14580X | 09/09 | Socket upper / Socket bottom | 242A14820X |
| 15/15 | Socket upper / Socket bottom | 242A14590X | 15/15 | Socket upper / Socket bottom | 242A14830X |
| 25/25 | Socket upper / Socket bottom | 242A14600X | 25/25 | Socket upper / Socket bottom | 242A14840X |
| 37/37 | Socket upper / Socket bottom | 242A14610X | 37/37 | Socket upper / Socket bottom | 242A14850X |
| 09/09 | Socket upper / Plug bottom | 242A14700X | 09/09 | Socket upper / Plug bottom | 242A14940X |
| 15/15 | Socket upper / Plug bottom | 242A14710X | 15/15 | Socket upper / Plug bottom | 242A14950X |
| 25/25 | Socket upper / Plug bottom | 242A14720X | 25/25 | Socket upper / Plug bottom | 242A14960X |
| 37/37 | Socket upper / Plug bottom | 242A14730X | 37/37 | Socket upper / Plug bottom | 242A14970X |

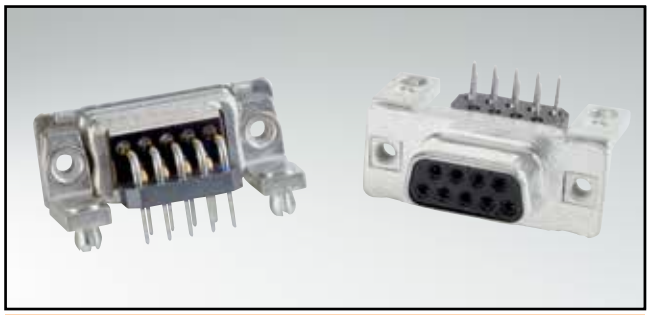
### Capacitance 1300 pF



| Version with 4-40 UNC Threaded insert | | | Version with 4-40 UNC Front spacer | | |
|---|---|---|---|---|---|
| No. of pos. | Design | Part Number | No. of pos. | Design | Part Number |
| 09/09 | Plug upper / Plug bottom | 241A14650X | 09/09 | Plug upper / Plug bottom | 241A14890X |
| 15/15 | Plug upper / Plug bottom | 241A14660X | 15/15 | Plug upper / Plug bottom | 241A14900X |
| 25/25 | Plug upper / Plug bottom | 241A14670X | 25/25 | Plug upper / Plug bottom | 241A14910X |
| 37/37 | Plug upper / Plug bottom | 241A14680X | 37/37 | Plug upper / Plug bottom | 241A14920X |
| 09/09 | Plug upper / Socket bottom | 241A14770X | 09/09 | Plug upper / Socket bottom | 241A15010X |
| 15/15 | Plug upper / Socket bottom | 241A14780X | 15/15 | Plug upper / Socket bottom | 241A15020X |
| 25/25 | Plug upper / Socket bottom | 241A14790X | 25/25 | Plug upper / Socket bottom | 241A15030X |
| 37/37 | Plug upper / Socket bottom | 241A14800X | 37/37 | Plug upper / Socket bottom | 241A15040X |
| 09/09 | Socket upper / Socket bottom | 242A14540X | 09/09 | Socket upper / Socket bottom | 242A14780X |
| 15/15 | Socket upper / Socket bottom | 242A14550X | 15/15 | Socket upper / Socket bottom | 242A14790X |
| 25/25 | Socket upper / Socket bottom | 242A14560X | 25/25 | Socket upper / Socket bottom | 242A14800X |
| 37/37 | Socket upper / Socket bottom | 242A14570X | 37/37 | Socket upper / Socket bottom | 242A14810X |
| 09/09 | Socket upper / Plug bottom | 242A14660X | 09/09 | Socket upper / Plug bottom | 242A14900X |
| 15/15 | Socket upper / Plug bottom | 242A14670X | 15/15 | Socket upper / Plug bottom | 242A14910X |
| 25/25 | Socket upper / Plug bottom | 242A14680X | 25/25 | Socket upper / Plug bottom | 242A14920X |
| 37/37 | Socket upper / Plug bottom | 242A14690X | 37/37 | Socket upper / Plug bottom | 242A14930X |

# LC-FILTER D-SUB STANDARD

## Solder pin – Angled – .283"/7.19 mm – Precision machined contacts – Metal bracket

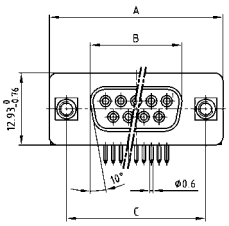


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### DESCRIPTION

- Mounting styles:
  - Mounting bracket with 4-40 UNC threaded insert
  - Mounting bracket with PCB clip and 4-40 UNC threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated on request)

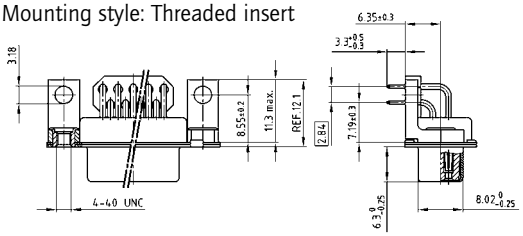
### SOCKET CONNECTOR



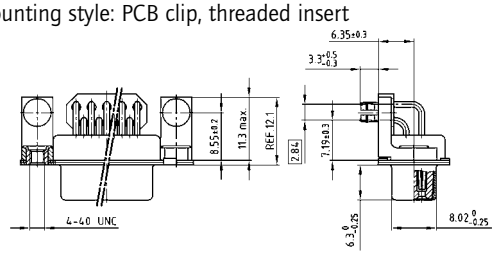
| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 15 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |

PCB-Layout: Kat1kGEA

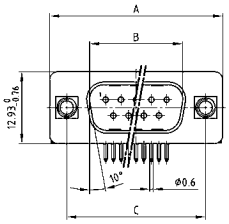
Mounting style: Threaded insert



Mounting style: PCB clip, threaded insert



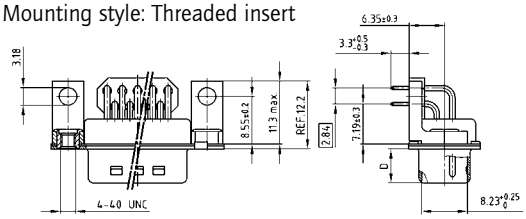
### PLUG CONNECTOR



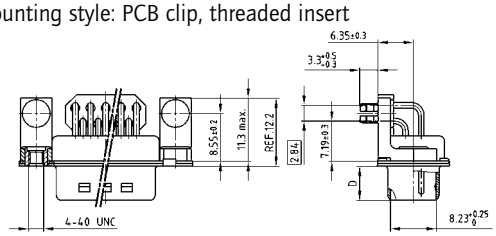
| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

PCB-Layout: Kat1kGFA

Mounting style: Threaded insert



Mounting style: PCB clip, threaded insert



### ORDER DATA

## Capacitance 180 pF

**SOCKET CONNECTOR**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 242A24660X |
| 15 | Threaded insert | 242A24670X |
| 25 | Threaded insert | 242A24680X |
| 37 | Threaded insert | 242A24690X |
| 09 | PCB clip / Threaded insert | 242A24820X |
| 15 | PCB clip / Threaded insert | 242A24830X |
| 25 | PCB clip / Threaded insert | 242A24840X |
| 37 | PCB clip / Threaded insert | 242A24850X |

**PLUG CONNECTOR**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 241A24760X |
| 15 | Threaded insert | 241A24770X |
| 25 | Threaded insert | 241A24780X |
| 37 | Threaded insert | 241A24790X |
| 09 | PCB clip / Threaded insert | 241A24920X |
| 15 | PCB clip / Threaded insert | 241A24930X |
| 25 | PCB clip / Threaded insert | 241A24940X |
| 37 | PCB clip / Threaded insert | 241A24950X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# LC-Filter D-SUB Standard

## Solder pin – Angled – .283"/7.19 mm – Precision machined contacts – Metal bracket

### Order data

### Capacitance 370 pF

**Socket connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 242A24700X |
| 15 | Threaded insert | 242A24710X |
| 25 | Threaded insert | 242A24720X |
| 37 | Threaded insert | 242A24730X |
| 09 | PCB clip / Threaded insert | 242A24860X |
| 15 | PCB clip / Threaded insert | 242A24870X |
| 25 | PCB clip / Threaded insert | 242A24880X |
| 37 | PCB clip / Threaded insert | 242A24890X |

**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 241A24800X |
| 15 | Threaded insert | 241A24810X |
| 25 | Threaded insert | 241A24820X |
| 37 | Threaded insert | 241A24830X |
| 09 | PCB clip / Threaded insert | 241A24960X |
| 15 | PCB clip / Threaded insert | 241A24970X |
| 25 | PCB clip / Threaded insert | 241A24980X |
| 37 | PCB clip / Threaded insert | 241A24990X |

### Capacitance 830 pF

**Socket connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 242A24740X |
| 15 | Threaded insert | 242A24750X |
| 25 | Threaded insert | 242A24760X |
| 37 | Threaded insert | 242A24770X |
| 09 | PCB clip / Threaded insert | 242A24900X |
| 15 | PCB clip / Threaded insert | 242A24910X |
| 25 | PCB clip / Threaded insert | 242A24920X |
| 37 | PCB clip / Threaded insert | 242A24930X |

**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 241A24840X |
| 15 | Threaded insert | 241A24850X |
| 25 | Threaded insert | 241A24860X |
| 37 | Threaded insert | 241A24870X |
| 09 | PCB clip / Threaded insert | 241A25000X |
| 15 | PCB clip / Threaded insert | 241A25010X |
| 25 | PCB clip / Threaded insert | 241A25020X |
| 37 | PCB clip / Threaded insert | 241A25030X |

### Capacitance 1300 pF

**Socket connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 242A24780X |
| 15 | Threaded insert | 242A24790X |
| 25 | Threaded insert | 242A24800X |
| 37 | Threaded insert | 242A24810X |
| 09 | PCB clip / Threaded insert | 242A24940X |
| 15 | PCB clip / Threaded insert | 242A24950X |
| 25 | PCB clip / Threaded insert | 242A24960X |
| 37 | PCB clip / Threaded insert | 242A24970X |

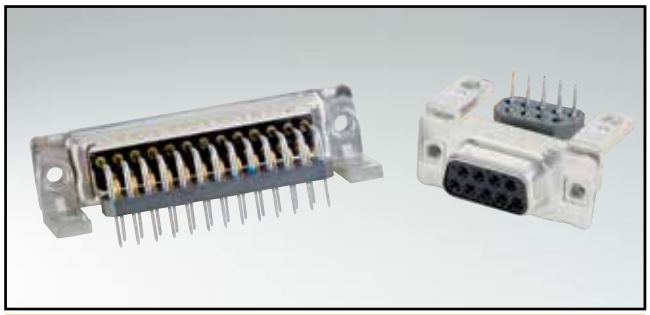
**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 241A24880X |
| 15 | Threaded insert | 241A24890X |
| 25 | Threaded insert | 241A24900X |
| 37 | Threaded insert | 241A24910X |
| 09 | PCB clip / Threaded insert | 241A25040X |
| 15 | PCB clip / Threaded insert | 241A25050X |
| 25 | PCB clip / Threaded insert | 241A25060X |
| 37 | PCB clip / Threaded insert | 241A25070X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# LC-FILTER D-SUB STANDARD

## Solder pin – Angled – .370"/9.4 mm – Precision machined contacts – Metal bracket

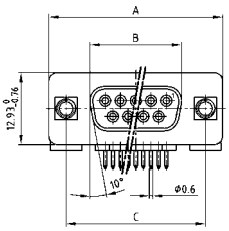


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### DESCRIPTION

- Mounting styles:
  - Mounting bracket with 4-40 UNC or M3 threaded insert
  - Mounting bracket with PCB clip and 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated on request)

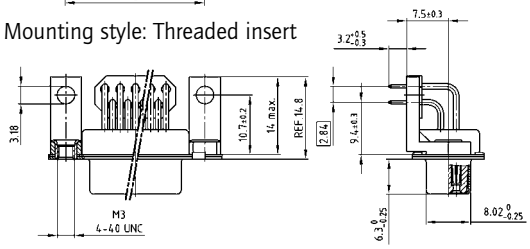
### SOCKET CONNECTOR



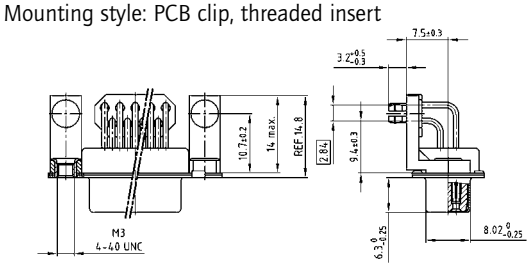
| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 15 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |

PCB-Layout: Kat1kGGA

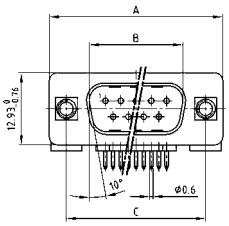
Mounting style: Threaded insert



Mounting style: PCB clip, threaded insert



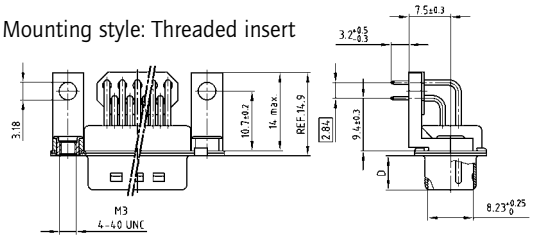
### PLUG CONNECTOR



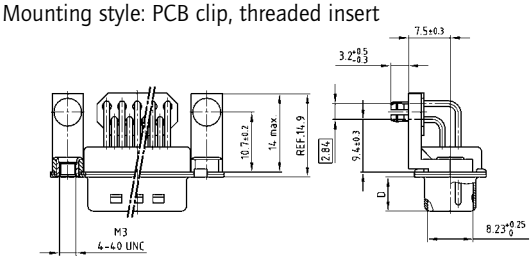
| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

PCB-Layout: Kat1kGHA

Mounting style: Threaded insert



Mounting style: PCB clip, threaded insert



### ORDER DATA

## Capacitance 180 pF

**SOCKET CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded insert | 242A24980X |
| 15 | 4-40 UNC Threaded insert | 242A24990X |
| 25 | 4-40 UNC Threaded insert | 242A25000X |
| 37 | 4-40 UNC Threaded insert | 242A25010X |
| 09 | M3 Threaded insert | 242A25140X |
| 15 | M3 Threaded insert | 242A25150X |
| 25 | M3 Threaded insert | 242A25160X |
| 37 | M3 Threaded insert | 242A25170X |
| 09 | PCB clip / 4-40 UNC Threaded insert | 242A25300X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 242A25310X |
| 25 | PCB clip / 4-40 UNC Threaded insert | 242A25320X |
| 37 | PCB clip / 4-40 UNC Threaded insert | 242A25330X |
| 09 | PCB clip / M3 Threaded insert | 242A25460X |
| 15 | PCB clip / M3 Threaded insert | 242A25470X |
| 25 | PCB clip / M3 Threaded insert | 242A25480X |
| 37 | PCB clip / M3 Threaded insert | 242A25490X |

**PLUG CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded insert | 241A25080X |
| 15 | 4-40 UNC Threaded insert | 241A25090X |
| 25 | 4-40 UNC Threaded insert | 241A25100X |
| 37 | 4-40 UNC Threaded insert | 241A25110X |
| 09 | M3 Threaded insert | 241A25240X |
| 15 | M3 Threaded insert | 241A25250X |
| 25 | M3 Threaded insert | 241A25260X |
| 37 | M3 Threaded insert | 241A25270X |
| 09 | PCB clip / 4-40 UNC Threaded insert | 241A25400X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 241A25410X |
| 25 | PCB clip / 4-40 UNC Threaded insert | 241A25420X |
| 37 | PCB clip / 4-40 UNC Threaded insert | 241A25430X |
| 09 | PCB clip / M3 Threaded insert | 241A25560X |
| 15 | PCB clip / M3 Threaded insert | 241A25570X |
| 25 | PCB clip / M3 Threaded insert | 241A25580X |
| 37 | PCB clip / M3 Threaded insert | 241A25590X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# LC-Filter D-SUB Standard

## Solder pin – Angled – .370"/9.4 mm – Precision machined contacts – Metal bracket

### Order data

### Capacitance 370 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded insert | 242A25020X |
| 15 | 4-40 UNC Threaded insert | 242A25030X |
| 25 | 4-40 UNC Threaded insert | 242A25040X |
| 37 | 4-40 UNC Threaded insert | 242A25050X |
| 09 | M3 Threaded insert | 242A25180X |
| 15 | M3 Threaded insert | 242A25190X |
| 25 | M3 Threaded insert | 242A25200X |
| 37 | M3 Threaded insert | 242A25210X |
| 09 | PCB clip / 4-40 UNC Threaded insert | 242A25340X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 242A25350X |
| 25 | PCB clip / 4-40 UNC Threaded insert | 242A25360X |
| 37 | PCB clip / 4-40 UNC Threaded insert | 242A25370X |
| 09 | PCB clip / M3 Threaded insert | 242A25500X |
| 15 | PCB clip / M3 Threaded insert | 242A25510X |
| 25 | PCB clip / M3 Threaded insert | 242A25520X |
| 37 | PCB clip / M3 Threaded insert | 242A25530X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded insert | 241A25120X |
| 15 | 4-40 UNC Threaded insert | 241A25130X |
| 25 | 4-40 UNC Threaded insert | 241A25140X |
| 37 | 4-40 UNC Threaded insert | 241A25150X |
| 09 | M3 Threaded insert | 241A25280X |
| 15 | M3 Threaded insert | 241A25290X |
| 25 | M3 Threaded insert | 241A25300X |
| 37 | M3 Threaded insert | 241A25310X |
| 09 | PCB clip / 4-40 UNC Threaded insert | 241A25440X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 241A25450X |
| 25 | PCB clip / 4-40 UNC Threaded insert | 241A25460X |
| 37 | PCB clip / 4-40 UNC Threaded insert | 241A25470X |
| 09 | PCB clip / M3 Threaded insert | 241A25600X |
| 15 | PCB clip / M3 Threaded insert | 241A25610X |
| 25 | PCB clip / M3 Threaded insert | 241A25620X |
| 37 | PCB clip / M3 Threaded insert | 241A25630X |

### Capacitance 830 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded insert | 242A25060X |
| 15 | 4-40 UNC Threaded insert | 242A25070X |
| 25 | 4-40 UNC Threaded insert | 242A25080X |
| 37 | 4-40 UNC Threaded insert | 242A25090X |
| 09 | M3 Threaded insert | 242A25220X |
| 15 | M3 Threaded insert | 242A25230X |
| 25 | M3 Threaded insert | 242A25240X |
| 37 | M3 Threaded insert | 242A25250X |
| 09 | PCB clip / 4-40 UNC Threaded insert | 242A25380X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 242A25390X |
| 25 | PCB clip / 4-40 UNC Threaded insert | 242A25400X |
| 37 | PCB clip / 4-40 UNC Threaded insert | 242A25410X |
| 09 | PCB clip / M3 Threaded insert | 242A25540X |
| 15 | PCB clip / M3 Threaded insert | 242A25550X |
| 25 | PCB clip / M3 Threaded insert | 242A25560X |
| 37 | PCB clip / M3 Threaded insert | 242A25570X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded insert | 241A25160X |
| 15 | 4-40 UNC Threaded insert | 241A25170X |
| 25 | 4-40 UNC Threaded insert | 241A25180X |
| 37 | 4-40 UNC Threaded insert | 241A25190X |
| 09 | M3 Threaded insert | 241A25320X |
| 15 | M3 Threaded insert | 241A25330X |
| 25 | M3 Threaded insert | 241A25340X |
| 37 | M3 Threaded insert | 241A25350X |
| 09 | PCB clip / 4-40 UNC Threaded insert | 241A25480X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 241A25490X |
| 25 | PCB clip / 4-40 UNC Threaded insert | 241A25500X |
| 37 | PCB clip / 4-40 UNC Threaded insert | 241A25510X |
| 09 | PCB clip / M3 Threaded insert | 241A25640X |
| 15 | PCB clip / M3 Threaded insert | 241A25650X |
| 25 | PCB clip / M3 Threaded insert | 241A25660X |
| 37 | PCB clip / M3 Threaded insert | 241A25670X |

### Capacitance 1300 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded insert | 242A25100X |
| 15 | 4-40 UNC Threaded insert | 242A25110X |
| 25 | 4-40 UNC Threaded insert | 242A25120X |
| 37 | 4-40 UNC Threaded insert | 242A25130X |
| 09 | M3 Threaded insert | 242A25260X |
| 15 | M3 Threaded insert | 242A25270X |
| 25 | M3 Threaded insert | 242A25280X |
| 37 | M3 Threaded insert | 242A25290X |
| 09 | PCB clip / 4-40 UNC Threaded insert | 242A25420X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 242A25430X |
| 25 | PCB clip / 4-40 UNC Threaded insert | 242A25440X |
| 37 | PCB clip / 4-40 UNC Threaded insert | 242A25450X |
| 09 | PCB clip / M3 Threaded insert | 242A25580X |
| 15 | PCB clip / M3 Threaded insert | 242A25590X |
| 25 | PCB clip / M3 Threaded insert | 242A25600X |
| 37 | PCB clip / M3 Threaded insert | 242A25610X |

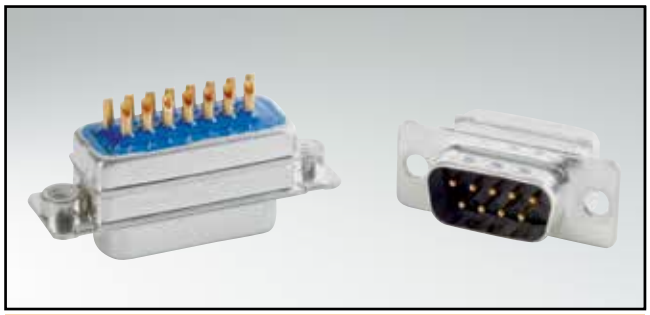
**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded insert | 241A25200X |
| 15 | 4-40 UNC Threaded insert | 241A25210X |
| 25 | 4-40 UNC Threaded insert | 241A25220X |
| 37 | 4-40 UNC Threaded insert | 241A25230X |
| 09 | M3 Threaded insert | 241A25360X |
| 15 | M3 Threaded insert | 241A25370X |
| 25 | M3 Threaded insert | 241A25380X |
| 37 | M3 Threaded insert | 241A25390X |
| 09 | PCB clip / 4-40 UNC Threaded insert | 241A25520X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 241A25530X |
| 25 | PCB clip / 4-40 UNC Threaded insert | 241A25540X |
| 37 | PCB clip / 4-40 UNC Threaded insert | 241A25550X |
| 09 | PCB clip / M3 Threaded insert | 241A25680X |
| 15 | PCB clip / M3 Threaded insert | 241A25690X |
| 25 | PCB clip / M3 Threaded insert | 241A25700X |
| 37 | PCB clip / M3 Threaded insert | 241A25710X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# π-FILTER D-SUB STANDARD

## Solder cup – Precision machined contacts – For wire size AWG 20

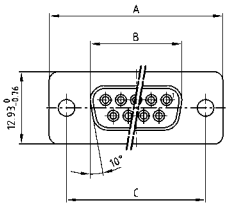


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### DESCRIPTION

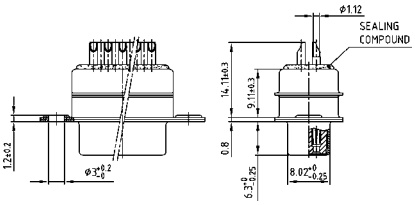
- Suitable for wire size **AWG 20**
- Mounting styles:
  - with through-hole, Ø .118"/3 mm
  - with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated on request)

### SOCKET CONNECTOR

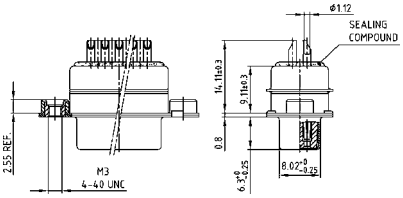



| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 15 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |

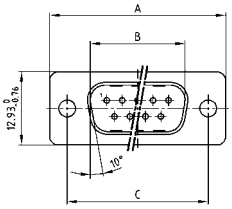
Mounting style: Through-hole




Mounting style: Threaded insert

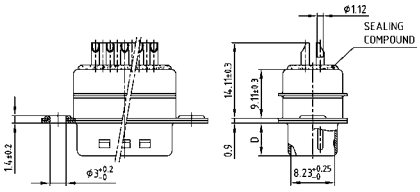



### PLUG CONNECTOR

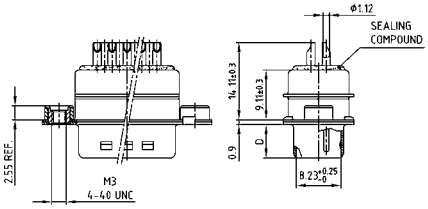



| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

Mounting style: Through-hole




Mounting style: Threaded insert




### ORDER DATA

## Capacitance 2 x 180 pF

**SOCKET CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 242A28980X |
| 15 | Through-hole | 242A28990X |
| 25 | Through-hole | 242A29000X |
| 37 | Through-hole | 242A29010X |
| 09 | 4-40 UNC Threaded insert | 242A29140X |
| 15 | 4-40 UNC Threaded insert | 242A29150X |
| 25 | 4-40 UNC Threaded insert | 242A29160X |
| 37 | 4-40 UNC Threaded insert | 242A29170X |
| 09 | M3 Threaded insert | 242A29300X |
| 15 | M3 Threaded insert | 242A29310X |
| 25 | M3 Threaded insert | 242A29320X |
| 37 | M3 Threaded insert | 242A29330X |

**PLUG CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 241A29080X |
| 15 | Through-hole | 241A29090X |
| 25 | Through-hole | 241A29100X |
| 37 | Through-hole | 241A29110X |
| 09 | 4-40 UNC Threaded insert | 241A29240X |
| 15 | 4-40 UNC Threaded insert | 241A29250X |
| 25 | 4-40 UNC Threaded insert | 241A29260X |
| 37 | 4-40 UNC Threaded insert | 241A29270X |
| 09 | M3 Threaded insert | 241A29400X |
| 15 | M3 Threaded insert | 241A29410X |
| 25 | M3 Threaded insert | 241A29420X |
| 37 | M3 Threaded insert | 241A29430X |

# π-Filter D-SUB Standard

## Solder cup – Precision machined contacts – For wire size AWG 20

### Order data

### Capacitance 2 x 370 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 242A29020X |
| 15 | Through-hole | 242A29030X |
| 25 | Through-hole | 242A29040X |
| 37 | Through-hole | 242A29050X |
| 09 | 4-40 UNC Threaded insert | 242A29180X |
| 15 | 4-40 UNC Threaded insert | 242A29190X |
| 25 | 4-40 UNC Threaded insert | 242A29200X |
| 37 | 4-40 UNC Threaded insert | 242A29210X |
| 09 | M3 Threaded insert | 242A29340X |
| 15 | M3 Threaded insert | 242A29350X |
| 25 | M3 Threaded insert | 242A29360X |
| 37 | M3 Threaded insert | 242A29370X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 241A29120X |
| 15 | Through-hole | 241A29130X |
| 25 | Through-hole | 241A29140X |
| 37 | Through-hole | 241A29150X |
| 09 | 4-40 UNC Threaded insert | 241A29280X |
| 15 | 4-40 UNC Threaded insert | 241A29290X |
| 25 | 4-40 UNC Threaded insert | 241A29300X |
| 37 | 4-40 UNC Threaded insert | 241A29310X |
| 09 | M3 Threaded insert | 241A29440X |
| 15 | M3 Threaded insert | 241A29450X |
| 25 | M3 Threaded insert | 241A29460X |
| 37 | M3 Threaded insert | 241A29470X |

### Capacitance 2 x 830 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 242A29060X |
| 15 | Through-hole | 242A29070X |
| 25 | Through-hole | 242A29080X |
| 37 | Through-hole | 242A29090X |
| 09 | 4-40 UNC Threaded insert | 242A29220X |
| 15 | 4-40 UNC Threaded insert | 242A29230X |
| 25 | 4-40 UNC Threaded insert | 242A29240X |
| 37 | 4-40 UNC Threaded insert | 242A29250X |
| 09 | M3 Threaded insert | 242A29380X |
| 15 | M3 Threaded insert | 242A29390X |
| 25 | M3 Threaded insert | 242A29400X |
| 37 | M3 Threaded insert | 242A29410X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 241A29160X |
| 15 | Through-hole | 241A29170X |
| 25 | Through-hole | 241A29180X |
| 37 | Through-hole | 241A29190X |
| 09 | 4-40 UNC Threaded insert | 241A29320X |
| 15 | 4-40 UNC Threaded insert | 241A29330X |
| 25 | 4-40 UNC Threaded insert | 241A29340X |
| 37 | 4-40 UNC Threaded insert | 241A29350X |
| 09 | M3 Threaded insert | 241A29480X |
| 15 | M3 Threaded insert | 241A29490X |
| 25 | M3 Threaded insert | 241A29500X |
| 37 | M3 Threaded insert | 241A29510X |

### Capacitance 2 x 1300 pF

**Socket connector**

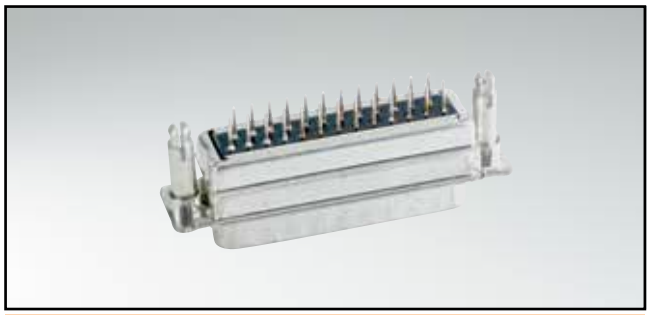
| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 242A29100X |
| 15 | Through-hole | 242A29110X |
| 25 | Through-hole | 242A29120X |
| 37 | Through-hole | 242A29130X |
| 09 | 4-40 UNC Threaded insert | 242A29260X |
| 15 | 4-40 UNC Threaded insert | 242A29270X |
| 25 | 4-40 UNC Threaded insert | 242A29280X |
| 37 | 4-40 UNC Threaded insert | 242A29290X |
| 09 | M3 Threaded insert | 242A29420X |
| 15 | M3 Threaded insert | 242A29430X |
| 25 | M3 Threaded insert | 242A29440X |
| 37 | M3 Threaded insert | 242A29450X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 241A29200X |
| 15 | Through-hole | 241A29210X |
| 25 | Through-hole | 241A29220X |
| 37 | Through-hole | 241A29230X |
| 09 | 4-40 UNC Threaded insert | 241A29360X |
| 15 | 4-40 UNC Threaded insert | 241A29370X |
| 25 | 4-40 UNC Threaded insert | 241A29380X |
| 37 | 4-40 UNC Threaded insert | 241A29390X |
| 09 | M3 Threaded insert | 241A29520X |
| 15 | M3 Threaded insert | 241A29530X |
| 25 | M3 Threaded insert | 241A29540X |
| 37 | M3 Threaded insert | 241A29550X |

# π-FILTER D-SUB STANDARD

## Solder pin – Straight – Precision machined contacts

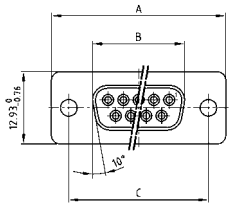


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### DESCRIPTION

- Mounting style:
  with 4-40 UNC or M3 threaded rear spacer with PCB clip
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated on request)

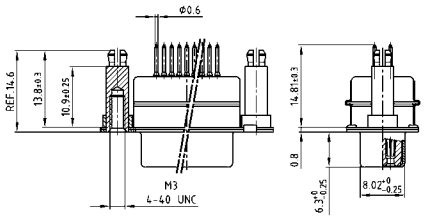
### SOCKET CONNECTOR



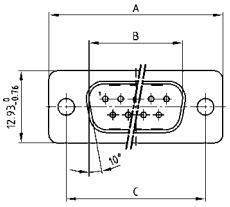

| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 15 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |

PCB-Layout: Kat1kFUA

Mounting style: Threaded rear spacer with PCB clip



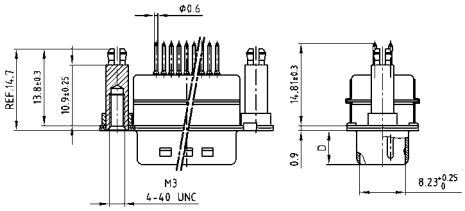

### PLUG CONNECTOR




| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

PCB-Layout: Kat1kFUA

Mounting style: Threaded rear spacer with PCB clip




### ORDER DATA

## Capacitance 2 x 180 pF

**SOCKET CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer PCB clip | 242A26260X |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 242A26270X |
| 25 | 4-40 UNC Threaded rear spacer PCB clip | 242A26280X |
| 37 | 4-40 UNC Threaded rear spacer PCB clip | 242A26290X |
| 09 | M3 Threaded rear spacer PCB clip | 242A26420X |
| 15 | M3 Threaded rear spacer PCB clip | 242A26430X |
| 25 | M3 Threaded rear spacer PCB clip | 242A26440X |
| 37 | M3 Threaded rear spacer PCB clip | 242A26450X |

**PLUG CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer PCB clip | 241A26360X |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 241A26370X |
| 25 | 4-40 UNC Threaded rear spacer PCB clip | 241A26380X |
| 37 | 4-40 UNC Threaded rear spacer PCB clip | 241A26390X |
| 09 | M3 Threaded rear spacer PCB clip | 241A26520X |
| 15 | M3 Threaded rear spacer PCB clip | 241A26530X |
| 25 | M3 Threaded rear spacer PCB clip | 241A26540X |
| 37 | M3 Threaded rear spacer PCB clip | 241A26550X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# π-Filter D-SUB Standard

## Solder pin – Straight – Precision machined contacts

### Order data

## Capacitance 2 x 370 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer PCB clip | 242A26300X |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 242A26310X |
| 25 | 4-40 UNC Threaded rear spacer PCB clip | 242A26320X |
| 37 | 4-40 UNC Threaded rear spacer PCB clip | 242A26330X |
| 09 | M3 Threaded rear spacer PCB clip | 242A26460X |
| 15 | M3 Threaded rear spacer PCB clip | 242A26470X |
| 25 | M3 Threaded rear spacer PCB clip | 242A26480X |
| 37 | M3 Threaded rear spacer PCB clip | 242A26490X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer PCB clip | 241A26400X |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 241A26410X |
| 25 | 4-40 UNC Threaded rear spacer PCB clip | 241A26420X |
| 37 | 4-40 UNC Threaded rear spacer PCB clip | 241A26430X |
| 09 | M3 Threaded rear spacer PCB clip | 241A26560X |
| 15 | M3 Threaded rear spacer PCB clip | 241A26570X |
| 25 | M3 Threaded rear spacer PCB clip | 241A26580X |
| 37 | M3 Threaded rear spacer PCB clip | 241A26590X |

## Capacitance 2 x 830 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer PCB clip | 242A26340X |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 242A26350X |
| 25 | 4-40 UNC Threaded rear spacer PCB clip | 242A26360X |
| 37 | 4-40 UNC Threaded rear spacer PCB clip | 242A26370X |
| 09 | M3 Threaded rear spacer PCB clip | 242A26500X |
| 15 | M3 Threaded rear spacer PCB clip | 242A26510X |
| 25 | M3 Threaded rear spacer PCB clip | 242A26520X |
| 37 | M3 Threaded rear spacer PCB clip | 242A26530X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer PCB clip | 241A26440X |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 241A26450X |
| 25 | 4-40 UNC Threaded rear spacer PCB clip | 241A26460X |
| 37 | 4-40 UNC Threaded rear spacer PCB clip | 241A26470X |
| 09 | M3 Threaded rear spacer PCB clip | 241A26600X |
| 15 | M3 Threaded rear spacer PCB clip | 241A26610X |
| 25 | M3 Threaded rear spacer PCB clip | 241A26620X |
| 37 | M3 Threaded rear spacer PCB clip | 241A26630X |

## Capacitance 2 x 1300 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer PCB clip | 242A26380X |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 242A26390X |
| 25 | 4-40 UNC Threaded rear spacer PCB clip | 242A26400X |
| 37 | 4-40 UNC Threaded rear spacer PCB clip | 242A26410X |
| 09 | M3 Threaded rear spacer PCB clip | 242A26540X |
| 15 | M3 Threaded rear spacer PCB clip | 242A26550X |
| 25 | M3 Threaded rear spacer PCB clip | 242A26560X |
| 37 | M3 Threaded rear spacer PCB clip | 242A26570X |

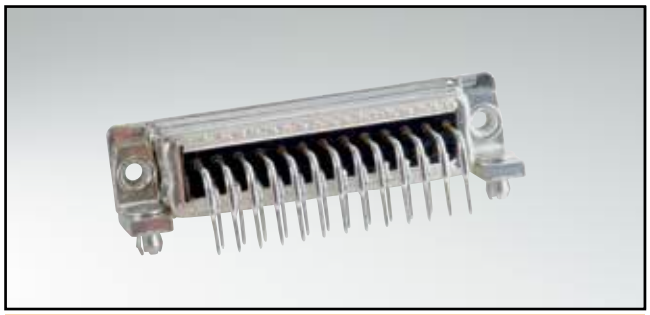
**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Threaded rear spacer PCB clip | 241A26480X |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 241A26490X |
| 25 | 4-40 UNC Threaded rear spacer PCB clip | 241A26500X |
| 37 | 4-40 UNC Threaded rear spacer PCB clip | 241A26510X |
| 09 | M3 Threaded rear spacer PCB clip | 241A26640X |
| 15 | M3 Threaded rear spacer PCB clip | 241A26650X |
| 25 | M3 Threaded rear spacer PCB clip | 241A26660X |
| 37 | M3 Threaded rear spacer PCB clip | 241A26670X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# π-FILTER D-SUB STANDARD

## Solder pin – Angled – .590"/14.19 mm – Precision machined contacts – Metal Bracket

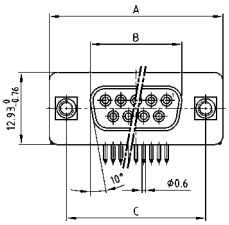


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### DESCRIPTION

- Mounting styles:
  - Mounting bracket with 4-40 UNC threaded insert
  - Mounting bracket with PCB clip and 4-40 UNC threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated on request)

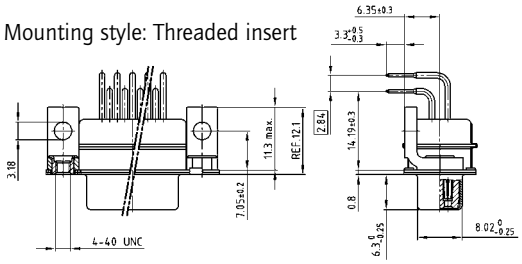
### SOCKET CONNECTOR



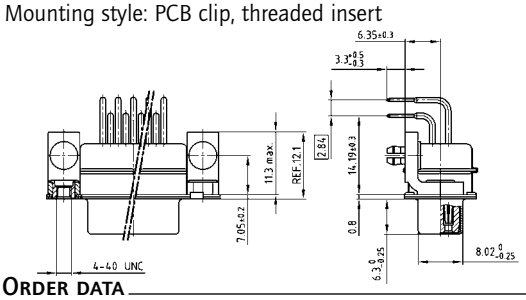
| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 15 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |

PCB-Layout: Kat1kGXA

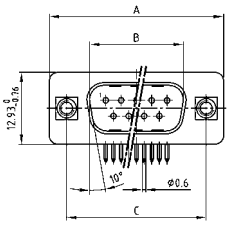
Mounting style: Threaded insert



Mounting style: PCB clip, threaded insert



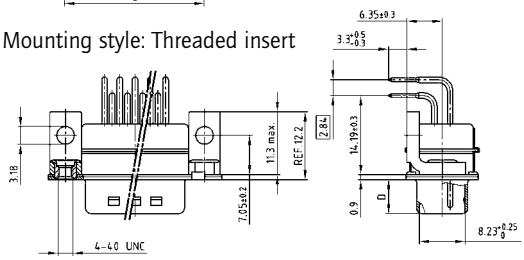
### PLUG CONNECTOR



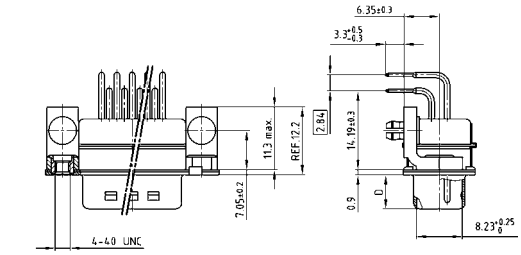
| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

PCB-Layout: Kat1kGYA

Mounting style: Threaded insert



Mounting style: PCB clip, threaded insert



### ORDER DATA

## Capacitance 2 x 180 pF

**SOCKET CONNECTOR**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 242A25940X |
| 15 | Threaded insert | 242A25950X |
| 25 | Threaded insert | 242A25960X |
| 37 | Threaded insert | 242A25970X |
| 09 | PCB clip / Threaded insert | 242A26100X |
| 15 | PCB clip / Threaded insert | 242A26110X |
| 25 | PCB clip / Threaded insert | 242A26120X |
| 37 | PCB clip / Threaded insert | 242A26130X |

**PLUG CONNECTOR**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 241A26040X |
| 15 | Threaded insert | 241A26050X |
| 25 | Threaded insert | 241A26060X |
| 37 | Threaded insert | 241A26070X |
| 09 | PCB clip / Threaded insert | 241A26200X |
| 15 | PCB clip / Threaded insert | 241A26210X |
| 25 | PCB clip / Threaded insert | 241A26220X |
| 37 | PCB clip / Threaded insert | 241A26230X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# π-Filter D-SUB Standard

## Solder pin – Angled – .590"/14.19 mm – Precision machined contacts – Metal Bracket

### Order data

### Capacitance 2 x 370 pF

**Socket connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 242A25980X |
| 15 | Threaded insert | 242A25990X |
| 25 | Threaded insert | 242A26000X |
| 37 | Threaded insert | 242A26010X |
| 09 | PCB clip / Threaded insert | 242A26140X |
| 15 | PCB clip / Threaded insert | 242A26150X |
| 25 | PCB clip / Threaded insert | 242A26160X |
| 37 | PCB clip / Threaded insert | 242A26170X |

**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 241A26080X |
| 15 | Threaded insert | 241A26090X |
| 25 | Threaded insert | 241A26100X |
| 37 | Threaded insert | 241A26110X |
| 09 | PCB clip / Threaded insert | 241A26240X |
| 15 | PCB clip / Threaded insert | 241A26250X |
| 25 | PCB clip / Threaded insert | 241A26260X |
| 37 | PCB clip / Threaded insert | 241A26270X |

### Capacitance 2 x 830 pF

**Socket connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 242A26020X |
| 15 | Threaded insert | 242A26030X |
| 25 | Threaded insert | 242A26040X |
| 37 | Threaded insert | 242A26050X |
| 09 | PCB clip / Threaded insert | 242A26180X |
| 15 | PCB clip / Threaded insert | 242A26190X |
| 25 | PCB clip / Threaded insert | 242A26200X |
| 37 | PCB clip / Threaded insert | 242A26210X |

**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 241A26120X |
| 15 | Threaded insert | 241A26130X |
| 25 | Threaded insert | 241A26140X |
| 37 | Threaded insert | 241A26150X |
| 09 | PCB clip / Threaded insert | 241A26280X |
| 15 | PCB clip / Threaded insert | 241A26290X |
| 25 | PCB clip / Threaded insert | 241A26300X |
| 37 | PCB clip / Threaded insert | 241A26310X |

### Capacitance 2 x 1300 pF

**Socket connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 242A26060X |
| 15 | Threaded insert | 242A26070X |
| 25 | Threaded insert | 242A26080X |
| 37 | Threaded insert | 242A26090X |
| 09 | PCB clip / Threaded insert | 242A26220X |
| 15 | PCB clip / Threaded insert | 242A26230X |
| 25 | PCB clip / Threaded insert | 242A26240X |
| 37 | PCB clip / Threaded insert | 242A26250X |

**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 241A26160X |
| 15 | Threaded insert | 241A26170X |
| 25 | Threaded insert | 241A26180X |
| 37 | Threaded insert | 241A26190X |
| 09 | PCB clip / Threaded insert | 241A26320X |
| 15 | PCB clip / Threaded insert | 241A26330X |
| 25 | PCB clip / Threaded insert | 241A26340X |
| 37 | PCB clip / Threaded insert | 241A26350X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# C-Filter D-SUB High Density

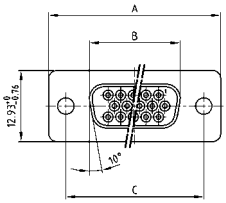
## Solder pin – Straight – Precision machined contacts

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

- Mounting styles:
  - with through-hole, Ø .118"/3 mm
  - with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated on request)

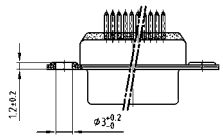
### Socket connector

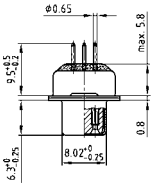



| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 15 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 26 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 44 | 53.42 | 38.50 | 47.04 ±0.13 |
| 62 | 69.70 | 54.96 | 63.50 ±0.13 |

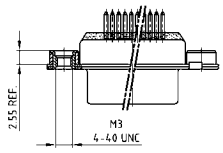
PCB-Layout: Kat1iT9A

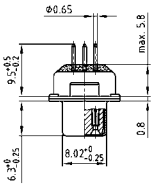
Mounting style: Through-hole



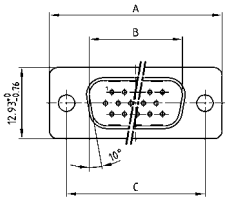



Mounting style: Threaded insert



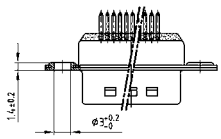

### Plug connector

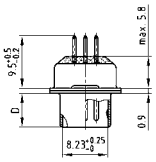



| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 15 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 26 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 44 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 62 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

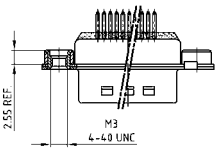
PCB-Layout: Kat1iU0A

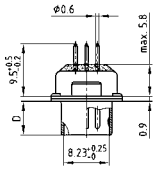
Mounting style: Through-hole






Mounting style: Threaded insert




### Order data

## Capacitance 180 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | Through-hole | 242A27380X |
| 26 | Through-hole | 242A27390X |
| 44 | Through-hole | 242A27400X |
| 62 | Through-hole | 242A27410X |
| 15 | 4-40 UNC Threaded insert | 242A27420X |
| 26 | 4-40 UNC Threaded insert | 242A27430X |
| 44 | 4-40 UNC Threaded insert | 242A27440X |
| 62 | 4-40 UNC Threaded insert | 242A27450X |
| 15 | M3 Threaded insert | 242A27460X |
| 26 | M3 Threaded insert | 242A27470X |
| 44 | M3 Threaded insert | 242A27480X |
| 62 | M3 Threaded insert | 242A27490X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | Through-hole | 241A27480X |
| 26 | Through-hole | 241A27490X |
| 44 | Through-hole | 241A27500X |
| 62 | Through-hole | 241A27510X |
| 15 | 4-40 UNC Threaded insert | 241A27520X |
| 26 | 4-40 UNC Threaded insert | 241A27530X |
| 44 | 4-40 UNC Threaded insert | 241A27540X |
| 62 | 4-40 UNC Threaded insert | 241A27550X |
| 15 | M3 Threaded insert | 241A27560X |
| 26 | M3 Threaded insert | 241A27570X |
| 44 | M3 Threaded insert | 241A27580X |
| 62 | M3 Threaded insert | 241A27590X |

# C-Filter D-SUB High Density

## Solder pin – Straight – Precision machined contacts

### Order data

### Capacitance 370 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | Through-hole | 242A17980X |
| 26 | Through-hole | 242A17990X |
| 44 | Through-hole | 242A18000X |
| 62 | Through-hole | 242A18010X |
| 15 | 4-40 UNC Threaded insert | 242A18060X |
| 26 | 4-40 UNC Threaded insert | 242A18070X |
| 44 | 4-40 UNC Threaded insert | 242A18080X |
| 62 | 4-40 UNC Threaded insert | 242A18090X |
| 15 | M3 Threaded insert | 242A18140X |
| 26 | M3 Threaded insert | 242A18150X |
| 44 | M3 Threaded insert | 242A18160X |
| 62 | M3 Threaded insert | 242A18170X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | Through-hole | 241A16380X |
| 26 | Through-hole | 241A16390X |
| 44 | Through-hole | 241A16400X |
| 62 | Through-hole | 241A16410X |
| 15 | 4-40 UNC Threaded insert | 241A16460X |
| 26 | 4-40 UNC Threaded insert | 241A16470X |
| 44 | 4-40 UNC Threaded insert | 241A16480X |
| 62 | 4-40 UNC Threaded insert | 241A16490X |
| 15 | M3 Threaded insert | 241A16540X |
| 26 | M3 Threaded insert | 241A16550X |
| 44 | M3 Threaded insert | 241A16560X |
| 62 | M3 Threaded insert | 241A16570X |

### Capacitance 830 pF

**Socket connector**

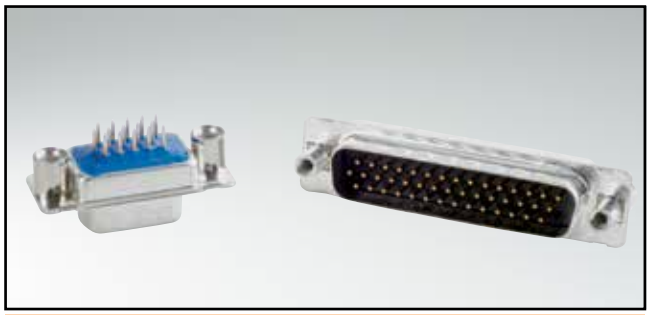
| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | Through-hole | 242A18020X |
| 26 | Through-hole | 242A18030X |
| 44 | Through-hole | 242A18040X |
| 62 | Through-hole | 242A18050X |
| 15 | 4-40 UNC Threaded insert | 242A18100X |
| 26 | 4-40 UNC Threaded insert | 242A18110X |
| 44 | 4-40 UNC Threaded insert | 242A18120X |
| 62 | 4-40 UNC Threaded insert | 242A18130X |
| 15 | M3 Threaded insert | 242A18180X |
| 26 | M3 Threaded insert | 242A18190X |
| 44 | M3 Threaded insert | 242A18200X |
| 62 | M3 Threaded insert | 242A18210X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | Through-hole | 241A16420X |
| 26 | Through-hole | 241A16430X |
| 44 | Through-hole | 241A16440X |
| 62 | Through-hole | 241A16450X |
| 15 | 4-40 UNC Threaded insert | 241A16500X |
| 26 | 4-40 UNC Threaded insert | 241A16510X |
| 44 | 4-40 UNC Threaded insert | 241A16520X |
| 62 | 4-40 UNC Threaded insert | 241A16530X |
| 15 | M3 Threaded insert | 241A16580X |
| 26 | M3 Threaded insert | 241A16590X |
| 44 | M3 Threaded insert | 241A16600X |
| 62 | M3 Threaded insert | 241A16610X |

# C-FILTER D-SUB HIGH DENSITY

## Solder pin – Straight – Precision machined contacts

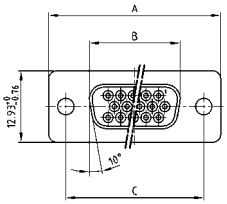


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### DESCRIPTION

- Mounting styles:
  - with 4-40 UNC or M3 threaded rear spacer
  - with 4-40 UNC or M3 front and threaded rear spacer
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated on request)

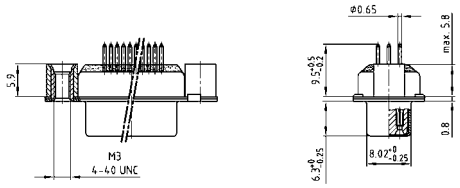
### SOCKET CONNECTOR



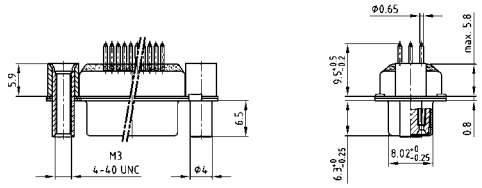

| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 15 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 26 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 44 | 53.42 | 38.50 | 47.04 ±0.13 |
| 62 | 69.70 | 54.96 | 63.50 ±0.13 |

PCB-Layout: Kat1iT9A

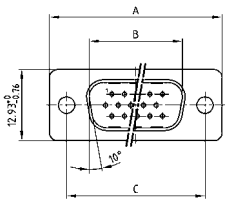
Mounting style: Threaded rear spacer




Mounting style: Front and threaded rear spacer



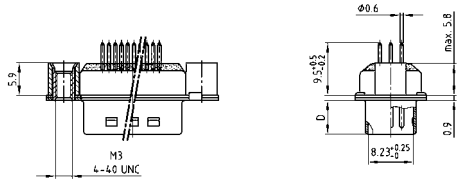

### PLUG CONNECTOR



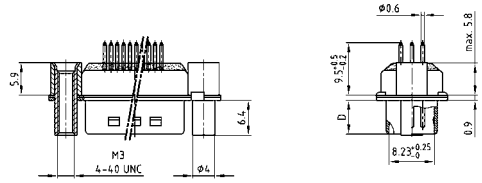

| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 15 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 26 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 44 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 62 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

PCB-Layout: Kat1iU0A

Mounting style: Threaded rear spacer




Mounting style: Front and threaded rear spacer




### ORDER DATA

## Capacitance 180 pF

**SOCKET CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | 4-40 UNC Threaded rear spacer | 242A27500X |
| 26 | 4-40 UNC Threaded rear spacer | 242A27510X |
| 44 | 4-40 UNC Threaded rear spacer | 242A27520X |
| 62 | 4-40 UNC Threaded rear spacer | 242A27530X |
| 15 | M3 Threaded rear spacer | 242A27540X |
| 26 | M3 Threaded rear spacer | 242A27550X |
| 44 | M3 Threaded rear spacer | 242A27560X |
| 62 | M3 Threaded rear spacer | 242A27570X |
| 15 | 4-40 UNC Front/Threaded rear spacer | 242A27580X |
| 26 | 4-40 UNC Front/Threaded rear spacer | 242A27590X |
| 44 | 4-40 UNC Front/Threaded rear spacer | 242A27600X |
| 62 | 4-40 UNC Front/Threaded rear spacer | 242A27610X |
| 15 | M3 Front/Threaded rear spacer | 242A27620X |
| 26 | M3 Front/Threaded rear spacer | 242A27630X |
| 44 | M3 Front/Threaded rear spacer | 242A27640X |
| 62 | M3 Front/Threaded rear spacer | 242A27650X |

**PLUG CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | 4-40 UNC Threaded rear spacer | 241A27600X |
| 26 | 4-40 UNC Threaded rear spacer | 241A27610X |
| 44 | 4-40 UNC Threaded rear spacer | 241A27620X |
| 62 | 4-40 UNC Threaded rear spacer | 241A27630X |
| 15 | M3 Threaded rear spacer | 241A27640X |
| 26 | M3 Threaded rear spacer | 241A27650X |
| 44 | M3 Threaded rear spacer | 241A27660X |
| 62 | M3 Threaded rear spacer | 241A27670X |
| 15 | 4-40 UNC Front/Threaded rear spacer | 241A27680X |
| 26 | 4-40 UNC Front/Threaded rear spacer | 241A27690X |
| 44 | 4-40 UNC Front/Threaded rear spacer | 241A27700X |
| 62 | 4-40 UNC Front/Threaded rear spacer | 241A27710X |
| 15 | M3 Front/Threaded rear spacer | 241A27720X |
| 26 | M3 Front/Threaded rear spacer | 241A27730X |
| 44 | M3 Front/Threaded rear spacer | 241A27740X |
| 62 | M3 Front/Threaded rear spacer | 241A27750X |

# C-Filter D-SUB High Density

## Solder pin – Straight – Precision machined contacts

### Order data

## Capacitance 370 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | 4-40 UNC Threaded rear spacer | 242A18220X |
| 26 | 4-40 UNC Threaded rear spacer | 242A18230X |
| 44 | 4-40 UNC Threaded rear spacer | 242A18240X |
| 62 | 4-40 UNC Threaded rear spacer | 242A18250X |
| 15 | M3 Threaded rear spacer | 242A18300X |
| 26 | M3 Threaded rear spacer | 242A18310X |
| 44 | M3 Threaded rear spacer | 242A18320X |
| 62 | M3 Threaded rear spacer | 242A18330X |
| 15 | 4-40 UNC Front/Threaded rear spacer | 242A18380X |
| 26 | 4-40 UNC Front/Threaded rear spacer | 242A18390X |
| 44 | 4-40 UNC Front/Threaded rear spacer | 242A18400X |
| 62 | 4-40 UNC Front/Threaded rear spacer | 242A18410X |
| 15 | M3 Front/Threaded rear spacer | 242A18460X |
| 26 | M3 Front/Threaded rear spacer | 242A18470X |
| 44 | M3 Front/Threaded rear spacer | 242A18480X |
| 62 | M3 Front/Threaded rear spacer | 242A18490X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | 4-40 UNC Threaded rear spacer | 241A16620X |
| 26 | 4-40 UNC Threaded rear spacer | 241A16630X |
| 44 | 4-40 UNC Threaded rear spacer | 241A16640X |
| 62 | 4-40 UNC Threaded rear spacer | 241A16650X |
| 15 | M3 Threaded rear spacer | 241A16700X |
| 26 | M3 Threaded rear spacer | 241A16710X |
| 44 | M3 Threaded rear spacer | 241A16720X |
| 62 | M3 Threaded rear spacer | 241A16730X |
| 15 | 4-40 UNC Front/Threaded rear spacer | 241A16780X |
| 26 | 4-40 UNC Front/Threaded rear spacer | 241A16790X |
| 44 | 4-40 UNC Front/Threaded rear spacer | 241A16800X |
| 62 | 4-40 UNC Front/Threaded rear spacer | 241A16810X |
| 15 | M3 Front/Threaded rear spacer | 241A16860X |
| 26 | M3 Front/Threaded rear spacer | 241A16870X |
| 44 | M3 Front/Threaded rear spacer | 241A16880X |
| 62 | M3 Front/Threaded rear spacer | 241A16890X |

## Capacitance 830 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | 4-40 UNC Threaded rear spacer | 242A18260X |
| 26 | 4-40 UNC Threaded rear spacer | 242A18270X |
| 44 | 4-40 UNC Threaded rear spacer | 242A18280X |
| 62 | 4-40 UNC Threaded rear spacer | 242A18290X |
| 15 | M3 Threaded rear spacer | 242A18340X |
| 26 | M3 Threaded rear spacer | 242A18350X |
| 44 | M3 Threaded rear spacer | 242A18360X |
| 62 | M3 Threaded rear spacer | 242A18370X |
| 15 | 4-40 UNC Front/Threaded rear spacer | 242A18420X |
| 26 | 4-40 UNC Front/Threaded rear spacer | 242A18430X |
| 44 | 4-40 UNC Front/Threaded rear spacer | 242A18440X |
| 62 | 4-40 UNC Front/Threaded rear spacer | 242A18450X |
| 15 | M3 Front/Threaded rear spacer | 242A18500X |
| 26 | M3 Front/Threaded rear spacer | 242A18510X |
| 44 | M3 Front/Threaded rear spacer | 242A18520X |
| 62 | M3 Front/Threaded rear spacer | 242A18530X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | 4-40 UNC Threaded rear spacer | 241A16660X |
| 26 | 4-40 UNC Threaded rear spacer | 241A16670X |
| 44 | 4-40 UNC Threaded rear spacer | 241A16680X |
| 62 | 4-40 UNC Threaded rear spacer | 241A16690X |
| 15 | M3 Threaded rear spacer | 241A16740X |
| 26 | M3 Threaded rear spacer | 241A16750X |
| 44 | M3 Threaded rear spacer | 241A16760X |
| 62 | M3 Threaded rear spacer | 241A16770X |
| 15 | 4-40 UNC Front/Threaded rear spacer | 241A16820X |
| 26 | 4-40 UNC Front/Threaded rear spacer | 241A16830X |
| 44 | 4-40 UNC Front/Threaded rear spacer | 241A16840X |
| 62 | 4-40 UNC Front/Threaded rear spacer | 241A16850X |
| 15 | M3 Front/Threaded rear spacer | 241A16900X |
| 26 | M3 Front/Threaded rear spacer | 241A16910X |
| 44 | M3 Front/Threaded rear spacer | 241A16920X |
| 62 | M3 Front/Threaded rear spacer | 241A16930X |

# C-FILTER D-SUB HIGH DENSITY

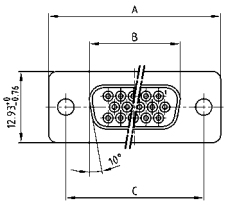
## Solder pin – Straight – Precision machined contacts

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### DESCRIPTION

- Mounting styles:
  - with 4-40 UNC or M3 threaded rear spacer with PCB clip
  - with 4-40 UNC or M3 front and threaded rear spacer with PCB clip
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated on request)

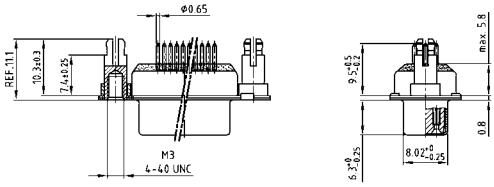
### SOCKET CONNECTOR



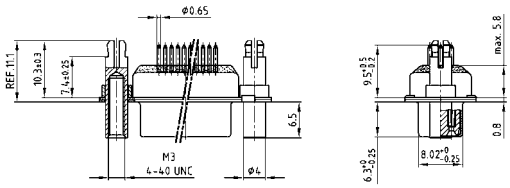

| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 15 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 26 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 44 | 53.42 | 38.50 | 47.04 ±0.13 |
| 62 | 69.70 | 54.96 | 63.50 ±0.13 |

PCB-Layout: Kat1iT9A

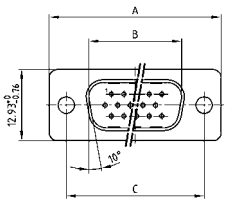
Mounting style: Threaded rear spacer with PCB clip




Mounting style: Front and threaded rear spacer with PCB clip



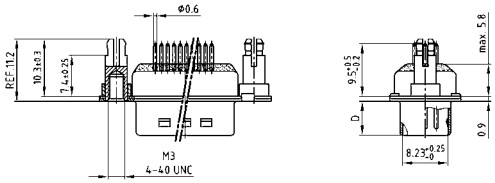

### PLUG CONNECTOR



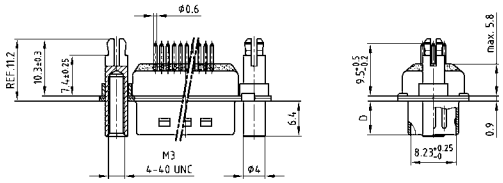

| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 15 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 26 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 44 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 62 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

PCB-Layout: Kat1iU0A

Mounting style: Threaded rear spacer with PCB clip




Mounting style: Front and threaded rear spacer with PCB clip




### ORDER DATA

## Capacitance 180 pF

**SOCKET CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 242A27700X |
| 26 | 4-40 UNC Threaded rear spacer PCB clip | 242A27710X |
| 44 | 4-40 UNC Threaded rear spacer PCB clip | 242A27720X |
| 62 | 4-40 UNC Threaded rear spacer PCB clip | 242A27730X |
| 15 | M3 Threaded rear spacer PCB clip | 242A27740X |
| 26 | M3 Threaded rear spacer PCB clip | 242A27750X |
| 44 | M3 Threaded rear spacer PCB clip | 242A27760X |
| 62 | M3 Threaded rear spacer PCB clip | 242A27770X |
| 15 | 4-40 UNC Front/Threaded rear spacer PCB clip | 242A27780X |
| 26 | 4-40 UNC Front/Threaded rear spacer PCB clip | 242A27790X |
| 44 | 4-40 UNC Front/Threaded rear spacer PCB clip | 242A27800X |
| 62 | 4-40 UNC Front/Threaded rear spacer PCB clip | 242A27810X |
| 15 | M3 Front/Threaded rear spacer PCB clip | 242A27820X |
| 26 | M3 Front/Threaded rear spacer PCB clip | 242A27830X |
| 44 | M3 Front/Threaded rear spacer PCB clip | 242A27840X |
| 62 | M3 Front/Threaded rear spacer PCB clip | 242A27850X |

**PLUG CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 241A27800X |
| 26 | 4-40 UNC Threaded rear spacer PCB clip | 241A27810X |
| 44 | 4-40 UNC Threaded rear spacer PCB clip | 241A27820X |
| 62 | 4-40 UNC Threaded rear spacer PCB clip | 241A27830X |
| 15 | M3 Threaded rear spacer PCB clip | 241A27840X |
| 26 | M3 Threaded rear spacer PCB clip | 241A27850X |
| 44 | M3 Threaded rear spacer PCB clip | 241A27860X |
| 62 | M3 Threaded rear spacer PCB clip | 241A27870X |
| 15 | 4-40 UNC Front/Threaded rear spacer PCB clip | 241A27880X |
| 26 | 4-40 UNC Front/Threaded rear spacer PCB clip | 241A27890X |
| 44 | 4-40 UNC Front/Threaded rear spacer PCB clip | 241A27900X |
| 62 | 4-40 UNC Front/Threaded rear spacer PCB clip | 241A27910X |
| 15 | M3 Front/Threaded rear spacer PCB clip | 241A27920X |
| 26 | M3 Front/Threaded rear spacer PCB clip | 241A27930X |
| 44 | M3 Front/Threaded rear spacer PCB clip | 241A27940X |
| 62 | M3 Front/Threaded rear spacer PCB clip | 241A27950X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# C-Filter D-SUB High Density

## Solder pin – Straight – Precision machined contacts

### Order data

## Capacitance 370 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 242A20610X |
| 26 | 4-40 UNC Threaded rear spacer PCB clip | 242A20620X |
| 44 | 4-40 UNC Threaded rear spacer PCB clip | 242A20630X |
| 62 | 4-40 UNC Threaded rear spacer PCB clip | 242A20640X |
| 15 | M3 Threaded rear spacer PCB clip | 242A20690X |
| 26 | M3 Threaded rear spacer PCB clip | 242A20700X |
| 44 | M3 Threaded rear spacer PCB clip | 242A20710X |
| 62 | M3 Threaded rear spacer PCB clip | 242A20720X |
| 15 | 4-40 UNC Front/Threaded rear spacer PCB clip | 242A20770X |
| 26 | 4-40 UNC Front/Threaded rear spacer PCB clip | 242A20780X |
| 44 | 4-40 UNC Front/Threaded rear spacer PCB clip | 242A20790X |
| 62 | 4-40 UNC Front/Threaded rear spacer PCB clip | 242A20800X |
| 15 | M3 Front/Threaded rear spacer PCB clip | 242A20850X |
| 26 | M3 Front/Threaded rear spacer PCB clip | 242A20860X |
| 44 | M3 Front/Threaded rear spacer PCB clip | 242A20870X |
| 62 | M3 Front/Threaded rear spacer PCB clip | 242A20880X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 241A20760X |
| 26 | 4-40 UNC Threaded rear spacer PCB clip | 241A20770X |
| 44 | 4-40 UNC Threaded rear spacer PCB clip | 241A20780X |
| 62 | 4-40 UNC Threaded rear spacer PCB clip | 241A20790X |
| 15 | M3 Threaded rear spacer PCB clip | 241A20840X |
| 26 | M3 Threaded rear spacer PCB clip | 241A20850X |
| 44 | M3 Threaded rear spacer PCB clip | 241A20860X |
| 62 | M3 Threaded rear spacer PCB clip | 241A20870X |
| 15 | 4-40 UNC Front/Threaded rear spacer PCB clip | 241A20920X |
| 26 | 4-40 UNC Front/Threaded rear spacer PCB clip | 241A20930X |
| 44 | 4-40 UNC Front/Threaded rear spacer PCB clip | 241A20940X |
| 62 | 4-40 UNC Front/Threaded rear spacer PCB clip | 241A20950X |
| 15 | M3 Front/Threaded rear spacer PCB clip | 241A21480X |
| 26 | M3 Front/Threaded rear spacer PCB clip | 241A21490X |
| 44 | M3 Front/Threaded rear spacer PCB clip | 241A21500X |
| 62 | M3 Front/Threaded rear spacer PCB clip | 241A21510X |

## Capacitance 830 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 242A20650X |
| 26 | 4-40 UNC Threaded rear spacer PCB clip | 242A20660X |
| 44 | 4-40 UNC Threaded rear spacer PCB clip | 242A20670X |
| 62 | 4-40 UNC Threaded rear spacer PCB clip | 242A20680X |
| 15 | M3 Threaded rear spacer PCB clip | 242A20730X |
| 26 | M3 Threaded rear spacer PCB clip | 242A20740X |
| 44 | M3 Threaded rear spacer PCB clip | 242A20750X |
| 62 | M3 Threaded rear spacer PCB clip | 242A20760X |
| 15 | 4-40 UNC Front/Threaded rear spacer PCB clip | 242A20810X |
| 26 | 4-40 UNC Front/Threaded rear spacer PCB clip | 242A20820X |
| 44 | 4-40 UNC Front/Threaded rear spacer PCB clip | 242A20830X |
| 62 | 4-40 UNC Front/Threaded rear spacer PCB clip | 242A20840X |
| 15 | M3 Front/Threaded rear spacer PCB clip | 242A20890X |
| 26 | M3 Front/Threaded rear spacer PCB clip | 242A20900X |
| 44 | M3 Front/Threaded rear spacer PCB clip | 242A20910X |
| 62 | M3 Front/Threaded rear spacer PCB clip | 242A20920X |

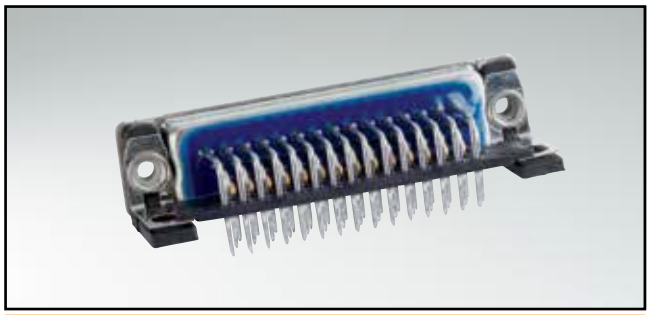
**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 241A20800X |
| 26 | 4-40 UNC Threaded rear spacer PCB clip | 241A20810X |
| 44 | 4-40 UNC Threaded rear spacer PCB clip | 241A20820X |
| 62 | 4-40 UNC Threaded rear spacer PCB clip | 241A20830X |
| 15 | M3 Threaded rear spacer PCB clip | 241A20880X |
| 26 | M3 Threaded rear spacer PCB clip | 241A20890X |
| 44 | M3 Threaded rear spacer PCB clip | 241A20900X |
| 62 | M3 Threaded rear spacer PCB clip | 241A20910X |
| 15 | 4-40 UNC Front/Threaded rear spacer PCB clip | 241A20960X |
| 26 | 4-40 UNC Front/Threaded rear spacer PCB clip | 241A20970X |
| 44 | 4-40 UNC Front/Threaded rear spacer PCB clip | 241A20980X |
| 62 | 4-40 UNC Front/Threaded rear spacer PCB clip | 241A20990X |
| 15 | M3 Front/Threaded rear spacer PCB clip | 241A21520X |
| 26 | M3 Front/Threaded rear spacer PCB clip | 241A21530X |
| 44 | M3 Front/Threaded rear spacer PCB clip | 241A21540X |
| 62 | M3 Front/Threaded rear spacer PCB clip | 241A21550X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# C-FILTER D-SUB HIGH DENSITY

## Solder pin – Angled – .350"/7.98 mm – Precision machined contacts – Plastic bracket

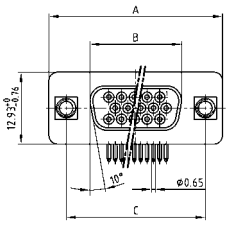


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### DESCRIPTION

- Mounting styles:
  - with mounting bracket, grounding strap and 4-40 UNC or M3 threaded insert
  - with mounting bracket, grounding strap and 4-40 UNC or M3 front spacer
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated on request)

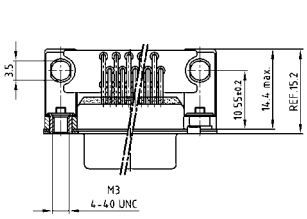
### SOCKET CONNECTOR

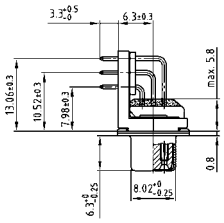


| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 15 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 26 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 44 | 53.42 | 38.50 | 47.04 ±0.13 |
| 62 | 69.70 | 54.96 | 63.50 ±0.13 |

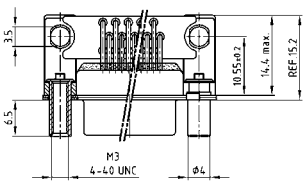
PCB-Layout: Kat1iU1A

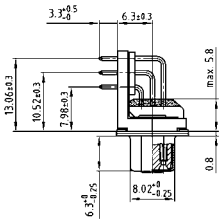
Mounting style: Grounding strap, threaded insert



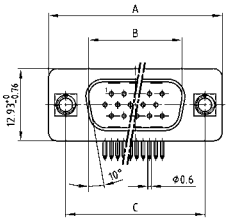


Mounting style: Grounding strap, front spacer





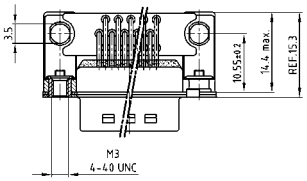
### PLUG CONNECTOR

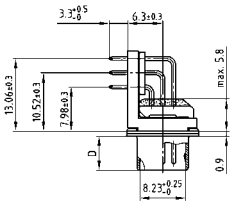


| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 15 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 26 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 44 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 62 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

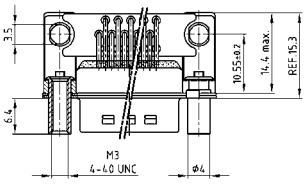
PCB-Layout: Kat1iU2A

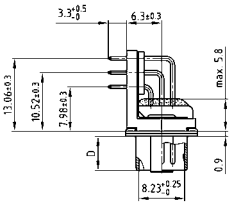
Mounting style: Grounding strap, threaded insert





Mounting style: Grounding strap, front spacer





### ORDER DATA

## Capacitance 180 pF

**SOCKET CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | Grounding strap / 4-40 UNC Threaded insert | 242A27860X |
| 26 | Grounding strap / 4-40 UNC Threaded insert | 242A27870X |
| 44 | Grounding strap / 4-40 UNC Threaded insert | 242A27880X |
| 62 | Grounding strap / 4-40 UNC Threaded insert | 242A27890X |
| 15 | Grounding strap / M3 Threaded insert | 242A27900X |
| 26 | Grounding strap / M3 Threaded insert | 242A27910X |
| 44 | Grounding strap / M3 Threaded insert | 242A27920X |
| 62 | Grounding strap / M3 Threaded insert | 242A27930X |
| 15 | Grounding strap / 4-40 UNC Front spacer | 242A27940X |
| 26 | Grounding strap / 4-40 UNC Front spacer | 242A27950X |
| 44 | Grounding strap / 4-40 UNC Front spacer | 242A27960X |
| 62 | Grounding strap / 4-40 UNC Front spacer | 242A27970X |
| 15 | Grounding strap / M3 Front spacer | 242A27980X |
| 26 | Grounding strap / M3 Front spacer | 242A27990X |
| 44 | Grounding strap / M3 Front spacer | 242A28000X |
| 62 | Grounding strap / M3 Front spacer | 242A28010X |

**PLUG CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | Grounding strap / 4-40 UNC Threaded insert | 241A27960X |
| 26 | Grounding strap / 4-40 UNC Threaded insert | 241A27970X |
| 44 | Grounding strap / 4-40 UNC Threaded insert | 241A27980X |
| 62 | Grounding strap / 4-40 UNC Threaded insert | 241A27990X |
| 15 | Grounding strap / M3 Threaded insert | 241A28000X |
| 26 | Grounding strap / M3 Threaded insert | 241A28010X |
| 44 | Grounding strap / M3 Threaded insert | 241A28020X |
| 62 | Grounding strap / M3 Threaded insert | 241A28030X |
| 15 | Grounding strap / 4-40 UNC Front spacer | 241A28040X |
| 26 | Grounding strap / 4-40 UNC Front spacer | 241A28050X |
| 44 | Grounding strap / 4-40 UNC Front spacer | 241A28060X |
| 62 | Grounding strap / 4-40 UNC Front spacer | 241A28070X |
| 15 | Grounding strap / M3 Front spacer | 241A28080X |
| 26 | Grounding strap / M3 Front spacer | 241A28090X |
| 44 | Grounding strap / M3 Front spacer | 241A28100X |
| 62 | Grounding strap / M3 Front spacer | 241A28110X |

# C-Filter D-SUB High Density

## Solder pin – Angled – .350"/7.98 mm – Precision machined contacts – Plastic bracket

### Order data

### Capacitance 370 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | Grounding strap / 4-40 UNC Threaded insert | 242A18690X |
| 26 | Grounding strap / 4-40 UNC Threaded insert | 242A18700X |
| 44 | Grounding strap / 4-40 UNC Threaded insert | 242A18710X |
| 62 | Grounding strap / 4-40 UNC Threaded insert | 242A18720X |
| 15 | Grounding strap / M3 Threaded insert | 242A18770X |
| 26 | Grounding strap / M3 Threaded insert | 242A18780X |
| 44 | Grounding strap / M3 Threaded insert | 242A18790X |
| 62 | Grounding strap / M3 Threaded insert | 242A18800X |
| 15 | Grounding strap / 4-40 UNC Front spacer | 242A18850X |
| 26 | Grounding strap / 4-40 UNC Front spacer | 242A18860X |
| 44 | Grounding strap / 4-40 UNC Front spacer | 242A18870X |
| 62 | Grounding strap / 4-40 UNC Front spacer | 242A18880X |
| 15 | Grounding strap / M3 Front spacer | 242A18930X |
| 26 | Grounding strap / M3 Front spacer | 242A18940X |
| 44 | Grounding strap / M3 Front spacer | 242A18950X |
| 62 | Grounding strap / M3 Front spacer | 242A18960X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | Grounding strap / 4-40 UNC Threaded insert | 241A17100X |
| 26 | Grounding strap / 4-40 UNC Threaded insert | 241A17110X |
| 44 | Grounding strap / 4-40 UNC Threaded insert | 241A17120X |
| 62 | Grounding strap / 4-40 UNC Threaded insert | 241A17130X |
| 15 | Grounding strap / M3 Threaded insert | 241A17180X |
| 26 | Grounding strap / M3 Threaded insert | 241A17190X |
| 44 | Grounding strap / M3 Threaded insert | 241A17200X |
| 62 | Grounding strap / M3 Threaded insert | 241A17210X |
| 15 | Grounding strap / 4-40 UNC Front spacer | 241A17260X |
| 26 | Grounding strap / 4-40 UNC Front spacer | 241A17270X |
| 44 | Grounding strap / 4-40 UNC Front spacer | 241A17280X |
| 62 | Grounding strap / 4-40 UNC Front spacer | 241A17290X |
| 15 | Grounding strap / M3 Front spacer | 241A17340X |
| 26 | Grounding strap / M3 Front spacer | 241A17350X |
| 44 | Grounding strap / M3 Front spacer | 241A17360X |
| 62 | Grounding strap / M3 Front spacer | 241A17370X |

### Capacitance 830 pF

**Socket connector**

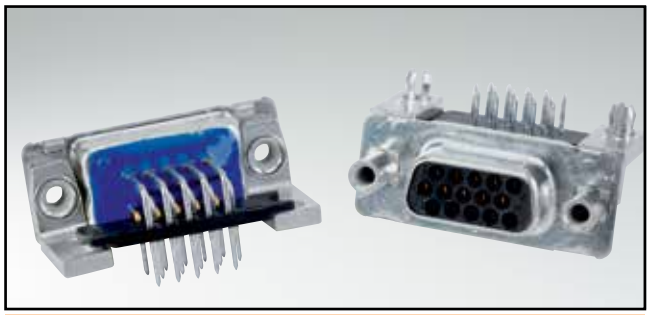
| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | Grounding strap / 4-40 UNC Threaded insert | 242A18730X |
| 26 | Grounding strap / 4-40 UNC Threaded insert | 242A18740X |
| 44 | Grounding strap / 4-40 UNC Threaded insert | 242A18750X |
| 62 | Grounding strap / 4-40 UNC Threaded insert | 242A18760X |
| 15 | Grounding strap / M3 Threaded insert | 242A18810X |
| 26 | Grounding strap / M3 Threaded insert | 242A18820X |
| 44 | Grounding strap / M3 Threaded insert | 242A18830X |
| 62 | Grounding strap / M3 Threaded insert | 242A18840X |
| 15 | Grounding strap / 4-40 UNC Front spacer | 242A18890X |
| 26 | Grounding strap / 4-40 UNC Front spacer | 242A18900X |
| 44 | Grounding strap / 4-40 UNC Front spacer | 242A18910X |
| 62 | Grounding strap / 4-40 UNC Front spacer | 242A18920X |
| 15 | Grounding strap / M3 Front spacer | 242A18970X |
| 26 | Grounding strap / M3 Front spacer | 242A18980X |
| 44 | Grounding strap / M3 Front spacer | 242A18990X |
| 62 | Grounding strap / M3 Front spacer | 242A19000X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | Grounding strap / 4-40 UNC Threaded insert | 241A17140X |
| 26 | Grounding strap / 4-40 UNC Threaded insert | 241A17150X |
| 44 | Grounding strap / 4-40 UNC Threaded insert | 241A17160X |
| 62 | Grounding strap / 4-40 UNC Threaded insert | 241A17170X |
| 15 | Grounding strap / M3 Threaded insert | 241A17220X |
| 26 | Grounding strap / M3 Threaded insert | 241A17230X |
| 44 | Grounding strap / M3 Threaded insert | 241A17240X |
| 62 | Grounding strap / M3 Threaded insert | 241A17250X |
| 15 | Grounding strap / 4-40 UNC Front spacer | 241A17300X |
| 26 | Grounding strap / 4-40 UNC Front spacer | 241A17310X |
| 44 | Grounding strap / 4-40 UNC Front spacer | 241A17320X |
| 62 | Grounding strap / 4-40 UNC Front spacer | 241A17330X |
| 15 | Grounding strap / M3 Front spacer | 241A17380X |
| 26 | Grounding strap / M3 Front spacer | 241A17390X |
| 44 | Grounding strap / M3 Front spacer | 241A17400X |
| 62 | Grounding strap / M3 Front spacer | 241A17410X |

# C-FILTER D-SUB HIGH DENSITY

## Solder pin – Angled – .350"/7.98 mm – Precision machined contacts – Metal bracket

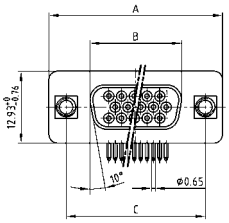


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### DESCRIPTION

- Mounting styles:
  - with mounting bracket and 4-40 UNC or M3 threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated on request)

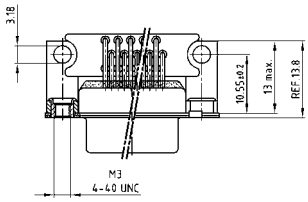
### SOCKET CONNECTOR

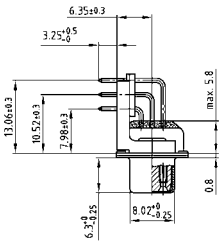


| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 15 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 26 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 44 | 53.42 | 38.50 | 47.04 ±0.13 |
| 62 | 69.70 | 54.96 | 63.50 ±0.13 |

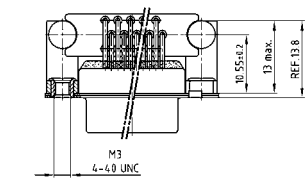
PCB-Layout: Kat1iU1A

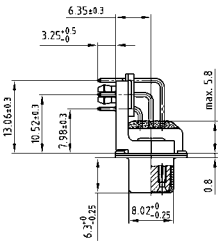
Mounting style: Threaded insert



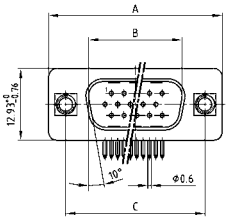


Mounting style: PCB clip, threaded insert





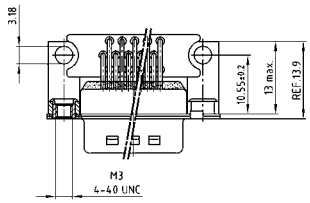
### PLUG CONNECTOR

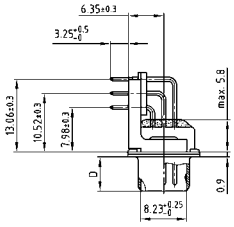


| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 15 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 26 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 44 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 62 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

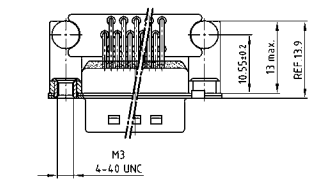
PCB-Layout: Kat1iU2A

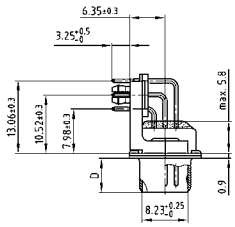
Mounting style: Threaded insert





Mounting style: PCB clip, threaded insert





### ORDER DATA

## Capacitance 180 pF

**SOCKET CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | 4-40 UNC Threaded insert | 242A28020X |
| 26 | 4-40 UNC Threaded insert | 242A28030X |
| 44 | 4-40 UNC Threaded insert | 242A28040X |
| 62 | 4-40 UNC Threaded insert | 242A28050X |
| 15 | M3 Threaded insert | 242A28060X |
| 26 | M3 Threaded insert | 242A28070X |
| 44 | M3 Threaded insert | 242A28080X |
| 62 | M3 Threaded insert | 242A28090X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 242A28180X |
| 26 | PCB clip / 4-40 UNC Threaded insert | 242A28190X |
| 44 | PCB clip / 4-40 UNC Threaded insert | 242A28200X |
| 62 | PCB clip / 4-40 UNC Threaded insert | 242A28210X |
| 15 | PCB clip / M3 Threaded insert | 242A28220X |
| 26 | PCB clip / M3 Threaded insert | 242A28230X |
| 44 | PCB clip / M3 Threaded insert | 242A28240X |
| 62 | PCB clip / M3 Threaded insert | 242A28250X |

**PLUG CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | 4-40 UNC Threaded insert | 241A28120X |
| 26 | 4-40 UNC Threaded insert | 241A28130X |
| 44 | 4-40 UNC Threaded insert | 241A28140X |
| 62 | 4-40 UNC Threaded insert | 241A28150X |
| 15 | M3 Threaded insert | 241A28160X |
| 26 | M3 Threaded insert | 241A28170X |
| 44 | M3 Threaded insert | 241A28180X |
| 62 | M3 Threaded insert | 241A28190X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 241A28280X |
| 26 | PCB clip / 4-40 UNC Threaded insert | 241A28290X |
| 44 | PCB clip / 4-40 UNC Threaded insert | 241A28300X |
| 62 | PCB clip / 4-40 UNC Threaded insert | 241A28310X |
| 15 | PCB clip / M3 Threaded insert | 241A28320X |
| 26 | PCB clip / M3 Threaded insert | 241A28330X |
| 44 | PCB clip / M3 Threaded insert | 241A28340X |
| 62 | PCB clip / M3 Threaded insert | 241A28350X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# C-Filter D-SUB High Density

## Solder pin – Angled – .350"/7.98 mm – Precision machined contacts – Metal bracket

### Order data

### Capacitance 370 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | 4-40 UNC Threaded insert | 242A19810X |
| 26 | 4-40 UNC Threaded insert | 242A19820X |
| 44 | 4-40 UNC Threaded insert | 242A19830X |
| 62 | 4-40 UNC Threaded insert | 242A19840X |
| 15 | M3 Threaded insert | 242A19890X |
| 26 | M3 Threaded insert | 242A19900X |
| 44 | M3 Threaded insert | 242A19910X |
| 62 | M3 Threaded insert | 242A19920X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 242A19490X |
| 26 | PCB clip / 4-40 UNC Threaded insert | 242A19500X |
| 44 | PCB clip / 4-40 UNC Threaded insert | 242A19510X |
| 62 | PCB clip / 4-40 UNC Threaded insert | 242A19520X |
| 15 | PCB clip / M3 Threaded insert | 242A19570X |
| 26 | PCB clip / M3 Threaded insert | 242A19580X |
| 44 | PCB clip / M3 Threaded insert | 242A19590X |
| 62 | PCB clip / M3 Threaded insert | 242A19600X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | 4-40 UNC Threaded insert | 241A18220X |
| 26 | 4-40 UNC Threaded insert | 241A18230X |
| 44 | 4-40 UNC Threaded insert | 241A18240X |
| 62 | 4-40 UNC Threaded insert | 241A18250X |
| 15 | M3 Threaded insert | 241A18300X |
| 26 | M3 Threaded insert | 241A18310X |
| 44 | M3 Threaded insert | 241A18320X |
| 62 | M3 Threaded insert | 241A18330X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 241A17900X |
| 26 | PCB clip / 4-40 UNC Threaded insert | 241A17910X |
| 44 | PCB clip / 4-40 UNC Threaded insert | 241A17920X |
| 62 | PCB clip / 4-40 UNC Threaded insert | 241A17930X |
| 15 | PCB clip / M3 Threaded insert | 241A17980X |
| 26 | PCB clip / M3 Threaded insert | 241A17990X |
| 44 | PCB clip / M3 Threaded insert | 241A18000X |
| 62 | PCB clip / M3 Threaded insert | 241A18010X |

### Capacitance 830 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | 4-40 UNC Threaded insert | 242A19850X |
| 26 | 4-40 UNC Threaded insert | 242A19860X |
| 44 | 4-40 UNC Threaded insert | 242A19870X |
| 62 | 4-40 UNC Threaded insert | 242A19880X |
| 15 | M3 Threaded insert | 242A19930X |
| 26 | M3 Threaded insert | 242A19940X |
| 44 | M3 Threaded insert | 242A19950X |
| 62 | M3 Threaded insert | 242A19960X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 242A19530X |
| 26 | PCB clip / 4-40 UNC Threaded insert | 242A19540X |
| 44 | PCB clip / 4-40 UNC Threaded insert | 242A19550X |
| 62 | PCB clip / 4-40 UNC Threaded insert | 242A19560X |
| 15 | PCB clip / M3 Threaded insert | 242A19610X |
| 26 | PCB clip / M3 Threaded insert | 242A19620X |
| 44 | PCB clip / M3 Threaded insert | 242A19630X |
| 62 | PCB clip / M3 Threaded insert | 242A19640X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | 4-40 UNC Threaded insert | 241A18260X |
| 26 | 4-40 UNC Threaded insert | 241A18270X |
| 44 | 4-40 UNC Threaded insert | 241A18280X |
| 62 | 4-40 UNC Threaded insert | 241A18290X |
| 15 | M3 Threaded insert | 241A18340X |
| 26 | M3 Threaded insert | 241A18350X |
| 44 | M3 Threaded insert | 241A18360X |
| 62 | M3 Threaded insert | 241A18370X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 241A17940X |
| 26 | PCB clip / 4-40 UNC Threaded insert | 241A17950X |
| 44 | PCB clip / 4-40 UNC Threaded insert | 241A17960X |
| 62 | PCB clip / 4-40 UNC Threaded insert | 241A17970X |
| 15 | PCB clip / M3 Threaded insert | 241A18020X |
| 26 | PCB clip / M3 Threaded insert | 241A18030X |
| 44 | PCB clip / M3 Threaded insert | 241A18040X |
| 62 | PCB clip / M3 Threaded insert | 241A18050X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# LC-FILTER D-SUB HIGH DENSITY

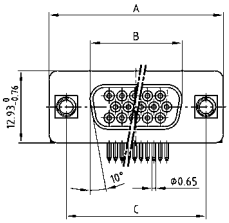
## Solder pin – Angled – .350"/7.98 mm – Precision machined contacts – Metal Bracket

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### DESCRIPTION

- Mounting styles:
  - with mounting bracket and 4-40 UNC or M3 threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC or M3 threaded insert
- 44 and 62 pos. version implemented with ferrite pearls
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated on request)

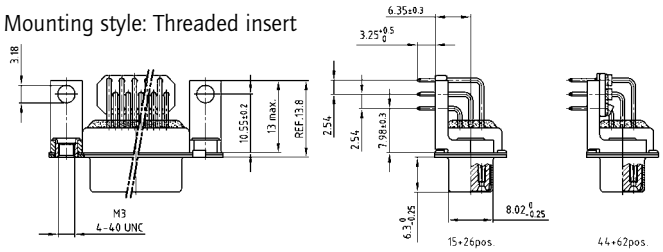
### SOCKET CONNECTOR



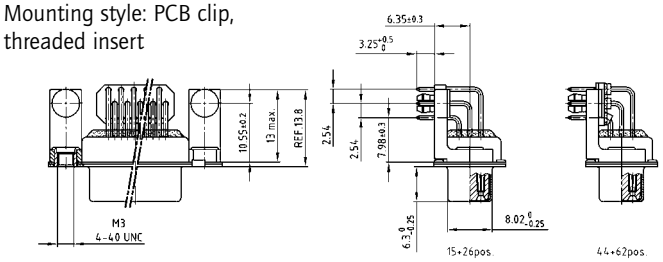
| No. of pos. | A -0.76 | B -0.25 | C |
|---|---|---|---|
| 15 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 26 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 44 | 53.42 | 38.50 | 47.04 ±0.13 |
| 62 | 69.70 | 54.96 | 63.50 ±0.13 |

PCB-Layout: Kat1iU1A

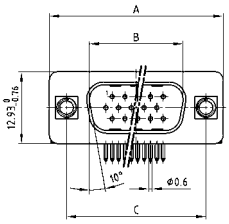
Mounting style: Threaded insert



Mounting style: PCB clip, threaded insert



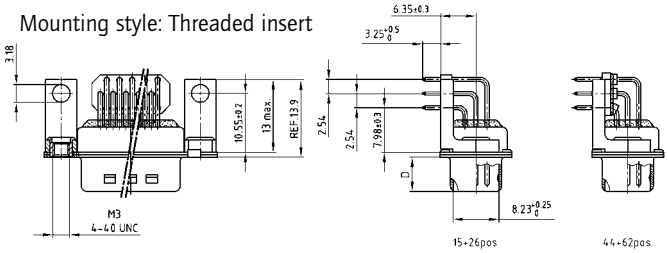
### PLUG CONNECTOR



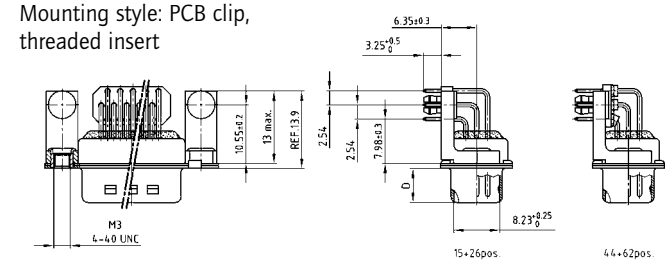
| No. of pos. | A -0.76 | B +0.25 | C | D -0.3 |
|---|---|---|---|---|
| 15 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 26 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 44 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 62 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

PCB-Layout: Kat1iU2A

Mounting style: Threaded insert



Mounting style: PCB clip, threaded insert



### ORDER DATA

## Capacitance 180 pF

**SOCKET CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | 4-40 UNC Threaded insert | 242A26580X |
| 26 | 4-40 UNC Threaded insert | 242A26590X |
| 44 | 4-40 UNC Threaded insert | 242A26600X |
| 62 | 4-40 UNC Threaded insert | 242A26610X |
| 15 | M3 Threaded insert | 242A26660X |
| 26 | M3 Threaded insert | 242A26670X |
| 44 | M3 Threaded insert | 242A26680X |
| 62 | M3 Threaded insert | 242A26690X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 242A26620X |
| 26 | PCB clip / 4-40 UNC Threaded insert | 242A26630X |
| 44 | PCB clip / 4-40 UNC Threaded insert | 242A26640X |
| 62 | PCB clip / 4-40 UNC Threaded insert | 242A26650X |
| 15 | PCB clip / M3 Threaded insert | 242A26700X |
| 26 | PCB clip / M3 Threaded insert | 242A26710X |
| 44 | PCB clip / M3 Threaded insert | 242A26720X |
| 62 | PCB clip / M3 Threaded insert | 242A26730X |

**PLUG CONNECTOR**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | 4-40 UNC Threaded insert | 241A26680X |
| 26 | 4-40 UNC Threaded insert | 241A26690X |
| 44 | 4-40 UNC Threaded insert | 241A26700X |
| 62 | 4-40 UNC Threaded insert | 241A26710X |
| 15 | M3 Threaded insert | 241A26760X |
| 26 | M3 Threaded insert | 241A26770X |
| 44 | M3 Threaded insert | 241A26780X |
| 62 | M3 Threaded insert | 241A26790X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 241A26720X |
| 26 | PCB clip / 4-40 UNC Threaded insert | 241A26730X |
| 44 | PCB clip / 4-40 UNC Threaded insert | 241A26740X |
| 62 | PCB clip / 4-40 UNC Threaded insert | 241A26750X |
| 15 | PCB clip / M3 Threaded insert | 241A26800X |
| 26 | PCB clip / M3 Threaded insert | 241A26810X |
| 44 | PCB clip / M3 Threaded insert | 241A26820X |
| 62 | PCB clip / M3 Threaded insert | 241A26830X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# LC-Filter D-SUB High Density

## Solder pin – Angled – .350"/7.98 mm – Precision machined contacts – Metal Bracket

### Order data

### Capacitance 370 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | 4-40 UNC Threaded insert | 242A25620X |
| 26 | 4-40 UNC Threaded insert | 242A25630X |
| 44 | 4-40 UNC Threaded insert | 242A25640X |
| 62 | 4-40 UNC Threaded insert | 242A25650X |
| 15 | M3 Threaded insert | 242A25700X |
| 26 | M3 Threaded insert | 242A25710X |
| 44 | M3 Threaded insert | 242A25720X |
| 62 | M3 Threaded insert | 242A25730X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 242A25780X |
| 26 | PCB clip / 4-40 UNC Threaded insert | 242A25790X |
| 44 | PCB clip / 4-40 UNC Threaded insert | 242A25800X |
| 62 | PCB clip / 4-40 UNC Threaded insert | 242A25810X |
| 15 | PCB clip / M3 Threaded insert | 242A25860X |
| 26 | PCB clip / M3 Threaded insert | 242A25870X |
| 44 | PCB clip / M3 Threaded insert | 242A25880X |
| 62 | PCB clip / M3 Threaded insert | 242A25890X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | 4-40 UNC Threaded insert | 241A25720X |
| 26 | 4-40 UNC Threaded insert | 241A25730X |
| 44 | 4-40 UNC Threaded insert | 241A25740X |
| 62 | 4-40 UNC Threaded insert | 241A25750X |
| 15 | M3 Threaded insert | 241A25800X |
| 26 | M3 Threaded insert | 241A25810X |
| 44 | M3 Threaded insert | 241A25820X |
| 62 | M3 Threaded insert | 241A25830X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 241A25880X |
| 26 | PCB clip / 4-40 UNC Threaded insert | 241A25890X |
| 44 | PCB clip / 4-40 UNC Threaded insert | 241A25900X |
| 62 | PCB clip / 4-40 UNC Threaded insert | 241A25910X |
| 15 | PCB clip / M3 Threaded insert | 241A25960X |
| 26 | PCB clip / M3 Threaded insert | 241A25970X |
| 44 | PCB clip / M3 Threaded insert | 241A25980X |
| 62 | PCB clip / M3 Threaded insert | 241A25990X |

### Capacitance 830 pF

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | 4-40 UNC Threaded insert | 242A25660X |
| 26 | 4-40 UNC Threaded insert | 242A25670X |
| 44 | 4-40 UNC Threaded insert | 242A25680X |
| 62 | 4-40 UNC Threaded insert | 242A25690X |
| 15 | M3 Threaded insert | 242A25740X |
| 26 | M3 Threaded insert | 242A25750X |
| 44 | M3 Threaded insert | 242A25760X |
| 62 | M3 Threaded insert | 242A25770X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 242A25820X |
| 26 | PCB clip / 4-40 UNC Threaded insert | 242A25830X |
| 44 | PCB clip / 4-40 UNC Threaded insert | 242A25840X |
| 62 | PCB clip / 4-40 UNC Threaded insert | 242A25850X |
| 15 | PCB clip / M3 Threaded insert | 242A25900X |
| 26 | PCB clip / M3 Threaded insert | 242A25910X |
| 44 | PCB clip / M3 Threaded insert | 242A25920X |
| 62 | PCB clip / M3 Threaded insert | 242A25930X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | 4-40 UNC Threaded insert | 241A25760X |
| 26 | 4-40 UNC Threaded insert | 241A25770X |
| 44 | 4-40 UNC Threaded insert | 241A25780X |
| 62 | 4-40 UNC Threaded insert | 241A25790X |
| 15 | M3 Threaded insert | 241A25840X |
| 26 | M3 Threaded insert | 241A25850X |
| 44 | M3 Threaded insert | 241A25860X |
| 62 | M3 Threaded insert | 241A25870X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 241A25920X |
| 26 | PCB clip / 4-40 UNC Threaded insert | 241A25930X |
| 44 | PCB clip / 4-40 UNC Threaded insert | 241A25940X |
| 62 | PCB clip / 4-40 UNC Threaded insert | 241A25950X |
| 15 | PCB clip / M3 Threaded insert | 241A26000X |
| 26 | PCB clip / M3 Threaded insert | 241A26010X |
| 44 | PCB clip / M3 Threaded insert | 241A26020X |
| 62 | PCB clip / M3 Threaded insert | 241A26030X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# C-Filter D-SUB Adapter

## Socket connector / Plug connector – Precision machined contacts – Metal

RoHS compliant

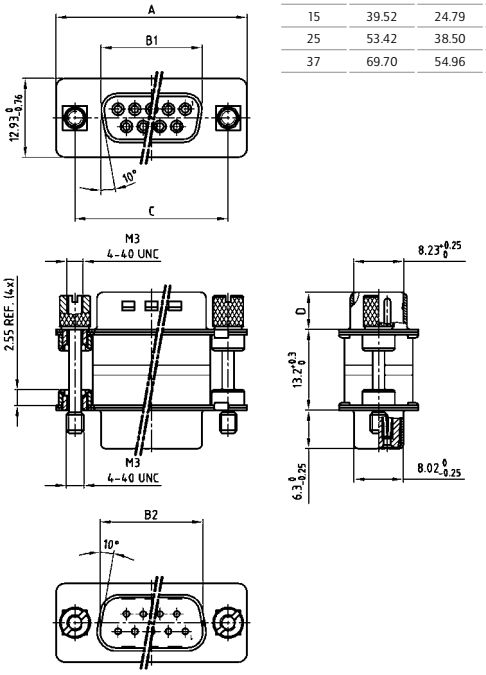
### Description

- Mounting styles:
  - with 4-40 UNC or M3 jack screw
  - with 4-40 UNC or M3 hex bolt
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

### Socket connector

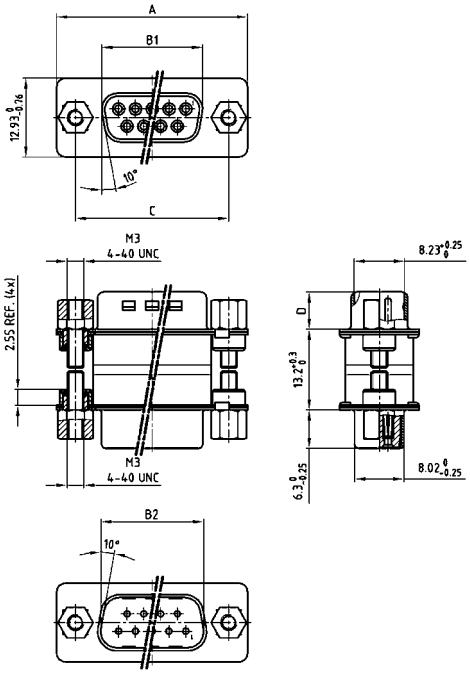
Version with jack screw

| No. of pos. | A -0.76 | B1 -0.25 | B2 +0.25 | C | D -0.3 |
|---|---|---|---|---|---|
| 09 | 31.19 | 16.46 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.10 |
| 15 | 39.52 | 24.79 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 25 | 53.42 | 38.50 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 54.96 | 55.30 | 63.50 ±0.13 | 5.99 |




### Plug connector

Version with hex bolt




### Order data

## Capacitance 180 pF

**Socket connector / Plug connector with jack screw**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Jack screw | 243A12160X |
| 15 | 4-40 UNC Jack screw | 243A12170X |
| 25 | 4-40 UNC Jack screw | 243A12180X |
| 37 | 4-40 UNC Jack screw | 243A12190X |
| 09 | M3 Jack screw | 243A12320X |
| 15 | M3 Jack screw | 243A12330X |
| 25 | M3 Jack screw | 243A12340X |
| 37 | M3 Jack screw | 243A12350X |

**Socket connector / Plug connector with hex bolt**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Hex bolt | 243A13120X |
| 15 | 4-40 UNC Hex bolt | 243A13130X |
| 25 | 4-40 UNC Hex bolt | 243A13140X |
| 37 | 4-40 UNC Hex bolt | 243A13150X |
| 09 | M3 Hex bolt | 243A13280X |
| 15 | M3 Hex bolt | 243A13290X |
| 25 | M3 Hex bolt | 243A13300X |
| 37 | M3 Hex bolt | 243A13310X |

# C-Filter D-SUB Adapter

## Socket connector / Plug connector – Precision machined contacts – Metal

### Order data

### Capacitance 370 pF

Socket connector / Plug connector with jack screw

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Jack screw | 243A12200X |
| 15 | 4-40 UNC Jack screw | 243A12210X |
| 25 | 4-40 UNC Jack screw | 243A12220X |
| 37 | 4-40 UNC Jack screw | 243A12230X |
| 09 | M3 Jack screw | 243A12360X |
| 15 | M3 Jack screw | 243A12370X |
| 25 | M3 Jack screw | 243A12380X |
| 37 | M3 Jack screw | 243A12390X |

Socket connector / Plug connector with hex bolt

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Hex bolt | 243A13160X |
| 15 | 4-40 UNC Hex bolt | 243A13170X |
| 25 | 4-40 UNC Hex bolt | 243A13180X |
| 37 | 4-40 UNC Hex bolt | 243A13190X |
| 09 | M3 Hex bolt | 243A13320X |
| 15 | M3 Hex bolt | 243A13330X |
| 25 | M3 Hex bolt | 243A13340X |
| 37 | M3 Hex bolt | 243A13350X |

### Capacitance 830 pF

Socket connector / Plug connector with jack screw

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Jack screw | 243A12240X |
| 15 | 4-40 UNC Jack screw | 243A12250X |
| 25 | 4-40 UNC Jack screw | 243A12260X |
| 37 | 4-40 UNC Jack screw | 243A12270X |
| 09 | M3 Jack screw | 243A12400X |
| 15 | M3 Jack screw | 243A12410X |
| 25 | M3 Jack screw | 243A12420X |
| 37 | M3 Jack screw | 243A12430X |

Socket connector / Plug connector with hex bolt

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Hex bolt | 243A13200X |
| 15 | 4-40 UNC Hex bolt | 243A13210X |
| 25 | 4-40 UNC Hex bolt | 243A13220X |
| 37 | 4-40 UNC Hex bolt | 243A13230X |
| 09 | M3 Hex bolt | 243A13360X |
| 15 | M3 Hex bolt | 243A13370X |
| 25 | M3 Hex bolt | 243A13380X |
| 37 | M3 Hex bolt | 243A13390X |

### Capacitance 1300 pF

Socket connector / Plug connector with jack screw

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Jack screw | 243A12280X |
| 15 | 4-40 UNC Jack screw | 243A12290X |
| 25 | 4-40 UNC Jack screw | 243A12300X |
| 37 | 4-40 UNC Jack screw | 243A12310X |
| 09 | M3 Jack screw | 243A12440X |
| 15 | M3 Jack screw | 243A12450X |
| 25 | M3 Jack screw | 243A12460X |
| 37 | M3 Jack screw | 243A12470X |

Socket connector / Plug connector with hex bolt

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Hex bolt | 243A13240X |
| 15 | 4-40 UNC Hex bolt | 243A13250X |
| 25 | 4-40 UNC Hex bolt | 243A13260X |
| 37 | 4-40 UNC Hex bolt | 243A13270X |
| 09 | M3 Hex bolt | 243A13400X |
| 15 | M3 Hex bolt | 243A13410X |
| 25 | M3 Hex bolt | 243A13420X |
| 37 | M3 Hex bolt | 243A13430X |

# C-FILTER D-SUB ADAPTER

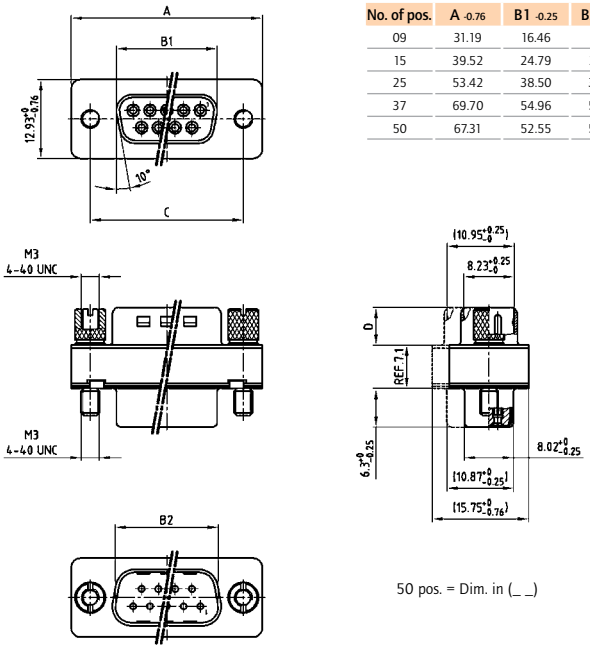
## Socket connector / Plug connector – Precision machined contacts – Low profile

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### DESCRIPTION

- Mounting style:
  with 4-40 UNC or M3 jack screw
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

### PRODUCT DRAWING




| No. of pos. | A -0.76 | B1 -0.25 | B2 +0.25 | C | | D -0.3 |
|---|---|---|---|---|---|---|
| 09 | 31.19 | 16.46 | 16.79 | 25.00 | +0.12 -0.13 | 6.10 |
| 15 | 39.52 | 24.79 | 25.12 | 33.30 | +0.15 -0.10 | 6.12 |
| 25 | 53.42 | 38.50 | 38.84 | 47.04 | ±0.13 | 5.99 |
| 37 | 69.70 | 54.96 | 55.30 | 63.50 | ±0.13 | 5.99 |
| 50 | 67.31 | 52.55 | 52.68 | 61.10 | +0.14 +0.11 | 5.99 |

50 pos. = Dim. in (_ _)

### ORDER DATA

## Capacitance 180 pF

**SOCKET CONNECTOR / PLUG CONNECTOR WITH JACK SCREW**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Jack screw | 243A11030X |
| 15 | 4-40 UNC Jack screw | 243A11040X |
| 25 | 4-40 UNC Jack screw | 243A11050X |
| 37 | 4-40 UNC Jack screw | 243A11060X |
| 50 | 4-40 UNC Jack screw | 243A11070X |

**SOCKET CONNECTOR / PLUG CONNECTOR WITH JACK SCREW**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Jack screw | 243A11080X |
| 15 | M3 Jack screw | 243A11090X |
| 25 | M3 Jack screw | 243A11100X |
| 37 | M3 Jack screw | 243A11110X |
| 50 | M3 Jack screw | 243A11120X |

# C-Filter D-SUB Adapter

## Socket connector / Plug connector – Precision machined contacts – Low profile

### Order data

### Capacitance 370 pF

Socket connector / Plug connector with jack screw

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Jack screw | 243A10010X |
| 15 | 4-40 UNC Jack screw | 243A10020X |
| 25 | 4-40 UNC Jack screw | 243A10030X |
| 37 | 4-40 UNC Jack screw | 243A10040X |
| 50 | 4-40 UNC Jack screw | 243A10130X |

Socket connector / Plug connector with jack screw

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Jack screw | 243A10510X |
| 15 | M3 Jack screw | 243A10520X |
| 25 | M3 Jack screw | 243A10530X |
| 37 | M3 Jack screw | 243A10540X |
| 50 | M3 Jack screw | 243A10550X |

### Capacitance 830 pF

Socket connector / Plug connector with jack screw

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Jack screw | 243A10090X |
| 15 | 4-40 UNC Jack screw | 243A10100X |
| 25 | 4-40 UNC Jack screw | 243A10110X |
| 37 | 4-40 UNC Jack screw | 243A10120X |
| 50 | 4-40 UNC Jack screw | 243A10150X |

Socket connector / Plug connector with jack screw

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Jack screw | 243A10610X |
| 15 | M3 Jack screw | 243A10620X |
| 25 | M3 Jack screw | 243A10630X |
| 37 | M3 Jack screw | 243A10640X |
| 50 | M3 Jack screw | 243A10650X |

### Capacitance 1300 pF

Socket connector / Plug connector with jack screw

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Jack screw | 243A10050X |
| 15 | 4-40 UNC Jack screw | 243A10060X |
| 25 | 4-40 UNC Jack screw | 243A10070X |
| 37 | 4-40 UNC Jack screw | 243A10080X |
| 50 | 4-40 UNC Jack screw | 243A10140X |

Socket connector / Plug connector with jack screw

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Jack screw | 243A10560X |
| 15 | M3 Jack screw | 243A10570X |
| 25 | M3 Jack screw | 243A10580X |
| 37 | M3 Jack screw | 243A10590X |
| 50 | M3 Jack screw | 243A10600X |

# LC-Filter D-SUB Adapter

## Socket connector / Plug connector – Precision machined contacts – Metal

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

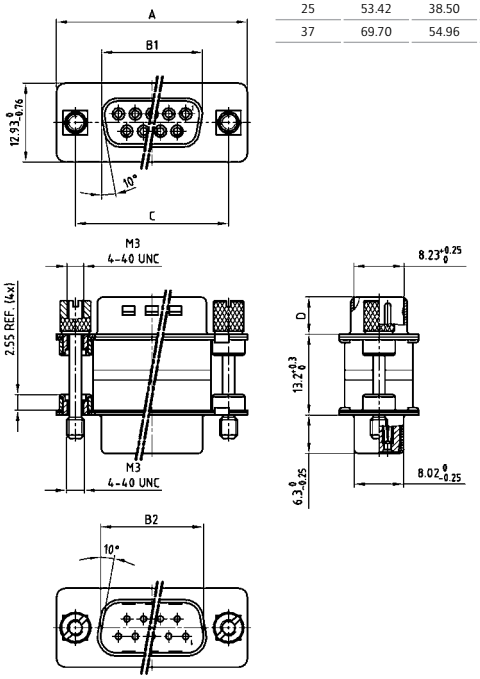
### Description

- Mounting styles:
  - with 4-40 UNC or M3 jack screw
  - with 4-40 UNC or M3 hex bolt
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

### Socket connector

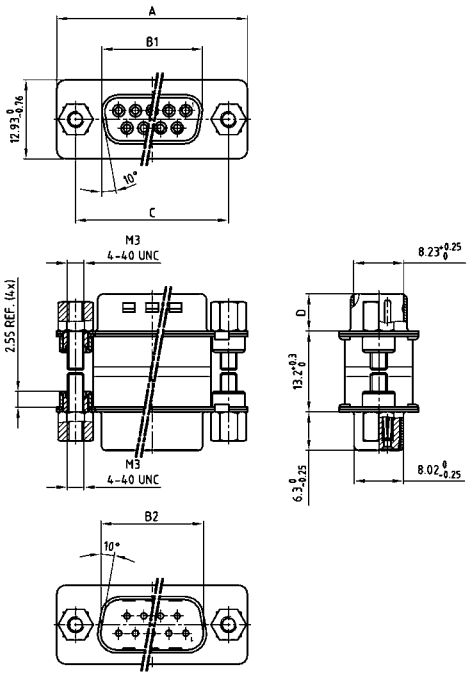
Version with jack screw

| No. of pos. | A -0.76 | B1 -0.25 | B2 +0.25 | C | D -0.3 |
|---|---|---|---|---|---|
| 09 | 31.19 | 16.46 | 16.79 | 25.00 +0.12 -0.13 | 6.10 |
| 15 | 39.52 | 24.79 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 25 | 53.42 | 38.50 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 54.96 | 55.30 | 63.50 ±0.13 | 5.99 |




### Plug connector

Version with hex bolt




### Order data

## Capacitance 180 pF

**Socket connector / Plug connector with jack screw**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Jack screw | 243A12800X |
| 15 | 4-40 UNC Jack screw | 243A12810X |
| 25 | 4-40 UNC Jack screw | 243A12820X |
| 37 | 4-40 UNC Jack screw | 243A12830X |
| 09 | M3 Jack screw | 243A12960X |
| 15 | M3 Jack screw | 243A12970X |
| 25 | M3 Jack screw | 243A12980X |
| 37 | M3 Jack screw | 243A12990X |

**Socket connector / Plug connector with hex bolt**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Hex bolt | 243A13440X |
| 15 | 4-40 UNC Hex bolt | 243A13450X |
| 25 | 4-40 UNC Hex bolt | 243A13460X |
| 37 | 4-40 UNC Hex bolt | 243A13470X |
| 09 | M3 Hex bolt | 243A13600X |
| 15 | M3 Hex bolt | 243A13610X |
| 25 | M3 Hex bolt | 243A13620X |
| 37 | M3 Hex bolt | 243A13630X |

# LC-Filter D-SUB Adapter

## Socket connector / Plug connector – Precision machined contacts – Metal

### Order data

### Capacitance 370 pF

Socket connector / Plug connector with jack screw

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Jack screw | 243A12840X |
| 15 | 4-40 UNC Jack screw | 243A12850X |
| 25 | 4-40 UNC Jack screw | 243A12860X |
| 37 | 4-40 UNC Jack screw | 243A12870X |
| 09 | M3 Jack screw | 243A13000X |
| 15 | M3 Jack screw | 243A13010X |
| 25 | M3 Jack screw | 243A13020X |
| 37 | M3 Jack screw | 243A13030X |

Socket connector / Plug connector with hex bolt

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Hex bolt | 243A13480X |
| 15 | 4-40 UNC Hex bolt | 243A13490X |
| 25 | 4-40 UNC Hex bolt | 243A13500X |
| 37 | 4-40 UNC Hex bolt | 243A13510X |
| 09 | M3 Hex bolt | 243A13640X |
| 15 | M3 Hex bolt | 243A13650X |
| 25 | M3 Hex bolt | 243A13660X |
| 37 | M3 Hex bolt | 243A13670X |

### Capacitance 830 pF

Socket connector / Plug connector with jack screw

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Jack screw | 243A12880X |
| 15 | 4-40 UNC Jack screw | 243A12890X |
| 25 | 4-40 UNC Jack screw | 243A12900X |
| 37 | 4-40 UNC Jack screw | 243A12910X |
| 09 | M3 Jack screw | 243A13040X |
| 15 | M3 Jack screw | 243A13050X |
| 25 | M3 Jack screw | 243A13060X |
| 37 | M3 Jack screw | 243A13070X |

Socket connector / Plug connector with hex bolt

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Hex bolt | 243A13520X |
| 15 | 4-40 UNC Hex bolt | 243A13530X |
| 25 | 4-40 UNC Hex bolt | 243A13540X |
| 37 | 4-40 UNC Hex bolt | 243A13550X |
| 09 | M3 Hex bolt | 243A13680X |
| 15 | M3 Hex bolt | 243A13690X |
| 25 | M3 Hex bolt | 243A13700X |
| 37 | M3 Hex bolt | 243A13710X |

### Capacitance 1300 pF

Socket connector / Plug connector with jack screw

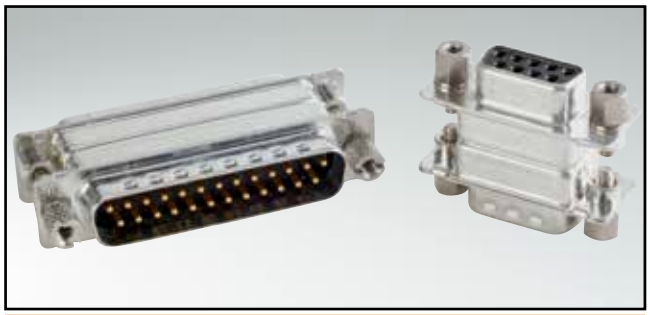
| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Jack screw | 243A12920X |
| 15 | 4-40 UNC Jack screw | 243A12930X |
| 25 | 4-40 UNC Jack screw | 243A12940X |
| 37 | 4-40 UNC Jack screw | 243A12950X |
| 09 | M3 Jack screw | 243A13080X |
| 15 | M3 Jack screw | 243A13090X |
| 25 | M3 Jack screw | 243A13100X |
| 37 | M3 Jack screw | 243A13110X |

Socket connector / Plug connector with hex bolt

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Hex bolt | 243A13560X |
| 15 | 4-40 UNC Hex bolt | 243A13570X |
| 25 | 4-40 UNC Hex bolt | 243A13580X |
| 37 | 4-40 UNC Hex bolt | 243A13590X |
| 09 | M3 Hex bolt | 243A13720X |
| 15 | M3 Hex bolt | 243A13730X |
| 25 | M3 Hex bolt | 243A13740X |
| 37 | M3 Hex bolt | 243A13750X |

# π-FILTER D-SUB ADAPTER

## Socket connector / Plug connector – Precision machined contacts – Metal



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

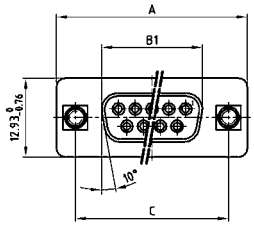
### DESCRIPTION

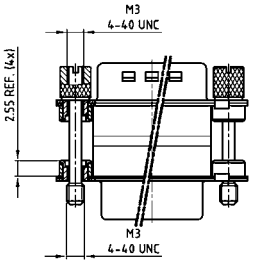
- Mounting styles:
  - with 4-40 UNC or M3 jack screw
  - with 4-40 UNC or M3 hex bolt
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

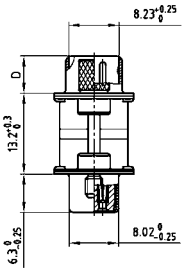
### SOCKET CONNECTOR

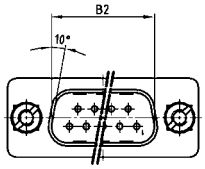
Version with jack screw

| No. of pos. | A -0.76 | B1 -0.25 | B2 +0.25 | C | D -0.3 |
|---|---|---|---|---|---|
| 09 | 31.19 | 16.46 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.10 |
| 15 | 39.52 | 24.79 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 25 | 53.42 | 38.50 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 54.96 | 55.30 | 63.50 ±0.13 | 5.99 |



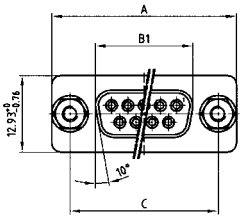



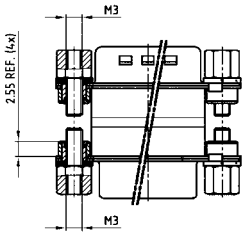



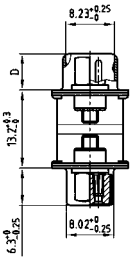



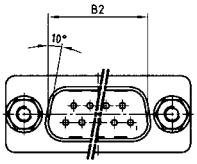

### PLUG CONNECTOR

Version with hex bolt




### ORDER DATA

## Capacitance 2 x 180 pF

**SOCKET CONNECTOR / PLUG CONNECTOR WITH JACK SCREW**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Jack screw | MAP1XAAAR02R361X |
| 15 | 4-40 UNC Jack screw | MAP2XAAAR02R361X |
| 25 | 4-40 UNC Jack screw | MAP3XAAAR02R361X |
| 37 | 4-40 UNC Jack screw | MAP4XAAAR02R361X |
| 09 | M3 Jack screw | MAP1XAAAR01R361X |
| 15 | M3 Jack screw | MAP2XAAAR01R361X |
| 25 | M3 Jack screw | MAP3XAAAR01R361X |
| 37 | M3 Jack screw | MAP4XAAAR01R361X |

**SOCKET CONNECTOR / PLUG CONNECTOR WITH HEX BOLT**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Hex bolt | MAP1XAAAH02R361X |
| 15 | 4-40 UNC Hex bolt | MAP2XAAAH02R361X |
| 25 | 4-40 UNC Hex bolt | MAP3XAAAH02R361X |
| 37 | 4-40 UNC Hex bolt | MAP4XAAAH02R361X |
| 09 | M3 Hex bolt | MAP1XAAAH01R361X |
| 15 | M3 Hex bolt | MAP2XAAAH01R361X |
| 25 | M3 Hex bolt | MAP3XAAAH01R361X |
| 37 | M3 Hex bolt | MAP4XAAAH01R361X |

# π-Filter D-SUB Adapter

## Socket connector / Plug connector – Precision machined contacts – Metal

### Order data

### Capacitance 2 x 370 pF

Socket connector / Plug connector with jack screw

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Jack screw | MAP1XAAAR02R741X |
| 15 | 4-40 UNC Jack screw | MAP2XAAAR02R741X |
| 25 | 4-40 UNC Jack screw | MAP3XAAAR02R741X |
| 37 | 4-40 UNC Jack screw | MAP4XAAAR02R741X |
| 09 | M3 Jack screw | MAP1XAAAR01R741X |
| 15 | M3 Jack screw | MAP2XAAAR01R741X |
| 25 | M3 Jack screw | MAP3XAAAR01R741X |
| 37 | M3 Jack screw | MAP4XAAAR01R741X |

Socket connector / Plug connector with hex bolt

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Hex bolt | MAP1XAAAH02R741X |
| 15 | 4-40 UNC Hex bolt | MAP2XAAAH02R741X |
| 25 | 4-40 UNC Hex bolt | MAP3XAAAH02R741X |
| 37 | 4-40 UNC Hex bolt | MAP4XAAAH02R741X |
| 09 | M3 Hex bolt | MAP1XAAAH01R741X |
| 15 | M3 Hex bolt | MAP2XAAAH01R741X |
| 25 | M3 Hex bolt | MAP3XAAAH01R741X |
| 37 | M3 Hex bolt | MAP4XAAAH01R741X |

### Capacitance 2 x 830 pF

Socket connector / Plug connector with jack screw

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Jack screw | MAP1XAAAR02R162X |
| 15 | 4-40 UNC Jack screw | MAP2XAAAR02R162X |
| 25 | 4-40 UNC Jack screw | MAP3XAAAR02R162X |
| 37 | 4-40 UNC Jack screw | MAP4XAAAR02R162X |
| 09 | M3 Jack screw | MAP1XAAAR01R162X |
| 15 | M3 Jack screw | MAP2XAAAR01R162X |
| 25 | M3 Jack screw | MAP3XAAAR01R162X |
| 37 | M3 Jack screw | MAP4XAAAR01R162X |

Socket connector / Plug connector with hex bolt

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Hex bolt | MAP1XAAAH02R162X |
| 15 | 4-40 UNC Hex bolt | MAP2XAAAH02R162X |
| 25 | 4-40 UNC Hex bolt | MAP3XAAAH02R162X |
| 37 | 4-40 UNC Hex bolt | MAP4XAAAH02R162X |
| 09 | M3 Hex bolt | MAP1XAAAH01R162X |
| 15 | M3 Hex bolt | MAP2XAAAH01R162X |
| 25 | M3 Hex bolt | MAP3XAAAH01R162X |
| 37 | M3 Hex bolt | MAP4XAAAH01R162X |

### Capacitance 2 x 1300 pF

Socket connector / Plug connector with jack screw

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Jack screw | MAP1XAAAR02R262X |
| 15 | 4-40 UNC Jack screw | MAP2XAAAR02R262X |
| 25 | 4-40 UNC Jack screw | MAP3XAAAR02R262X |
| 37 | 4-40 UNC Jack screw | MAP4XAAAR02R262X |
| 09 | M3 Jack screw | MAP1XAAAR01R262X |
| 15 | M3 Jack screw | MAP2XAAAR01R262X |
| 25 | M3 Jack screw | MAP3XAAAR01R262X |
| 37 | M3 Jack screw | MAP4XAAAR01R262X |

Socket connector / Plug connector with hex bolt

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | 4-40 UNC Hex bolt | MAP1XAAAH02R262X |
| 15 | 4-40 UNC Hex bolt | MAP2XAAAH02R262X |
| 25 | 4-40 UNC Hex bolt | MAP3XAAAH02R262X |
| 37 | 4-40 UNC Hex bolt | MAP4XAAAH02R262X |
| 09 | M3 Hex bolt | MAP1XAAAH01R262X |
| 15 | M3 Hex bolt | MAP2XAAAH01R262X |
| 25 | M3 Hex bolt | MAP3XAAAH01R262X |
| 37 | M3 Hex bolt | MAP4XAAAH01R262X |

# C-Filter D-SUB Adapter – High Density

## Socket connector / Plug connector – Precision machined contacts – Low profile

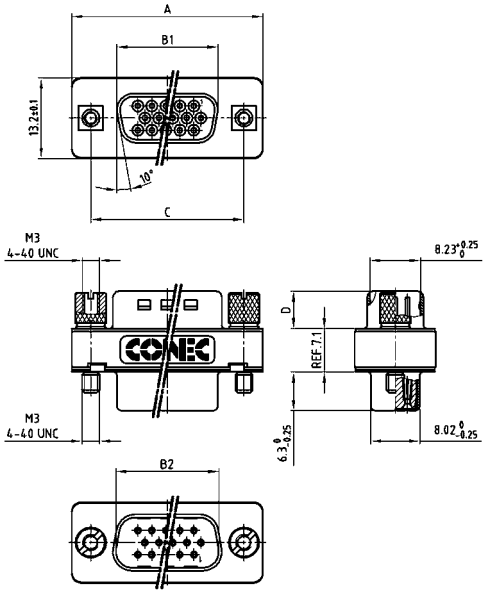
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

- Mounting style:
  with 4-40 UNC or M3 jack screw
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

### Product drawing

C-Filter design




| No. of pos. | A -0.76 | B1 -0.25 | B2 +0.25 | C | | D -0.3 |
|---|---|---|---|---|---|---|
| 15 | 31.19 | 16.46 | 16.79 | 25.00 | +0.12 -0.13 | 6.10 |
| 26 | 39.52 | 24.79 | 25.12 | 33.30 | +0.15 -0.10 | 6.12 |
| 44 | 53.42 | 38.50 | 38.84 | 47.04 | ±0.13 | 5.99 |
| 62 | 69.70 | 54.96 | 55.30 | 63.50 | ±0.13 | 5.99 |

### Order data

| Socket connector / Plug connector with C-Filter | | | Socket connector / Plug connector with C-Filter | | |
|---|---|---|---|---|---|
| No. of pos. | Mounting style | Part Number | No. of pos. | Mounting style | Part Number |
| **Capacitance 180 pF** | | | | | |
| 15 | 4-40 UNC Jack screw | 243A11600X | 15 | M3 Jack screw | 243A11720X |
| 26 | 4-40 UNC Jack screw | 243A11610X | 26 | M3 Jack screw | 243A11730X |
| 44 | 4-40 UNC Jack screw | 243A11620X | 44 | M3 Jack screw | 243A11740X |
| 62 | 4-40 UNC Jack screw | 243A11630X | 62 | M3 Jack screw | 243A11750X |
| **Capacitance 370 pF** | | | | | |
| 15 | 4-40 UNC Jack screw | 243A11640X | 15 | M3 Jack screw | 243A11760X |
| 26 | 4-40 UNC Jack screw | 243A11650X | 26 | M3 Jack screw | 243A11770X |
| 44 | 4-40 UNC Jack screw | 243A11660X | 44 | M3 Jack screw | 243A11780X |
| 62 | 4-40 UNC Jack screw | 243A11670X | 62 | M3 Jack screw | 243A11790X |
| **Capacitance 830 pF** | | | | | |
| 15 | 4-40 UNC Jack screw | 243A11680X | 15 | M3 Jack screw | 243A11800X |
| 26 | 4-40 UNC Jack screw | 243A11690X | 26 | M3 Jack screw | 243A11810X |
| 44 | 4-40 UNC Jack screw | 243A11700X | 44 | M3 Jack screw | 243A11820X |
| 62 | 4-40 UNC Jack screw | 243A11710X | 62 | M3 Jack screw | 243A11830X |

# LC-Filter D-SUB Adapter – High Density

## Socket connector / Plug connector – Precision machined contacts – Low profile

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

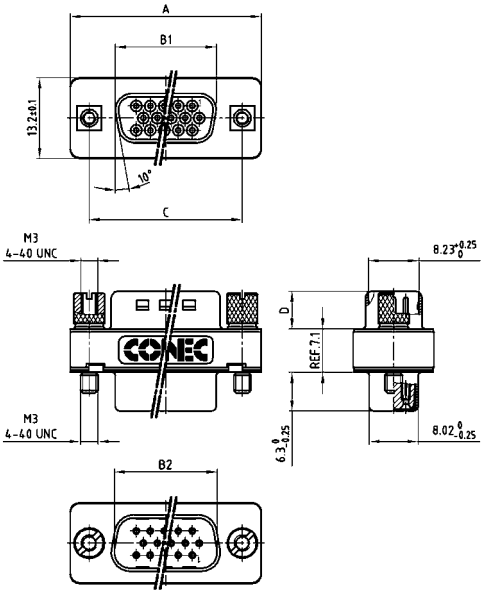
### Description

- Mounting style:
  with 4-40 UNC or M3 jack screw
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

### Product drawing

LC-Filter design

| No. of pos. | A -0.76 | B1 -0.25 | B2 +0.25 | C | | D -0.3 |
|---|---|---|---|---|---|---|
| 15 | 31.19 | 16.46 | 16.79 | 25.00 | $^{+0.12}_{-0.13}$ | 6.10 |
| 26 | 39.52 | 24.79 | 25.12 | 33.30 | $^{+0.15}_{-0.10}$ | 6.12 |
| 44 | 53.42 | 38.50 | 38.84 | 47.04 | ±0.13 | 5.99 |
| 62 | 69.70 | 54.96 | 55.30 | 63.50 | ±0.13 | 5.99 |

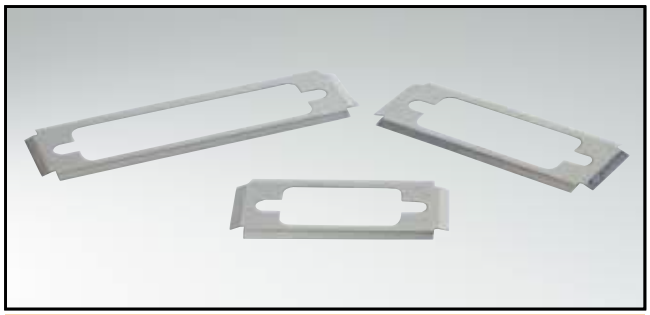



### Order data

| Socket connector / Plug connector with LC-Filter | | | Socket connector / Plug connector with LC-Filter | | |
|---|---|---|---|---|---|
| No. of pos. | Mounting style | Part Number | No. of pos. | Mounting style | Part Number |
| **Capacitance 180 pF** | | | | | |
| 15 | 4-40 UNC Jack screw | 243A13780X | 15 | M3 Jack screw | 243A13900X |
| 26 | 4-40 UNC Jack screw | 243A13790X | 26 | M3 Jack screw | 243A13910X |
| 44 | 4-40 UNC Jack screw | 243A13800X | 44 | M3 Jack screw | 243A13920X |
| 62 | 4-40 UNC Jack screw | 243A13810X | 62 | M3 Jack screw | 243A13930X |
| **Capacitance 370 pF** | | | | | |
| 15 | 4-40 UNC Jack screw | 243A13820X | 15 | M3 Jack screw | 243A13940X |
| 26 | 4-40 UNC Jack screw | 243A13830X | 26 | M3 Jack screw | 243A13950X |
| 44 | 4-40 UNC Jack screw | 243A13840X | 44 | M3 Jack screw | 243A13960X |
| 62 | 4-40 UNC Jack screw | 243A13850X | 62 | M3 Jack screw | 243A13970X |
| **Capacitance 830 pF** | | | | | |
| 15 | 4-40 UNC Jack screw | 243A13860X | 15 | M3 Jack screw | 243A13980X |
| 26 | 4-40 UNC Jack screw | 243A13870X | 26 | M3 Jack screw | 243A13990X |
| 44 | 4-40 UNC Jack screw | 243A13880X | 44 | M3 Jack screw | 243A14000X |
| 62 | 4-40 UNC Jack screw | 243A13890X | 62 | M3 Jack screw | 243A14010X |

# Filter D-SUB – Accessories

## EMI / RFI shielding frames

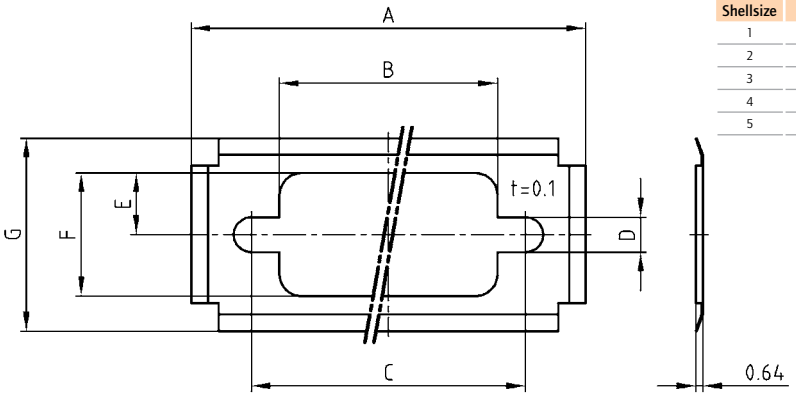


RoHS compliant

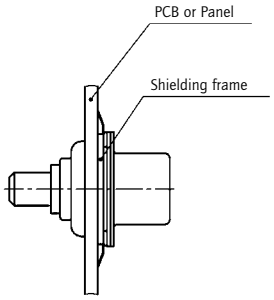
### Description

- Material: Stainless steel
- For improved ground contact
- Suitable for assembly to the mating side

### Product drawing




| Shellsize | A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|---|
| 1 | 35.80 | 19.80 | 24.90 | 3.20 | 5.60 | 11.20 | 17.50 |
| 2 | 44.20 | 28.20 | 33.30 | 3.20 | 5.60 | 11.20 | 17.50 |
| 3 | 57.90 | 41.90 | 47.00 | 3.20 | 5.60 | 11.20 | 17.50 |
| 4 | 74.40 | 58.20 | 63.50 | 3.20 | 5.60 | 11.20 | 17.50 |
| 5 | 72.10 | 53.60 | 61.20 | 6.10 | 7.10 | 13.90 | 20.30 |

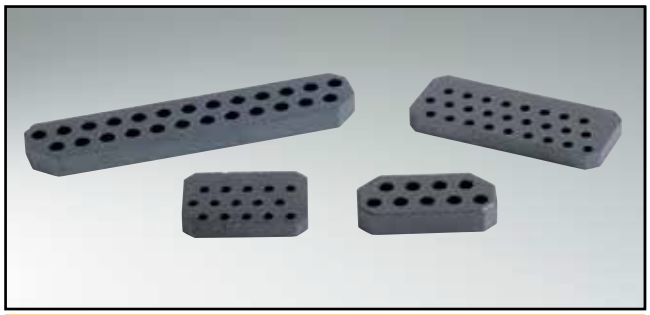



### Order data

| Shielding frame | | | |
|---|---|---|---|
| Shell size | Standard | High Density | Part Number |
| 1 | 09 | 15 | 160X10839X |
| 2 | 15 | 26 | 160X10849X |
| 3 | 25 | 44 | 160X10859X |
| 4 | 37 | 62 | 160X10869X |
| 5 | 50 | 78 | 160X10879X |

# Filter D-SUB – Accessories

## Ferrite for Standard and High Density D-SUB

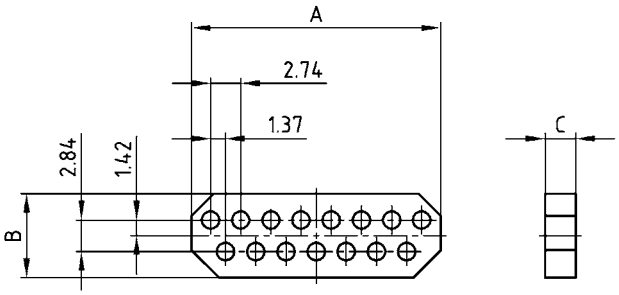


RoHS compliant

### Description

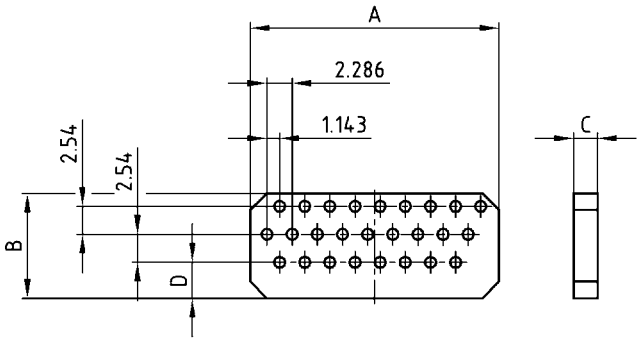
- Ferrite black for use with D-SUB Connectors

### Ferrite for Standard D-SUB




| No. of pos. | A ±0.5 | B ±0.5 | C ±0.10 |
|---|---|---|---|
| 09 | 14.50 | 7.6 | 2.75 |
| 15 | 22.65 | 7.6 | 2.74 |
| 25 | 36.40 | 7.6 | 2.70 |
| 37 | 53.08 | 7.6 | 2.80 |

### Ferrite for High Density angled D-SUB




| No. of pos. | A ±0.5 | B ±0.5 | C ±0.10 | D ±0.15 |
|---|---|---|---|---|
| 15 | 14.0 | 6.9 | 2.0 | 0.91 |
| 26 | 22.6 | 9.5 | 2.2 | 3.26 |

### Order data

**Ferrite for Standard D-SUB**

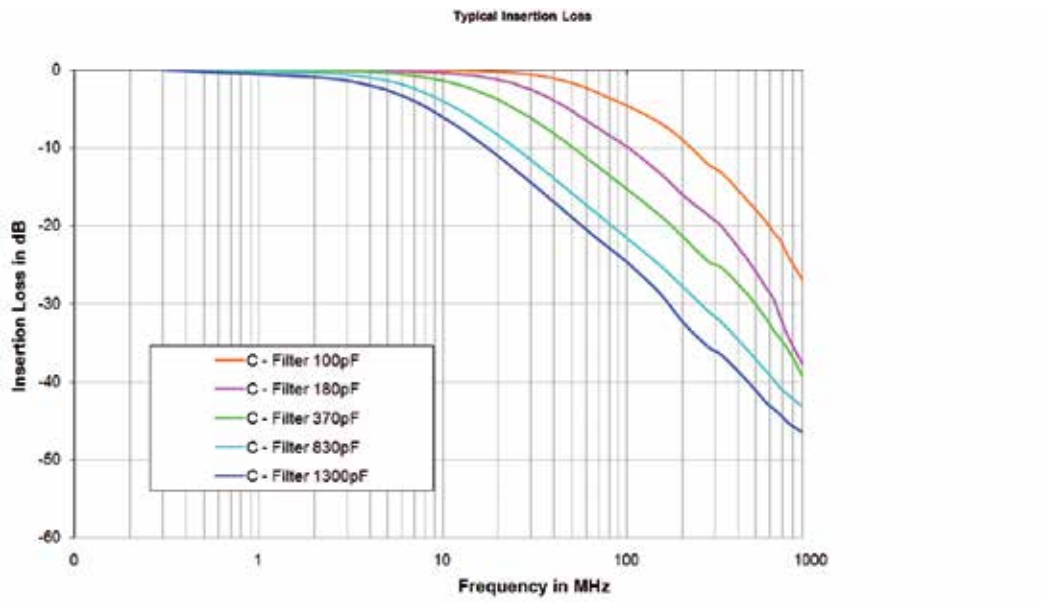
| No. of pos. | Part Number |
|---|---|
| 09 | 240X10019X |
| 15 | 240X10029X |
| 25 | 240X10039X |
| 37 | 240X10049X |

**Ferrite for High Density angled D-SUB**

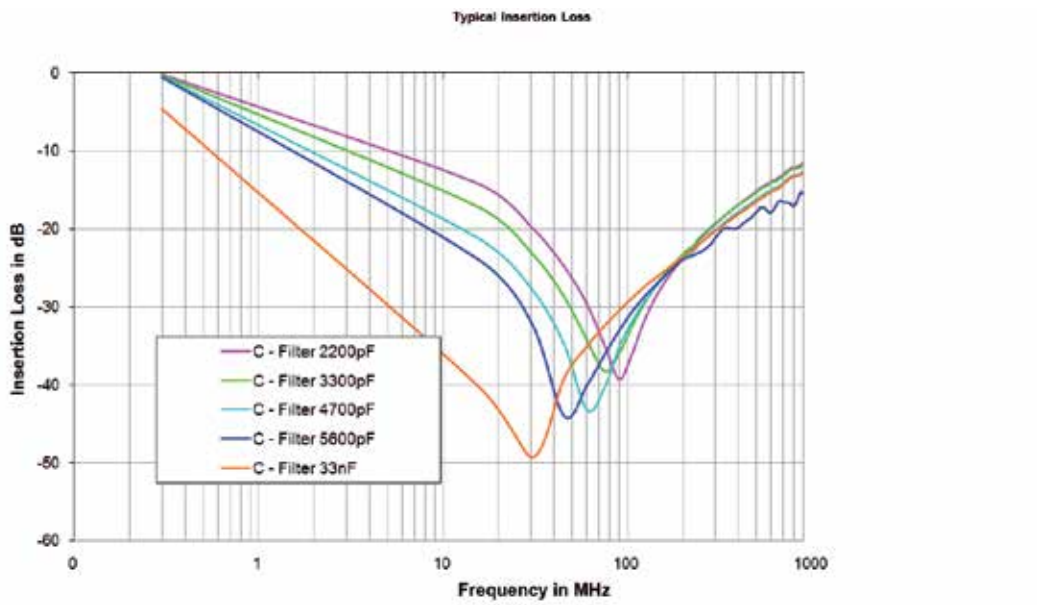
| No. of pos. | Part Number |
|---|---|
| 15 | 240X10069X |
| 26 | 240X10079X |

# Insertion loss

## C-Filter with planar filter technology

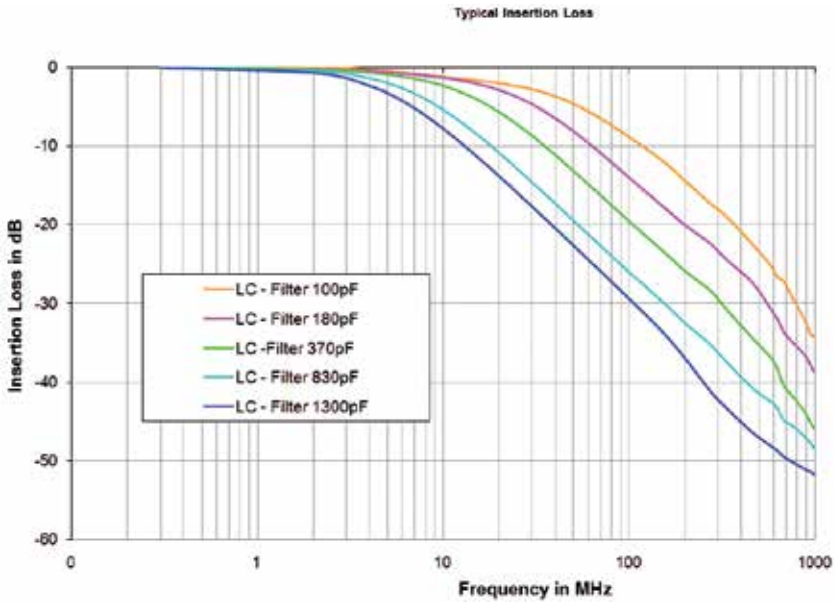



## C-Filter with chip technology

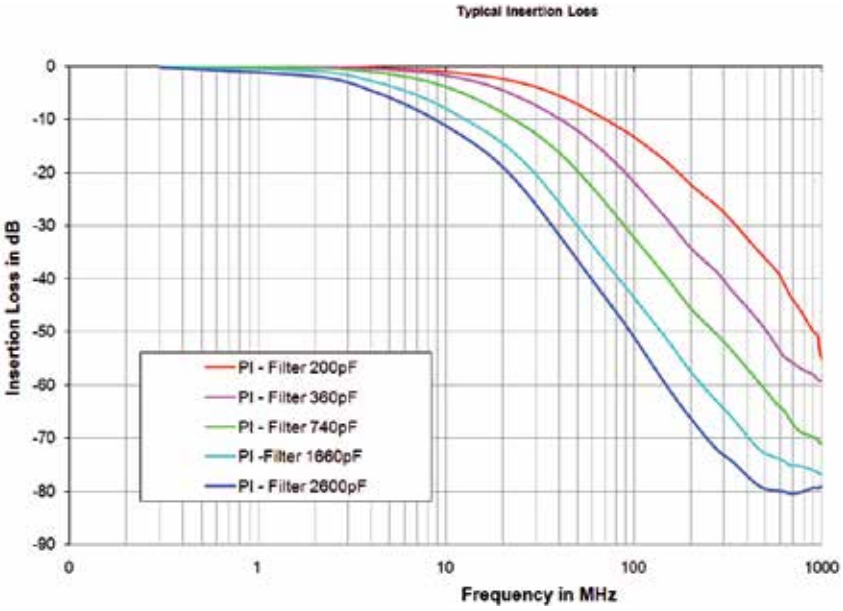


# Insertion loss

## LC-Filter with planar filter technology

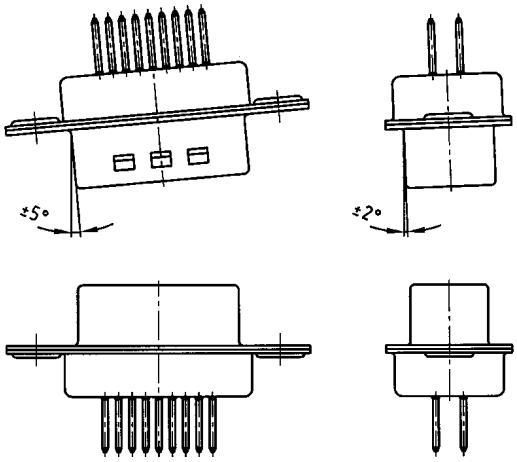



## π-Filter with planar filter technology

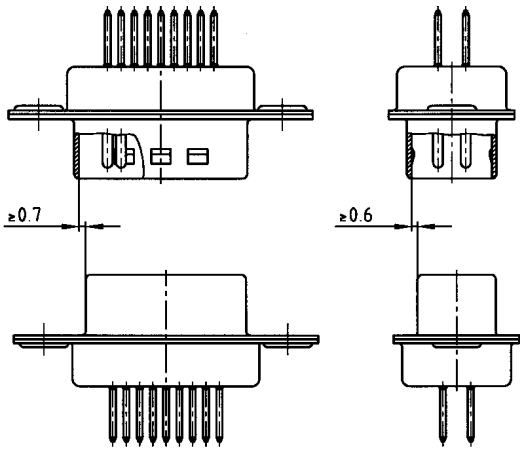


# Mating conditions

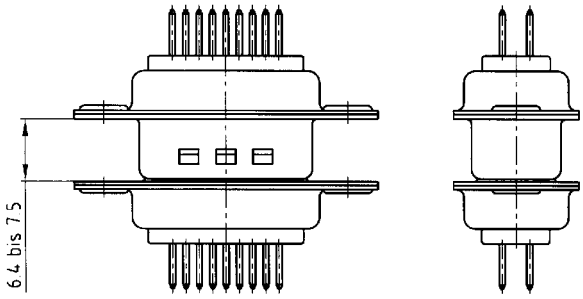
Float mount tolerance guide




Rigid mount tolerance guide

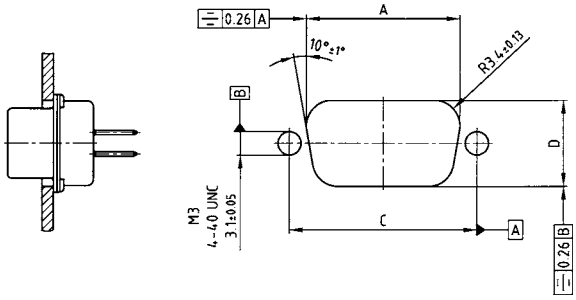



Rigid mount vertical to tolerance guide

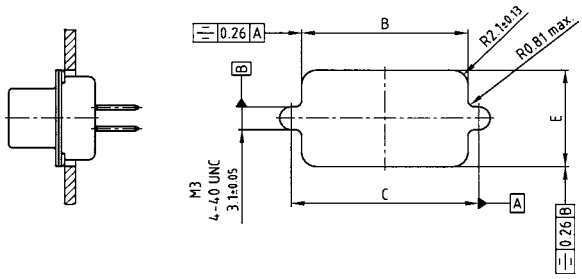



## Panel cut-out

Rear panel mounting




Front panel mounting

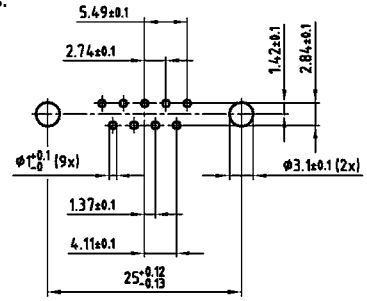



| Shell size | | A ± 0,13 | B ± 0,13 | C ± 0,13 | D ± 0,13 | E ± 0,13 |
|---|---|---|---|---|---|---|
| 9 | 15 | 20.50 | 22.20 | 25.00 | 11.40 | 13.00 |
| 15 | 26 | 28.80 | 30.50 | 33.30 | 11.40 | 13.00 |
| 25 | 44 | 42.50 | 44.30 | 47.04 | 11.40 | 13.00 |
| 37 | 62 | 59.10 | 60.70 | 63.50 | 11.40 | 13.00 |
| 50 | 78 | 56.30 | 58.30 | 61.10 | 14.10 | 15.80 |

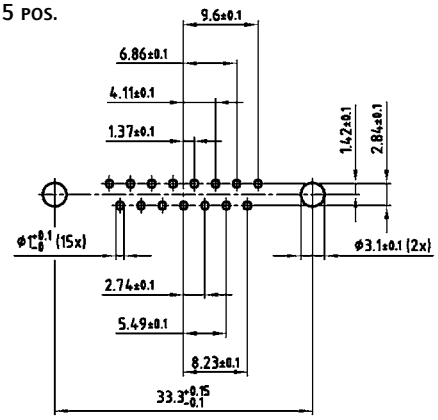
# PCB layout D-SUB Standard

## Solder pin, straight – Plug and Socket connector

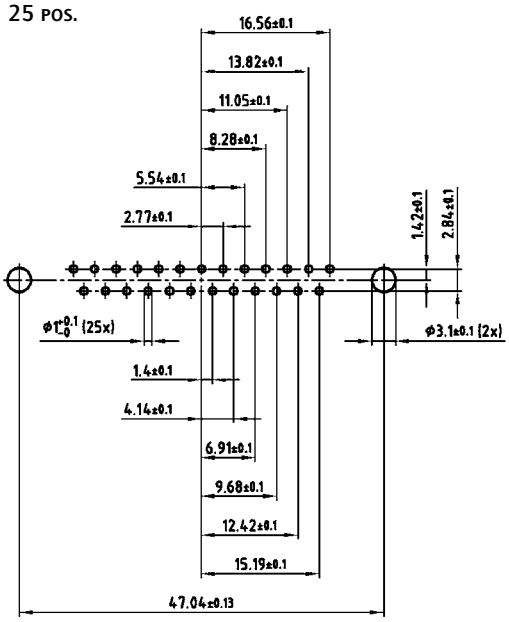
9 pos.



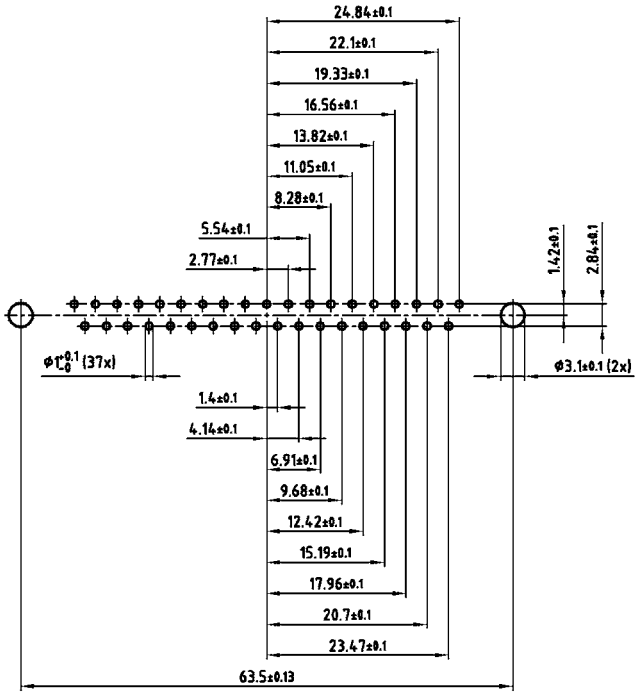

15 pos.



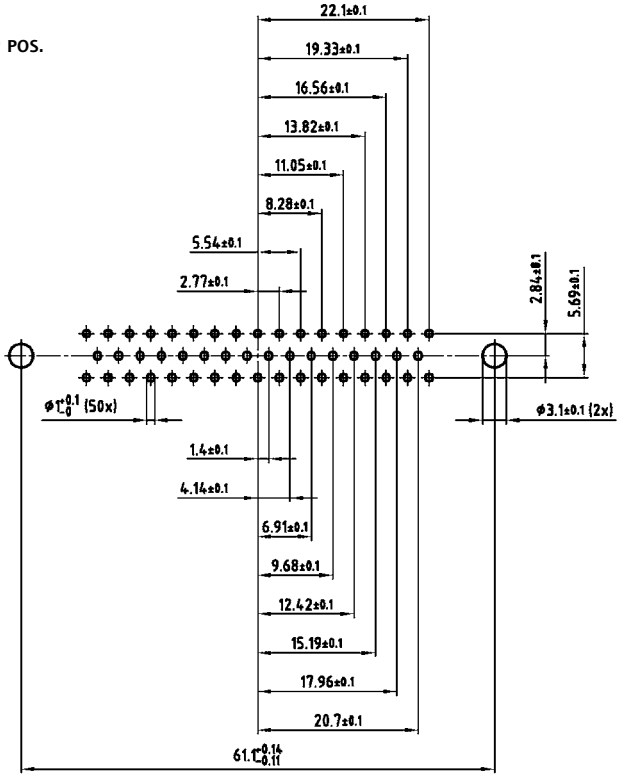

25 pos.




37 pos.




50 pos.

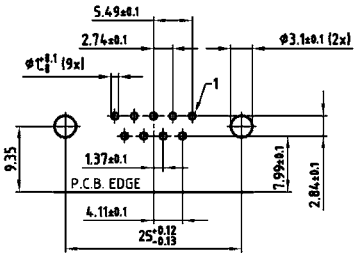



PCB layout Kat1kFUA (View: component side)

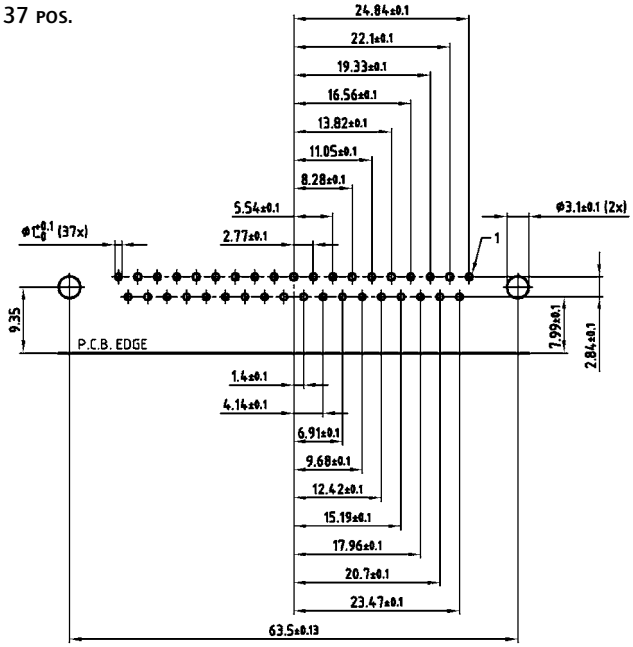
# PCB layout D-SUB Standard

## Solder pin, angled, .318" / 7.19 mm – Socket connector

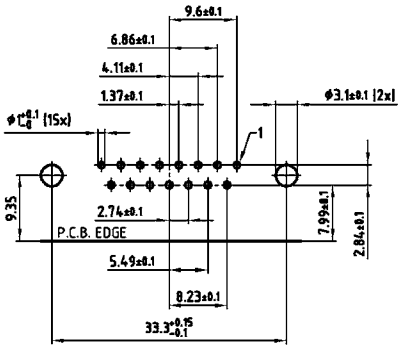
9 pos.



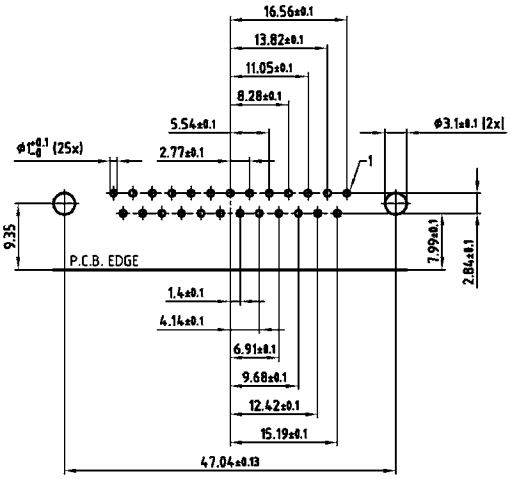

37 pos.



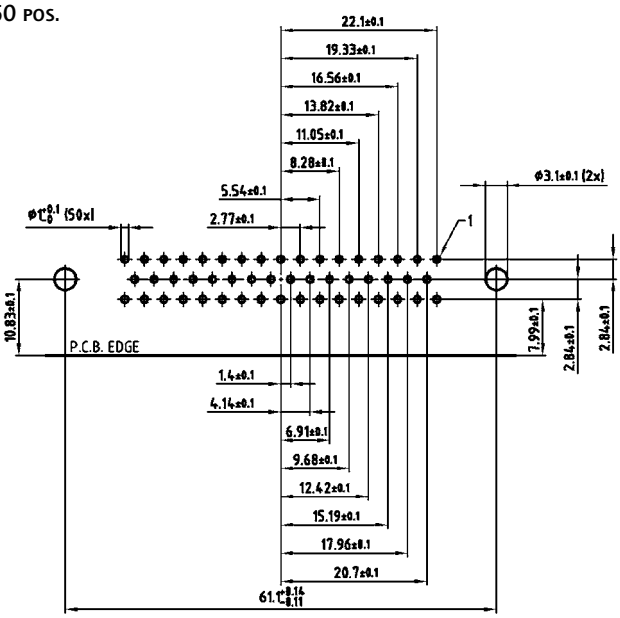

15 pos.




25 pos.




50 pos.

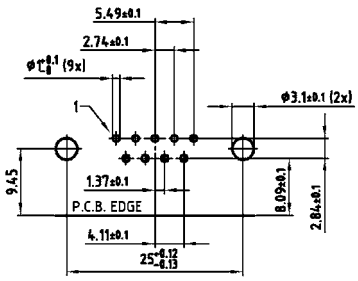



PCB layout Kat1kGEA (View: component side)

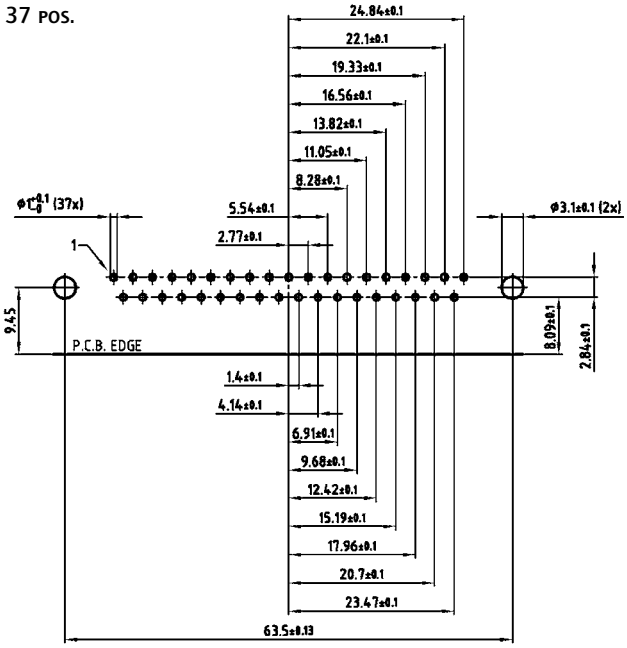
# PCB layout D-SUB Standard

## Solder pin, angled, .318" / 7.19 mm – Plug connector

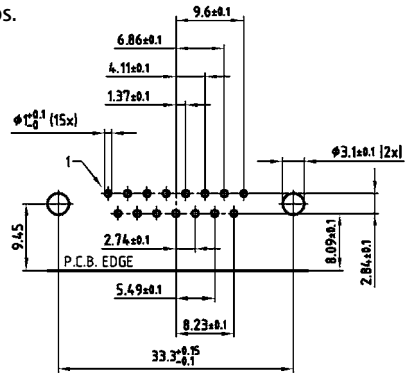
9 pos.



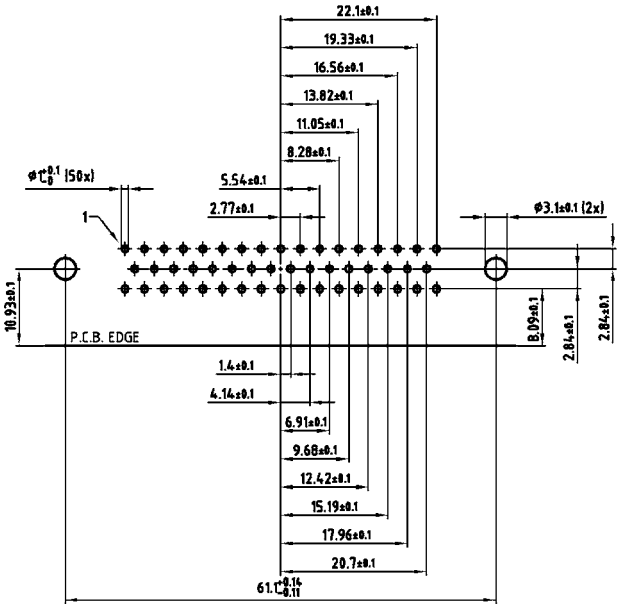

37 pos.



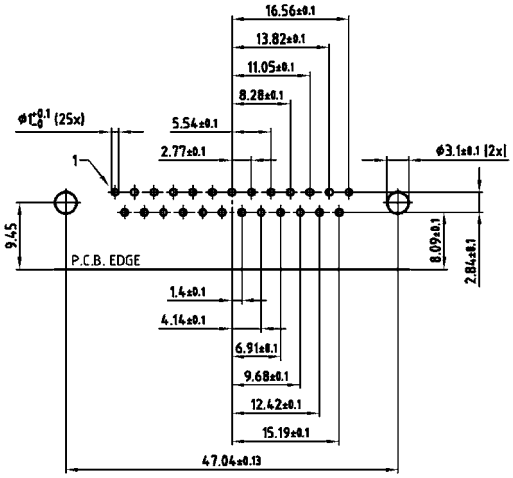

15 pos.




50 pos.




25 pos.

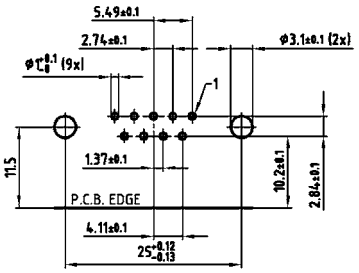



PCB layout Kat1kGFA (View: component side)

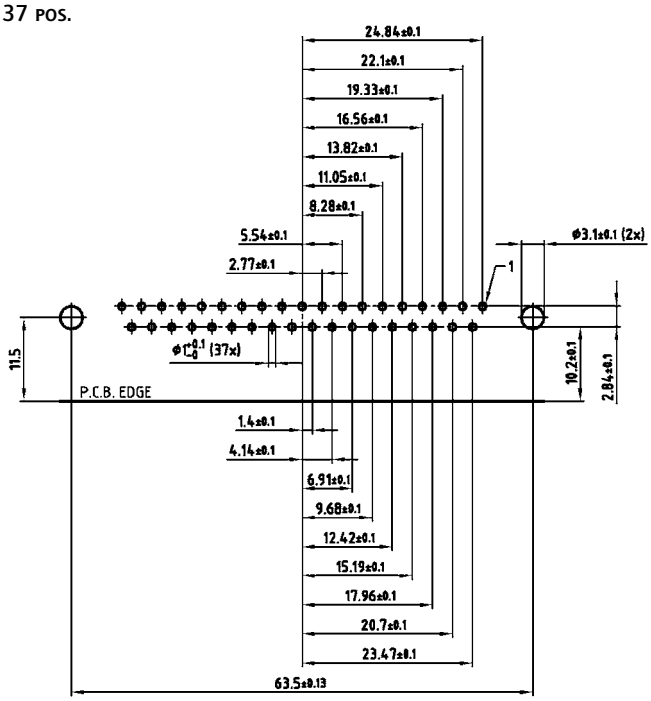
# PCB layout D-SUB Standard

## Solder pin, angled, .370"/9.4 mm – Socket connector

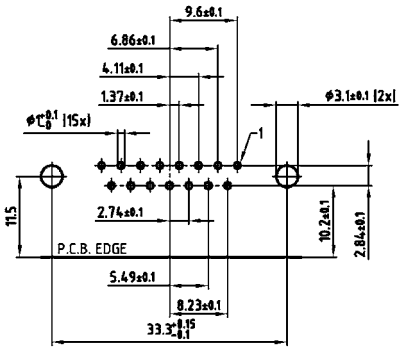
9 pos.



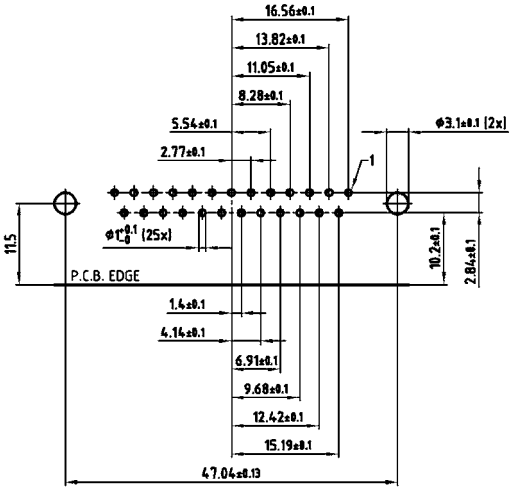

37 pos.



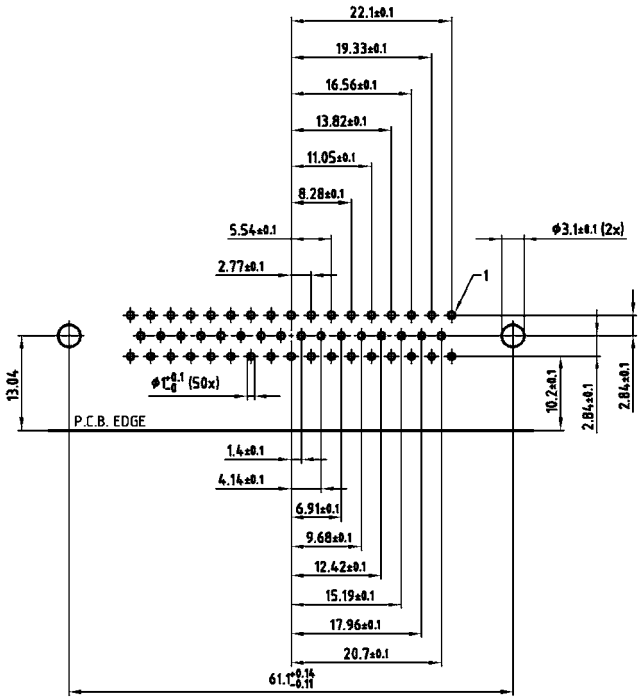

15 pos.




25 pos.




50 pos.

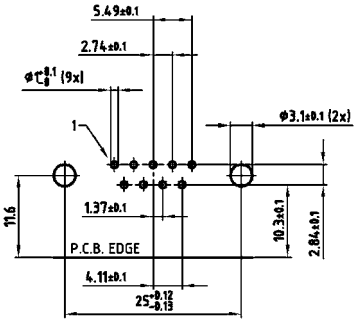



PCB layout Kat1kGGA (View: component side)

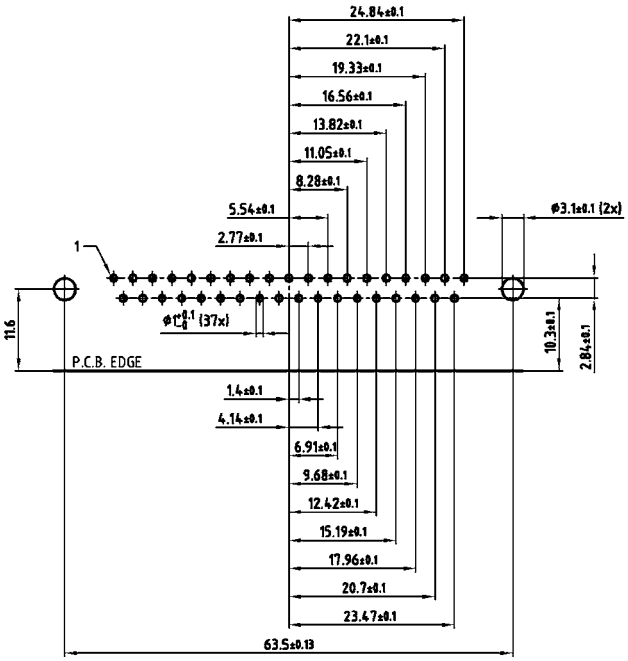
# PCB layout D-SUB Standard

## Solder pin, angled, .370"/9.4 mm – Plug connector

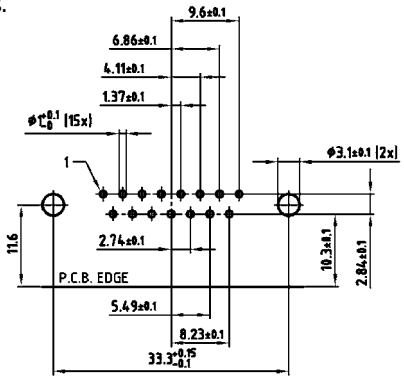
9 pos.



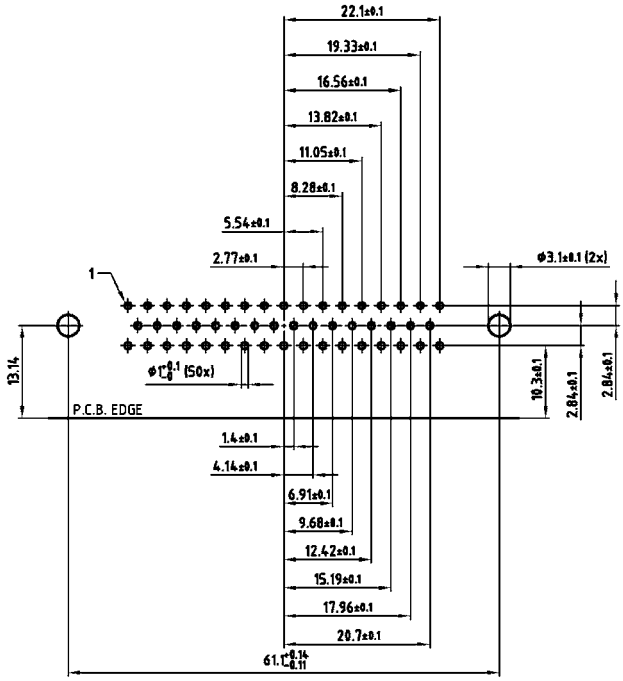

37 pos.



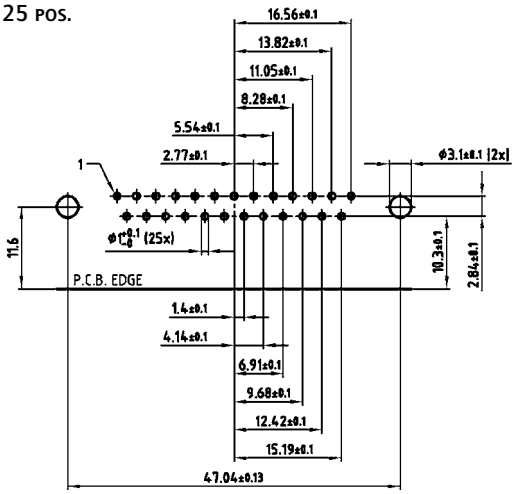

15 pos.




50 pos.




25 pos.

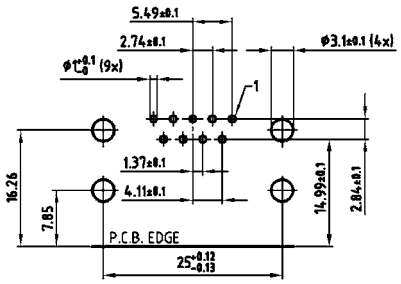



PCB layout Kat1kGHA (View: component side)

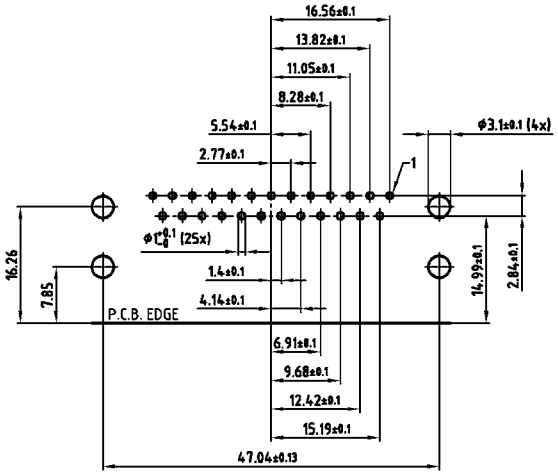
# PCB layout D-SUB Standard

## Solder pin, angled, .590" / 14.19 mm – Socket connector

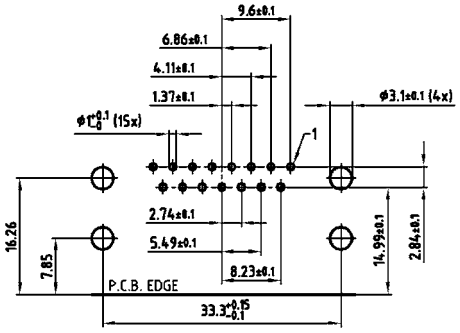
9 pos.



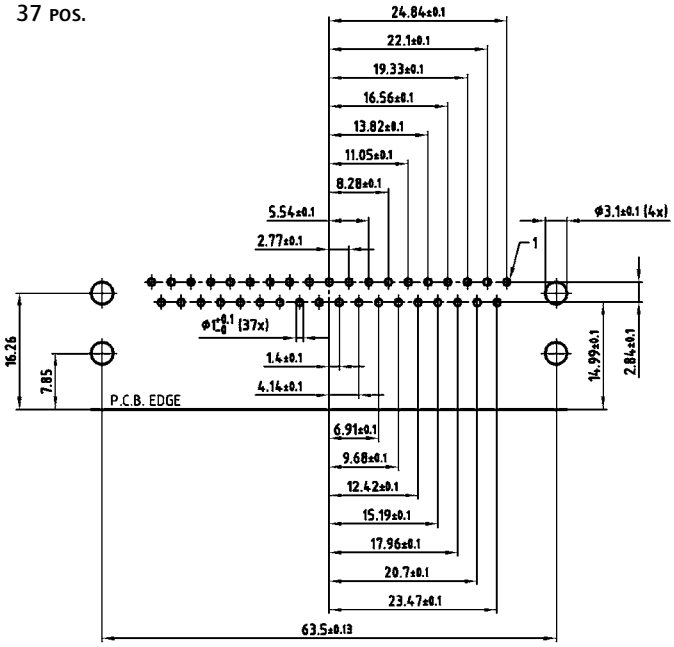

25 pos.




15 pos.




37 pos.

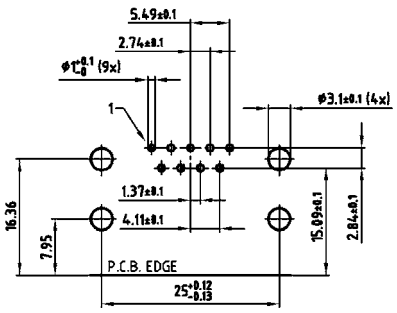



PCB layout Kat1kGIA (View: component side)

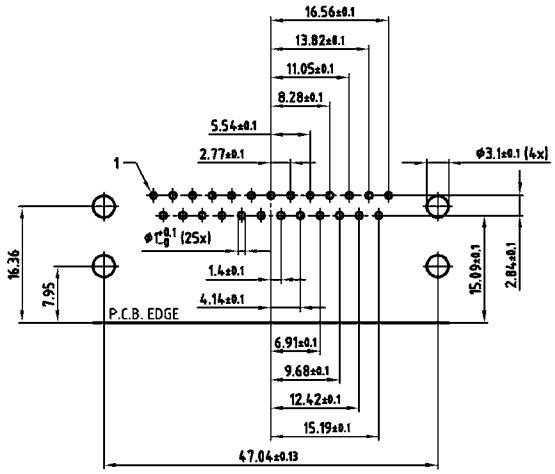
# PCB layout D-SUB Standard

## Solder pin, angled, .590" / 14.19 mm – Plug connector

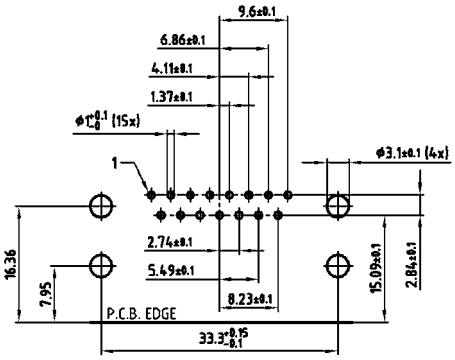
9 pos.



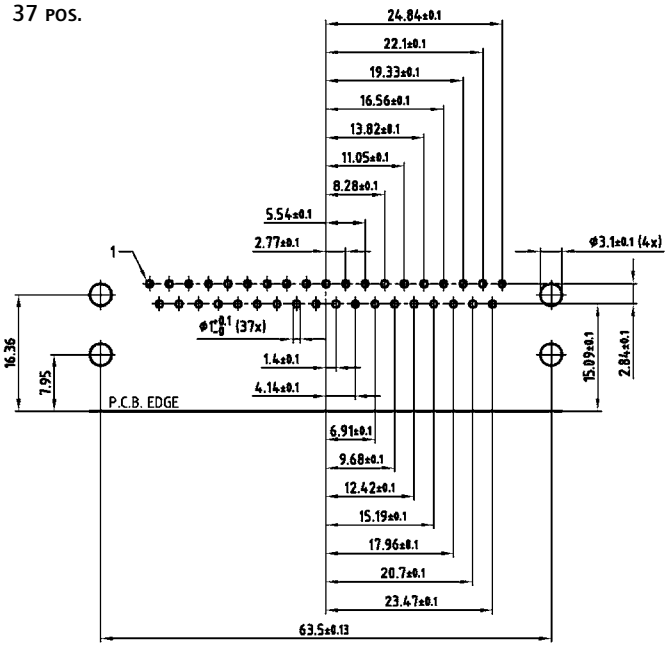

25 pos.




15 pos.




37 pos.

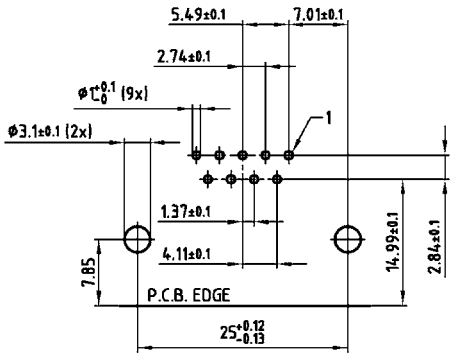



PCB layout Kat1kGJA (View: component side)

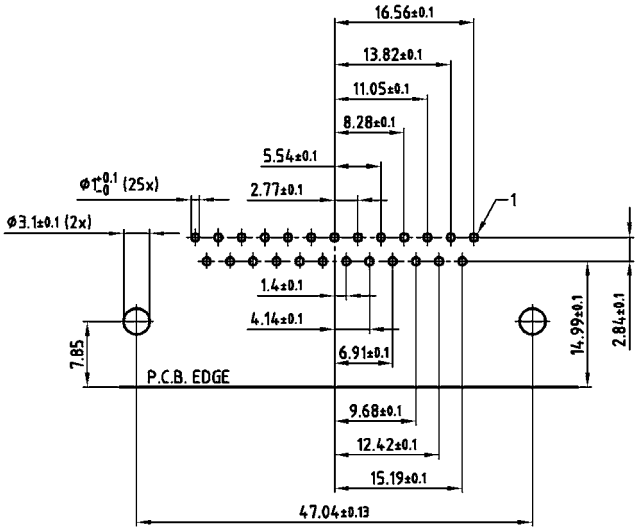
# PCB layout D-SUB Standard

Solder pin, angled, .590" / 14.19 mm – Short metal bracket – Socket connector

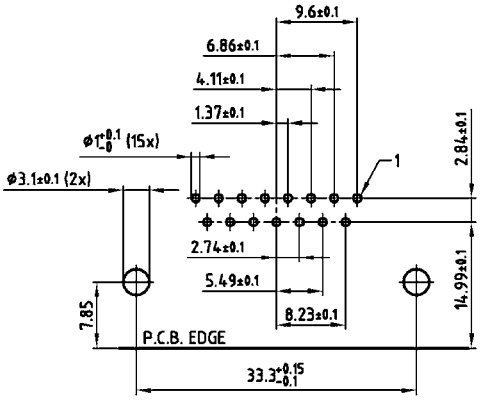
9 pos.



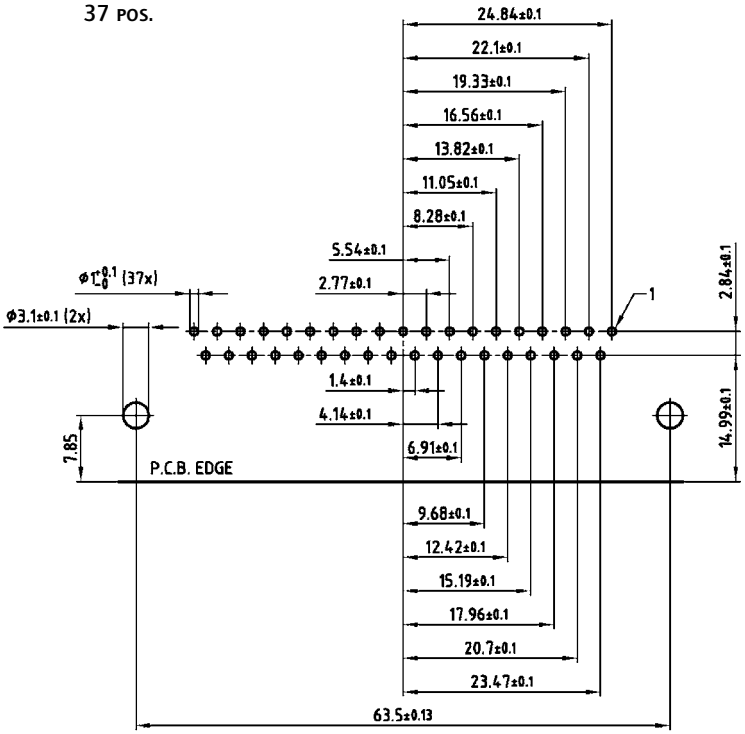

25 pos.




15 pos.




37 pos.

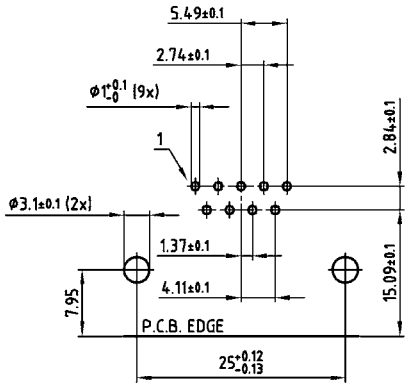



PCB layout Kat1kGXA (View: component side)

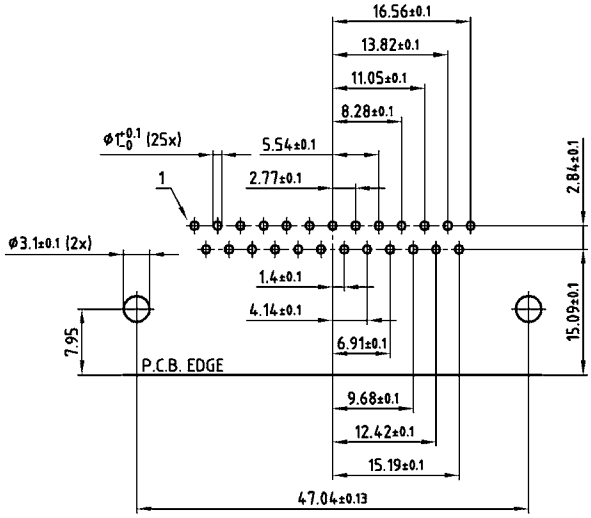
# PCB layout D-SUB Standard

## Solder pin, angled, .590" / 14.19 mm – Short metal bracket – Plug connector

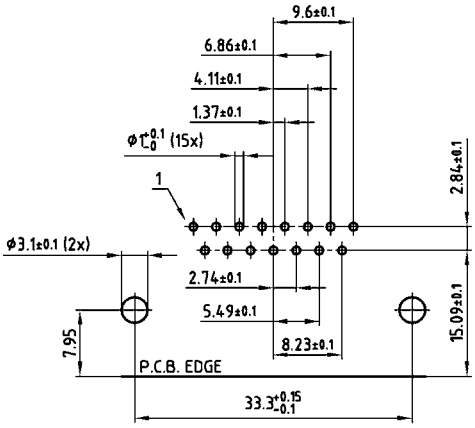
9 pos.



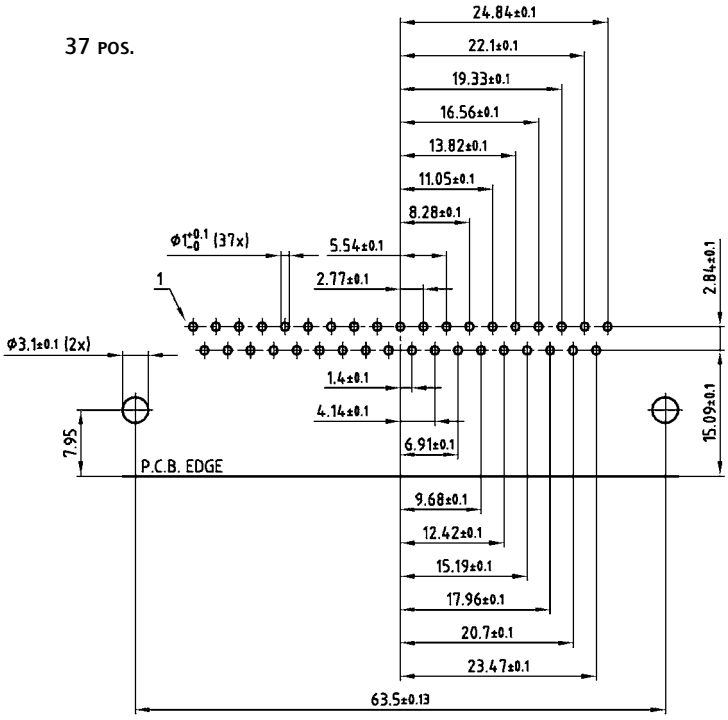

25 pos.




15 pos.




37 pos.

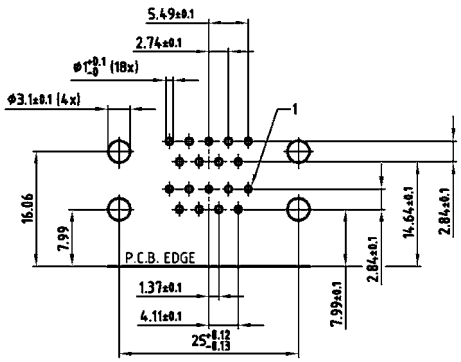



PCB layout Kat1kGYA (View: component side)

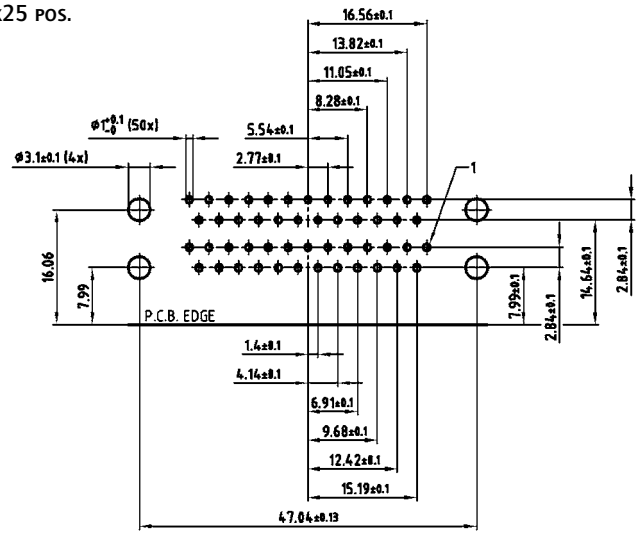
# PCB layout D-SUB Standard

## Dual port style – Socket connector bottom

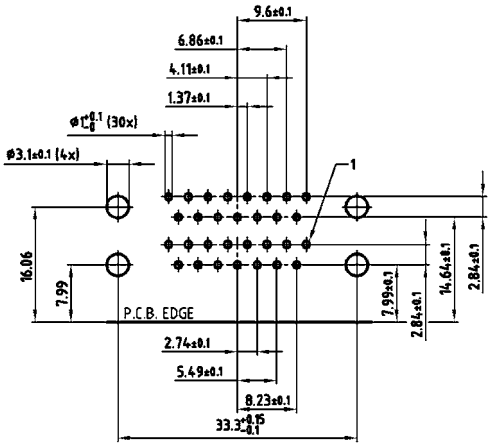
2x9 pos.



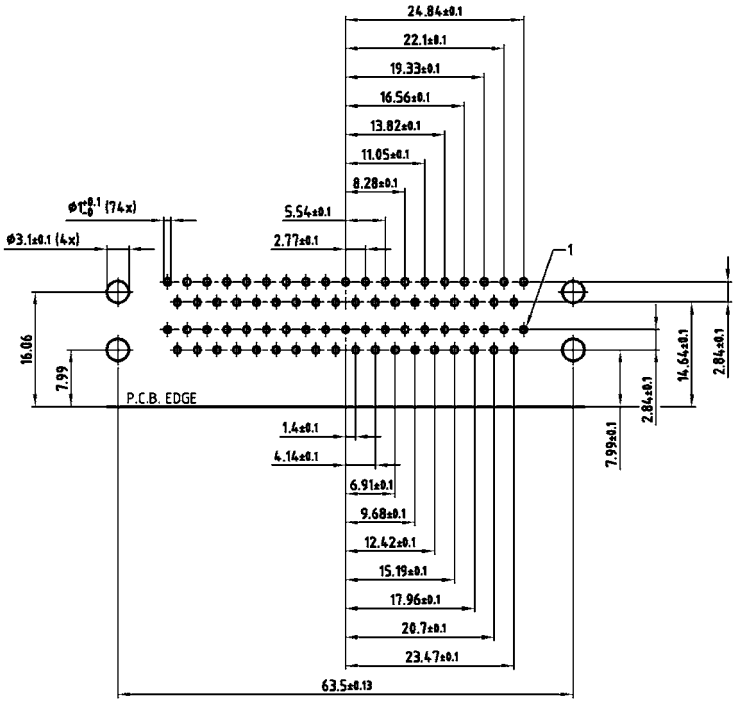

2x25 pos.




2x15 pos.




2x37 pos.

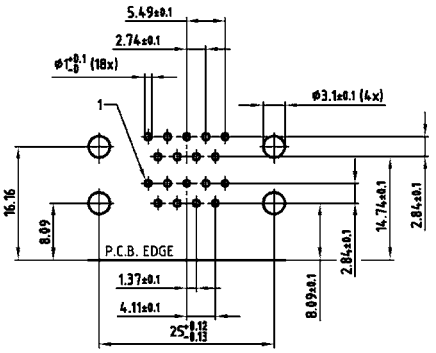



PCB layout Kat1iU6A (View: component side)

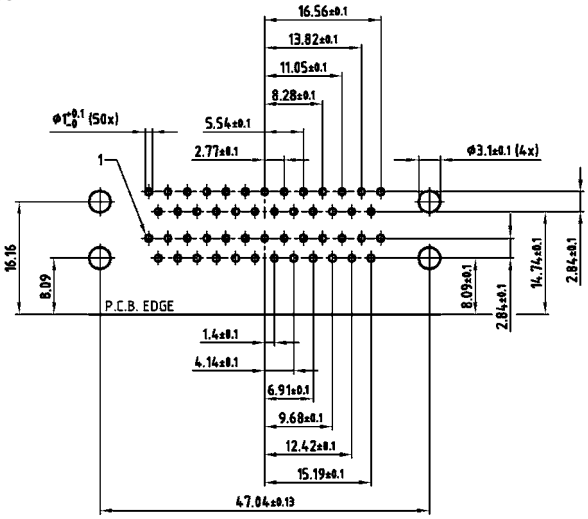
# PCB layout D-SUB Standard

## Dual port style – Plug connector bottom

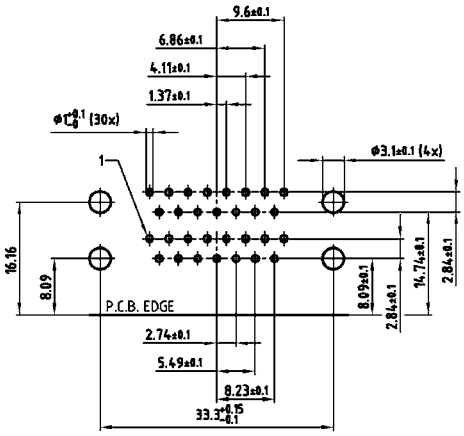
2x9 pos.



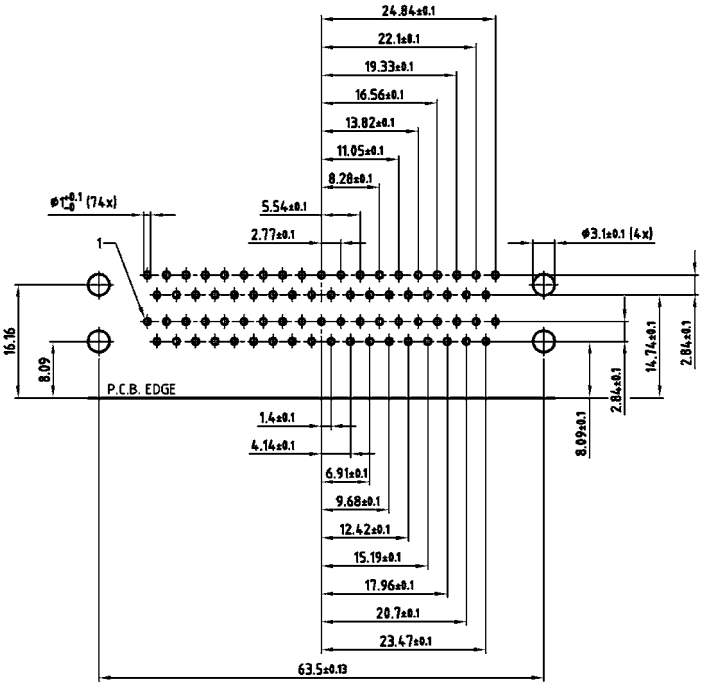

2x25 pos.




2x15 pos.




2x37 pos.

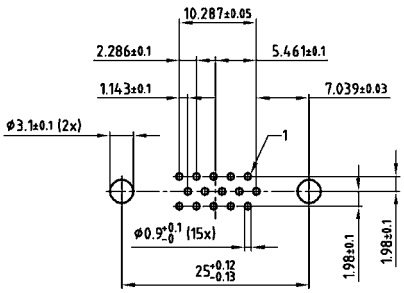



PCB layout Kat1iU5A (View: component side)

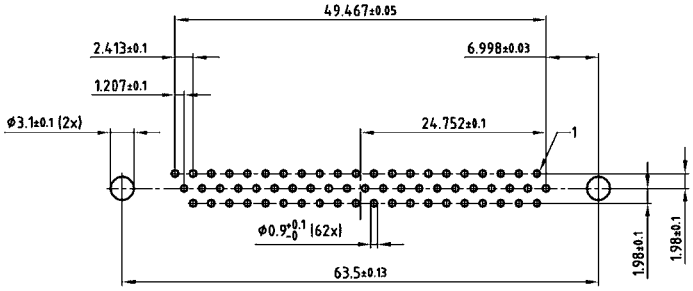
# PCB layout D-SUB High Density

## Solder pin, straight – Socket connector

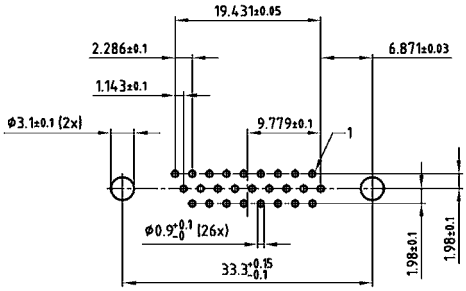
15 pos.



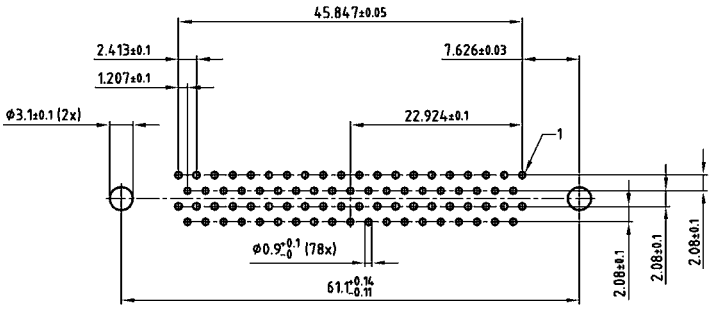

62 pos.



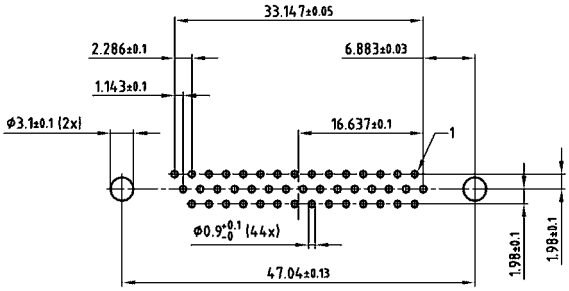

26 pos.




78 pos.




44 pos.

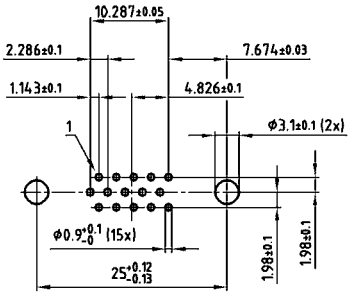



PCB layout Kat1iT9A (View: component side)

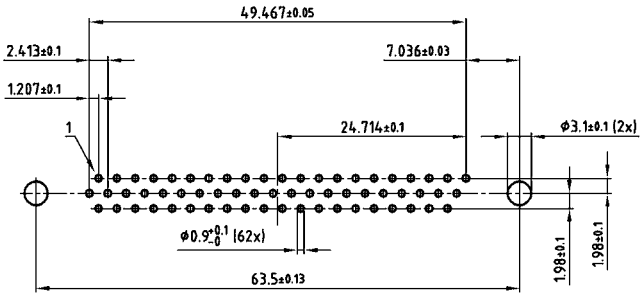
# PCB layout D-SUB High Density

## Solder pin, straight – Plug connector

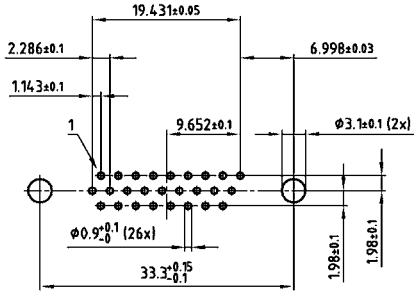
15 pos.



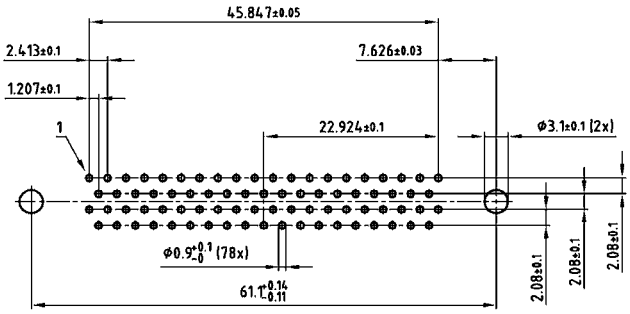

62 pos.



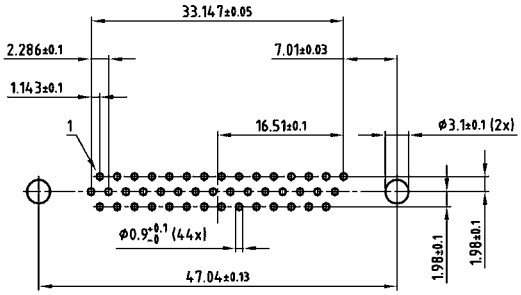

26 pos.




78 pos.




44 pos.

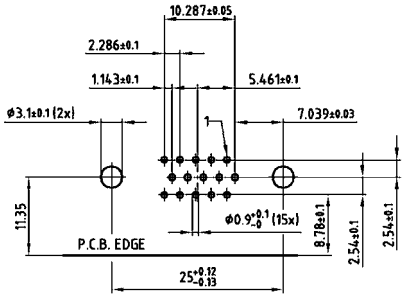



PCB layout Kat1iU0A (View: component side)

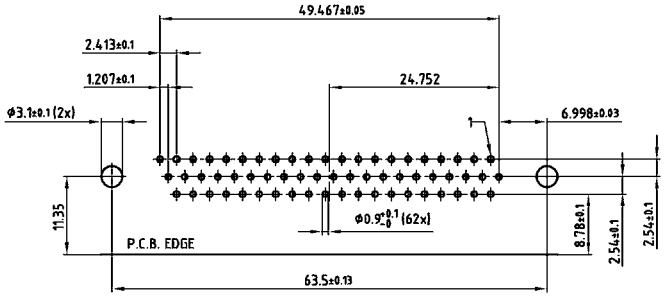
# PCB layout D-SUB High Density

## Solder pin, angled .350"/7.98 mm – Socket connector

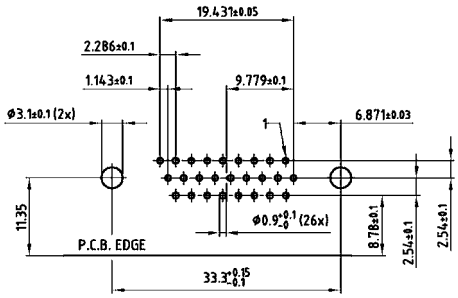
15 pos.



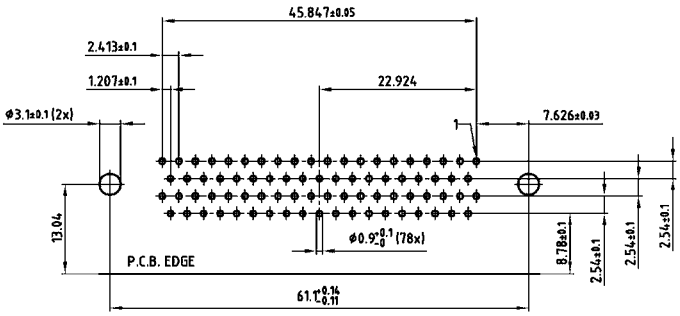

62 pos.



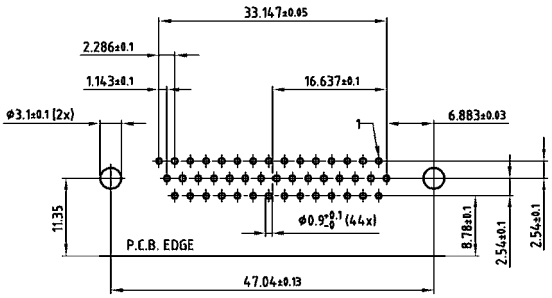

26 pos.




78 pos.




44 pos.

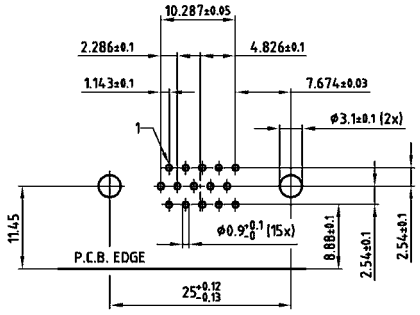



PCB layout Kat1iU1A (View: component side)

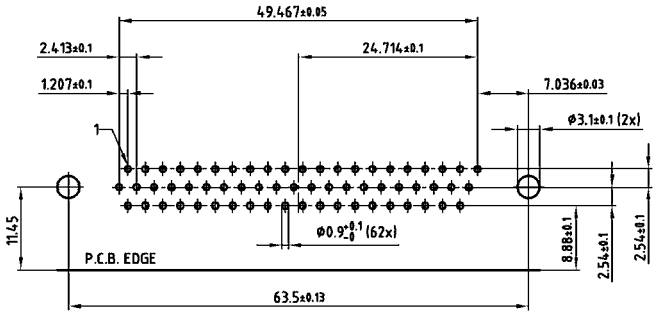
# PCB layout D-SUB High Density

## Solder pin, angled .350"/7.98 mm – Plug connector

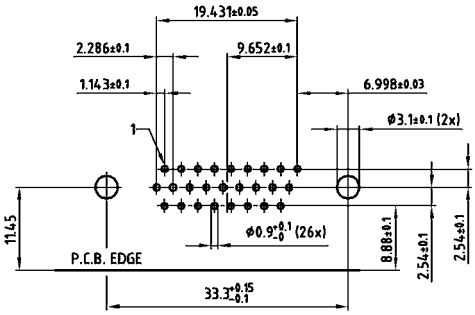
15 pos.



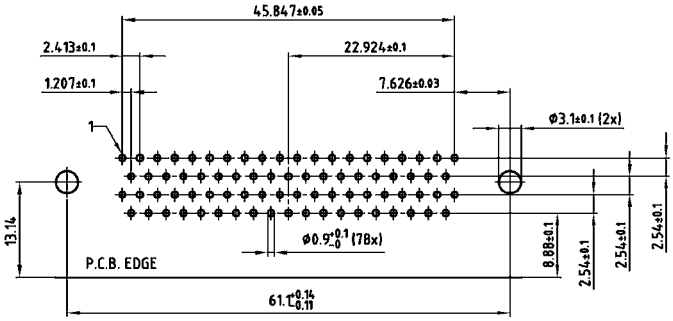

62 pos.



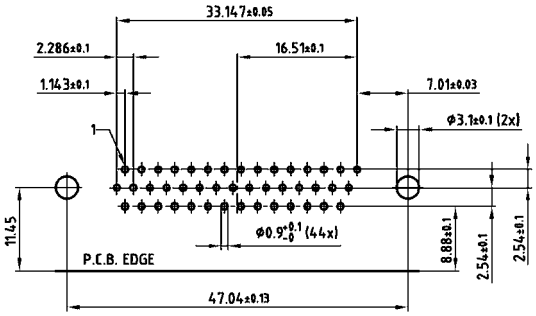

26 pos.




78 pos.



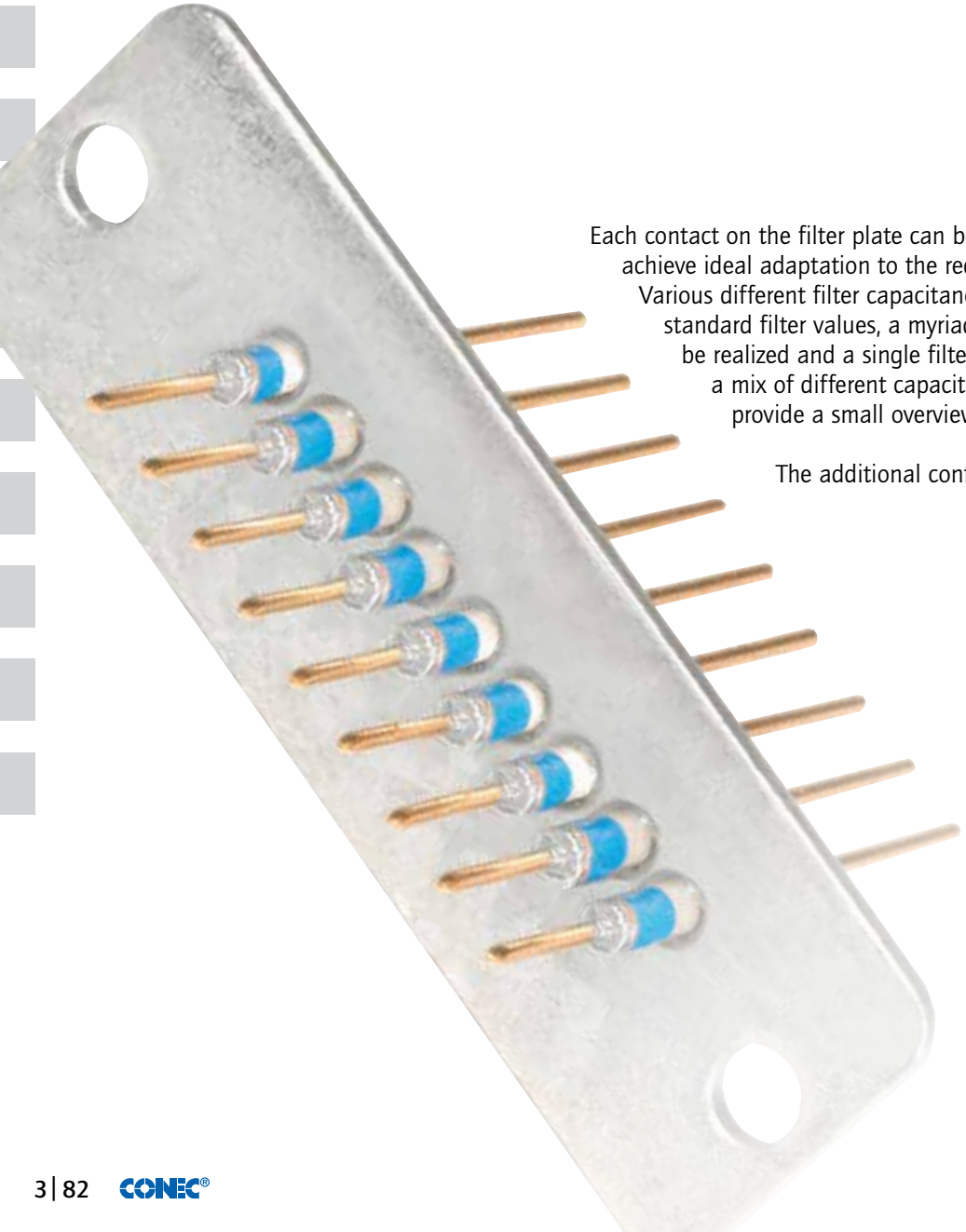

44 pos.




PCB layout Kat1iU2A (View: component side)

# C- and π-Filter Plates

CONEC EMI filter plates are used in modules or systems where the transmission of clean, interference-free signals is a top priority. Filter plates are simple to install, they are either mounted directly on the enclosure or even directly onto the PC board. Mounting holes are provided to fasten the filter plate with screws or rivets.



Each contact on the filter plate can be specified for a C- or π-filter to achieve ideal adaptation to the requirements of the given application. Various different filter capacitance values are available. Aside from standard filter values, a myriad of other filter capacitances can be realized and a single filter plate can also be populated with a mix of different capacitance values. The following pages provide a small overview of standard configurations.

The additional configuration please contact factory.

# Part Number Creator

CFP 1 B 2 0 8 C 101 1 X

**Product line**

**Lead spacing configuration**
1 = Lead spacing .100" / 2.54 mm
2 = Lead spacing .079" / 2.00 mm (only in C-Filter available)

**Base plate size**
A = 1.060" / 26.92 mm x = .500" / 12.70 mm
B = 1.560" / 39.62 mm x = .500" / 12.70 mm
C = 2.560" / 65.02 mm x = .500" / 12.70 mm
D = 3,560" / 90.42 mm x = .500" / 12.70 mm

**Number of rows**
1 = Single row (buttom row)
2 = Double rows

**Number of filter per row**

| .100" / 2.54 mm lead spacing | 079" / 2.00 mm lead spacing |
|---|---|
| Plate size A: 01.....05 | Plate size A: 02.....06 |
| Plate size B: 01.....10 | Plate size B: 03.....12 |
| Plate size C: 01.....20 | Plate size C: 10.....25 |
| Plate size D: 13.....30 | Plate size D: 20.....37 |

**Filter circuits**
C = C-Filter
P = π-Filter

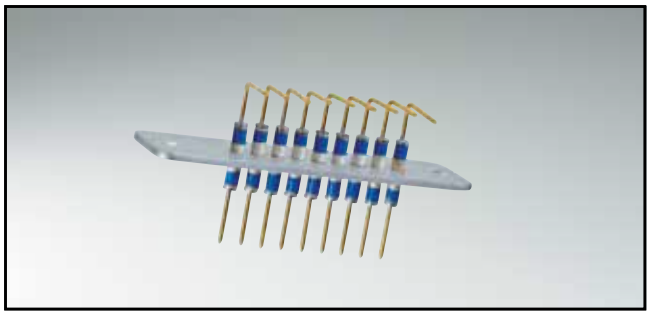
**Capacitance**

| C-Filter | π-Filter |
|---|---|
| 680 =0068pF ± 20% | 680 = 0068pF ± 20% |
| 101 =0100pF ± 20% | 101 = 0100pF ± 20% |
| 141 =0140pF + 100/-0% | 141 = 0140pF + 100/-0% |
| 471 =0470pF ± 20% | 471 = 0470pF ± 20% |
| 821 =0820pF ± 20% | 821 = 0820pF ± 20% |
| 102 =1000pF ± 20% | 102 = 1000pF ± 20% |
| 152 =1500pF ± 20% | 172 = 1700pF + 100/-0% |
| 252 =2500pF + 100/-0% | 252 = 2500pF + 100/-0% |
| 402 =4000pF + 100/-0% | 502 = 5000pF + 100/-0% |

**Termination**
1 = Round contact straight
2 = Round contact 90° left
3 = Round contact 90° right
4 = Round contact 90° both
5 = Square contacts straight (only with .100" / 2.54 mm lead spacing available)

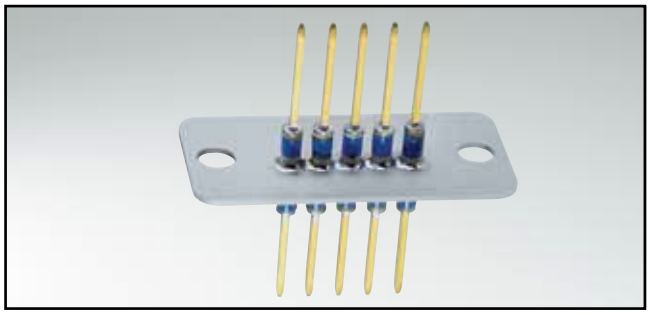
X = Standard

# Overview C- and π-Filter Plates



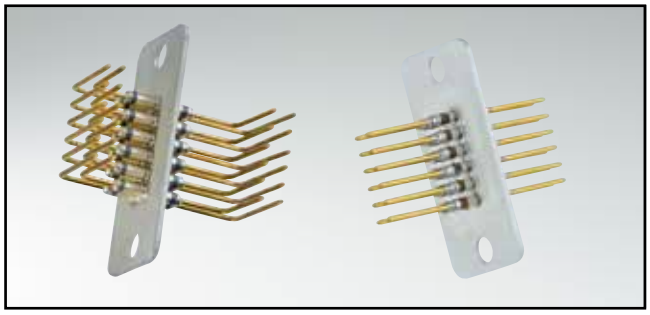
**Description**

- C- or π-Filter Plates lead spacing .100"/2.54 mm, 1-row
- **Round contact Ø .025"/0.64 mm**
- Number of positions: 1-21 filter contacts
- Designs:
  - straight
  - 90° left
  - 90° right
  - 90° both
- Diverse filter capacitance



**Description**

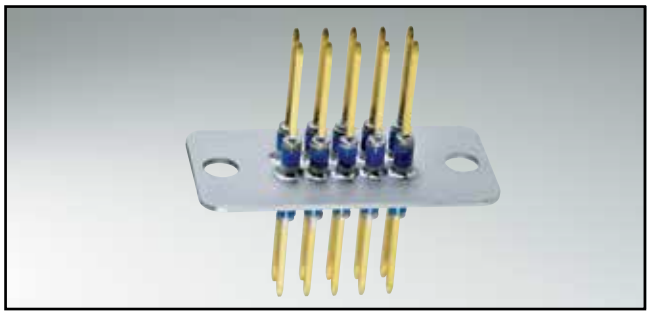
- C- or π-Filter Plates lead spacing .100"/2.54 mm, 1-row
- **Square end pin .025"/0,64 x .025"/0,64 mm**
- Number of positions: 1-21 filter contacts
- Design: Straight
- Diverse filter capacitance



**Description**

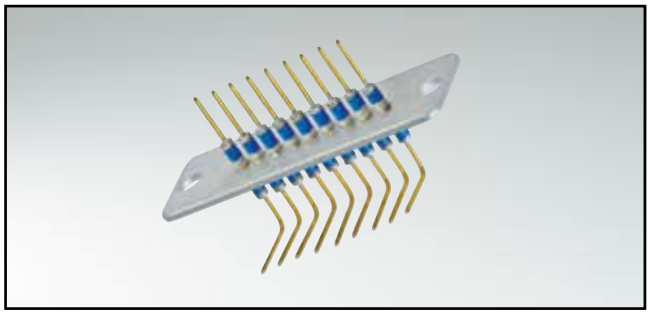
- C- or π-Filter Plates lead spacing .100"/2.54 mm, 2-row
- **Round contact Ø .025"/0.64 mm**
- Number of positions: 2-42 filter contacts
- Designs:
  - straight
  - 90° left
  - 90° right
  - 90° both
- Diverse filter capacitance

# Overview C- and π-Filter Plates



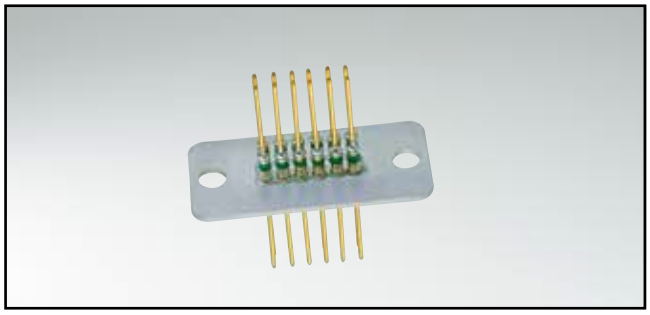
**Description**

- C- or π-Filter Plates lead spacing .100"/2.54 mm, 2-row
- **Square end pin .025"/0,64 x .025"/0,64 mm**
- Number of positions: 2-42 filter contacts
- Design: Straight
- Diverse filter capacitance



**Description**

- C- or π-Filter Plates lead spacing .079"/2.00 mm, 1-row
- **Round contact Ø .020"/0.51 mm**
- Number of positions: 2-28 filter contacts
- Designs:
  - straight
  - 90° left
  - 90° right
  - 90° both
- Diverse filter capacitance



**Description**

- C- or π-Filter Plates lead spacing .079"/2.00 mm, 2-row
- **Round contact Ø .020"/0.51 mm**
- Number of positions: 4-56 filter contacts
- Designs:
  - straight
  - 90° left
  - 90° right
  - 90° both
- Diverse filter capacitance

Section 4

# Filter Combination D-SUB Connectors

In addition to our filtered connectors such as standard and High Density, D-SUB, CONEC has developed the Combination D-SUB Filter connector product family.

The low pass filters connect each contact through a capacitor to the connector housing.
Filtered D-SUB Connectors used in I/O aqpplications for power in or power out where EMI/RFI problems can occur, are the right solution for those type of occurances.

Filter capacitace can be selected for specific applications.

Thus if undesirable high-frequency noise should occur in the environment or inside the device itself, the appropriately selected interface connector, fitted with filters, is able to suppress the noise directly at the interface.

Such connectors, for example, can also reliably eliminate the noise frequencies generated by the power supply's own switching operation. The filters employed in these power connectors meet today's safety requirements for surge and DC dielectric strength. Filter connectors in the CONEC product line offer dielectric strength ratings up to 1500 VDC.

# Part Number Creator

3 F 3 S P A 0 8 S 4 1 A 1 0 X

**Variations**
2W2C = Coded
3W3S = Standard
3W3C = Coded
5W5S = Standard
8W8S = standard (Replace the letter „W“ with letter „F“ = Filtered version)

**Contact type**
P = Plug connector
S = Socket connector

**Plaiting code / Quality class for contacts**
A = Quality class 3 =50 mating cycles
C = Quality class 1 =500 mating cycles*
*on request

**Capacitance**

| | | | |
|---|---|---|---|
| 05 | = 1.3 nF | 14 | = 12 nF |
| 08 | = 5,0 nF | 22 | = 47 nF |
| 12 | = 10 nF | 28 | = 100 nF |

**Dielectic with standing voltage**
S = 707 VDC standard DWV
H = 1020 VDC high DWV
U = 1500 VDC ultra high DWV

**Termination for high current contacts**
41 = Solder cup 10 A
42 = Solder cup 20 A
43 = Solder cup 30 A
44 = Solder cup 40 A
45 = Solder cup 50 A
46 = Solder cup 65 A*
48 = Solder pin, straight 20 A, D= .077"/1.95 mm
49 = Solder pin, straight 20 A, D= .102"/2.60 mm
50 = Solder pin, straight 20 A, D= .112"/2.85 mm
51 = Solder pin, straight 30 A, D= .125"/3.18 mm
52 = Solder pin, straight 40 A, D= .148"/3.75 mm
53 = Solder pin, straight 50 A, D= .148"/3.75 mm
56 = Solder pin, angled 20 A
57 = Solder pin, angled 30 A
58 = Solder pin, angled 40 A
P1 = Press fit 30 A
P2 = Press fit 30 A
P4 = Press fit 30 A
*3W3: Pos. A1 + A3; 5W5: Pos. A1 + A3 + A5

**Mounting style**
A1 = Riveted
A2 = M3 threaded insert
A3 = 4-40 UNC threaded insert
A4 = M3 threaded rear spacer
A5 = 4-40 UNC threaded rear spacer
A9 = Threaded rear spacer with M3 press fit
AA = Threaded rear spacer with 4-40 UNC press fit
C1 = M3 threaded rear spacer with PCB clip, PCB .063"/1.60 mm
C2 = 4-40 UNC threaded rear spacer with PCB clip, PCB .063"/1.60 mm
C3 = M3 threaded rear spacer with PCB clip, PCB .091"/2.30 mm
C4 = 4-40 UNC threaded rear spacer with PCB clip, PCB .091"/2.30 mm
C5 = M3 threaded rear spacer with PCB clip, PCB .126"/3.20 mm
C6 = 4-40 UNC threaded rear spacer with PCB clip, PCB .126"/3.20 mm
D1 = M3 front/threaded rear spacer with PCB clip, PCB .063"/1.60 mm
D2 = 4-40 UNC front/threaded rear spacer with PCB clip, PCB .063"/1.60 mm
D3 = M3 front/threaded rear spacer with PCB clip, PCB .091"/2.30 mm
D4 = 4-40 UNC front/threaded rear spacer with PCB clip .091"/2.30 mm
D5 = M3 front/threaded rear spacer with PCB clip, PCB .126"/3.20 mm
D6 = 4-40 UNC front/threaded rear spacer with PCB clip, PCB .126"/3.20 mm
E1 = M3 front/threaded rear spacer with PCB clip, PCB .063"/1.60 mm
E2 = 4-40 UNC threaded rear spacer with PCB clip, PCB .063"/1.60 mm
E3 = M3 threaded rear spacer with PCB clip, PCB .091"/2.30 mm
E4 = 4-40 UNC threaded rear spacer with PCB clip, PCB .091"/2.30 mm
E5 = M3 threaded rear spacer with PCB clip, PCB .126"/3.20 mm
E6 = 4-40 UNC threaded rear spacer with PCB clip, PCB .126"/3.20 mm
F1 = M3 front/threaded rear spacer with PCB clip, PCB .063"/1.60 mm
F2 = 4-40 UNC front/threaded rear spacer with PCB clip, PCB .063"/1.60 mm
F3 = M3 front/threaded rear spacer with PCB clip, PCB .091"/2.30 mm
F4 = 4-40 UNC front/threaded rear spacer with PCB clip, PCB .091"/2.30 mm
F5 = M3 front/threaded rear spacer with PCB clip, PCB .126"/3.20 mm
F6 = 4-40 UNC front/threaded rear spacer with PCB clip, PCB .126"/3.20 mm
K1 = Metal bracket, M3 threaded insert
K2 = Metal bracket, 4-40 UNC threaded insert
K3 = Metal bracket, M3 threaded insert /PCB clip
K4 = Metal bracket, 4-40 UNC threaded insert /PCB clip
L1 = Metal bracket, M3 threaded lock
L2 = Metal bracket, 4-40 UNC threaded lock
L3 = Metal bracket, M3 threaded lock /PCB clip
L4 = Metal bracket, 4-40 UNC threaded lock /PCB clip
W3 = Press-fit spacer with M3 push in pin
W4 = Press-fit spacer with 4-40 UNC push in pin

OX = Standard

# Technical data

| Materiala | Variations<br>2W2C – 3W3C – 3W3 – 5W5 – 8W8 |
|---|---|
| Insulator | Polyester GF UL94 V0 |
| Contacts | CU alloy |
| Contact plating | Mating area gold plated over nickel / termination area tin or gold plated |
| Shell | Steel tin plated |

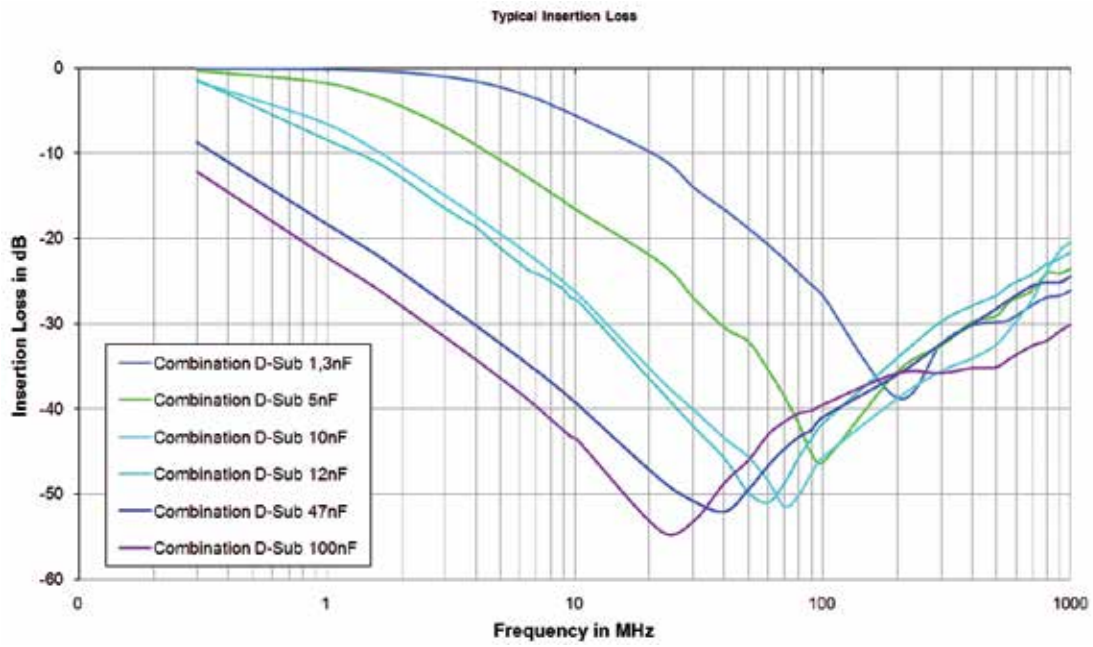
| Mechanical and electrical characteristics | |
|---|---|
| Test voltage U eff/NM | 1000 V |
| Dielectric with standing voltage | Standard DWV 707 VDC/ high DWV 1020 VDC / ultra high DWV 1500 VDC |
| Working voltage | 100 VDC<br>Depending on isolation coordination (refer to DIN VDE 0110/IEC 664-1) |
| Contact resistance | Max. 2 mΩ prior to stressing, Δ R max. 2 mΩ after stressing<br>per DIN 41652, Part 2 |
| Insulation resistance | ≥1 GΩ at 100 VDC |
| Current rating | up to 65 A (20°C) |
| Temperature storage range | -55°C to + 125°C |
| Temperature working range | -55°C to + 125°C |
| Humidity | 40°C / 85% relative humidity / RH |
| Capacitor values<br>For other capacitance values please contact the factory. | 1.3 nF ± 20% tolerance<br>5 nF ± 20% tolerance<br>10 nF ± 20% tolerance<br>12 nF ± 20% tolerance<br>47 nF ± 20% tolerance<br>100 nF ± 20% tolerance |
| Quality class | A = Quality class 3 = 50 mating cycles<br>C = Quality class 1 = 500 mating cycles |

| Solder parameter | Preheating | | Solder terminal dipping parameters | |
|---|---|---|---|---|
| | max. Tempertature | Duration | max. solder bath Temperature | max. Terminal Immersion Time |
| Recommended wave-solder parameters | 120°C | 120s | 260°C | 5s |

Technical specifications are subject to change without notice.

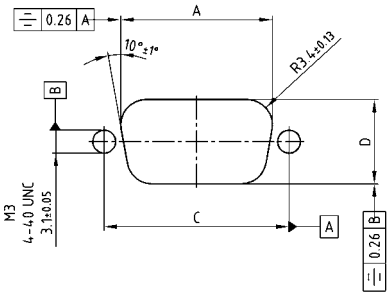
# Insertion loss

## C-Filter

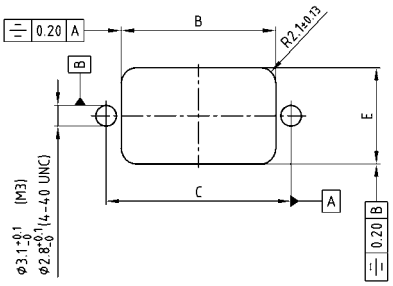



### Panel cut-out

**Rear panel mounting**



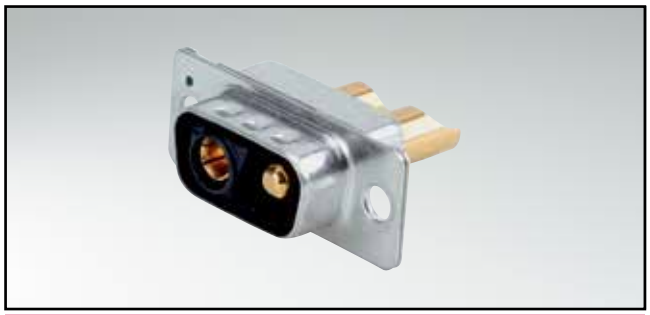

**Front panel mounting**




| Shell size | A ± 0.1 | B ± 0.1 | C ± 0.1 | D ± 0.1 | E ± 0.1 |
|---|---|---|---|---|---|
| 9 | 20.50 | 20.90 | 25.00 | 11.40 | 13.00 |
| 15 | 28.80 | 29.20 | 33.30 | 11.40 | 13.00 |
| 25 | 42.50 | 42.90 | 47.04 | 11.40 | 13.00 |
| 37 | 59.10 | 59.40 | 63.50 | 11.40 | 13.00 |
| 50 | 56.30 | 57.00 | 61.10 | 14.10 | 15.80 |

# C-FILTER COMBINATION D-SUB 2W2C

## Solder cup – Precision machined contacts – For wire size AWG 8...20

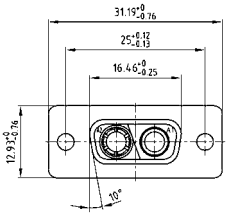


RoHS compliant – UL listed, File No.: E228329

### DESCRIPTION

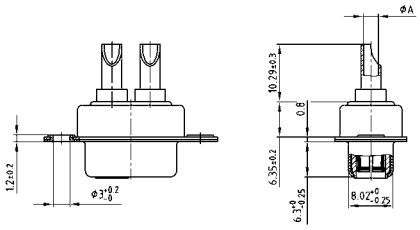
- Coding design = 1 Plug and 1 socket contact
- 707 VDC (other DWV on request)
- Mounting styles:
  - with through-hole, Ø .118"/3 mm
  - with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

### SOCKET CONNECTOR

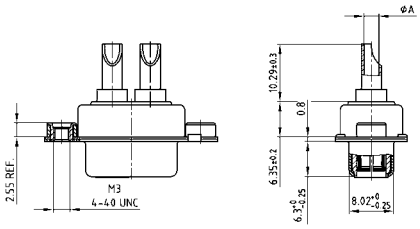


| Termination Code | Current Rating | Wire Size | Ø A |
|---|---|---|---|
| 41 | 10A | AWG 16-20 | 1.80 |
| 42 | 20A | AWG 12-14 | 2.70 |
| 43 | 30A | AWG 10-12 | 3.50 |
| 44 | 40A | AWG 8-10 | 4.80 |

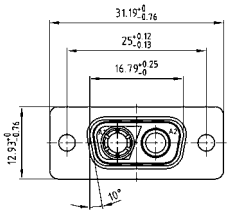
Mounting style: Through-hole



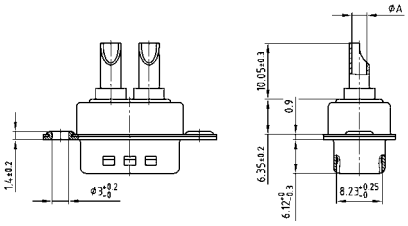
Mounting style: Threaded insert



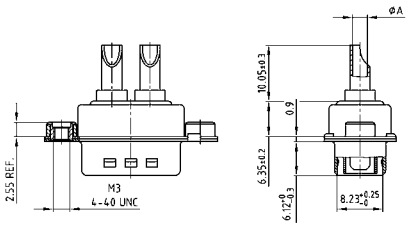
### PLUG CONNECTOR



Mounting style: Through-hole



Mounting style: Threaded insert



### ORDER DATA

**SOCKET CONNECTOR**

| Type | Mounting style | AWG | Capacitance | Part Number |
|---|---|---|---|---|
| 2W2C | Through-hole | 16...20 | 47 nF | 2F2CSA 22 S41A10X |
| 2W2C | Through-hole | 12...14 | 47 nF | 2F2CSA 22 S42A10X |
| 2W2C | Through-hole | 10...12 | 47 nF | 2F2CSA 22 S43A10X |
| 2W2C | Through-hole | 8...10 | 47 nF | 2F2CSA 22 S44A10X |
| 2W2C | 4-40 UNC Threaded insert | 16...20 | 47 nF | 2F2CSA 22 S41A30X |
| 2W2C | 4-40 UNC Threaded insert | 12...14 | 47 nF | 2F2CSA 22 S42A30X |
| 2W2C | 4-40 UNC Threaded insert | 10...12 | 47 nF | 2F2CSA 22 S43A30X |
| 2W2C | 4-40 UNC Threaded insert | 8...10 | 47 nF | 2F2CSA 22 S44A30X |
| 2W2C | M3 Threaded insert | 16...20 | 47 nF | 2F2CSA 22 S41A20X |
| 2W2C | M3 Threaded insert | 12...14 | 47 nF | 2F2CSA 22 S42A20X |
| 2W2C | M3 Threaded insert | 10...12 | 47 nF | 2F2CSA 22 S43A20X |
| 2W2C | M3 Threaded insert | 8...10 | 47 nF | 2F2CSA 22 S44A20X |

**PLUG CONNECTOR**

| Type | Mounting style | AWG | Capacitance | Part Number |
|---|---|---|---|---|
| 2W2C | Through-hole | 16...20 | 47 nF | 2F2CPA 22 S41A10X |
| 2W2C | Through-hole | 12...14 | 47 nF | 2F2CPA 22 S42A10X |
| 2W2C | Through-hole | 10...12 | 47 nF | 2F2CPA 22 S43A10X |
| 2W2C | Through-hole | 8...10 | 47 nF | 2F2CPA 22 S44A10X |
| 2W2C | 4-40 UNC Threaded insert | 16...20 | 47 nF | 2F2CPA 22 S41A30X |
| 2W2C | 4-40 UNC Threaded insert | 12...14 | 47 nF | 2F2CPA 22 S42A30X |
| 2W2C | 4-40 UNC Threaded insert | 10...12 | 47 nF | 2F2CPA 22 S43A30X |
| 2W2C | 4-40 UNC Threaded insert | 8...10 | 47 nF | 2F2CPA 22 S44A30X |
| 2W2C | M3 Threaded insert | 16...20 | 47 nF | 2F2CPA 22 S41A20X |
| 2W2C | M3 Threaded insert | 12...14 | 47 nF | 2F2CPA 22 S42A20X |
| 2W2C | M3 Threaded insert | 10...12 | 47 nF | 2F2CPA 22 S43A20X |
| 2W2C | M3 Threaded insert | 8...10 | 47 nF | 2F2CPA 22 S44A20X |

For other capacitance values refer to the part number creator.

| Capacitance value | Code |
|---|---|
| 100 nF | 28 |
| 47 nF | 22 |
| 12 nF | 14 |
| 10 nF | 12 |
| 5 nF | 08 |
| 1.3 nF | 05 |

# C-FILTER COMBINATION D-SUB 3W3

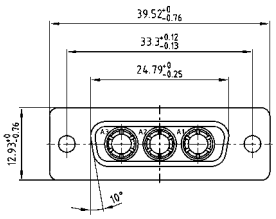
## Solder cup – Precision machined contacts – For wire size AWG 8...20

RoHS compliant – UL listed, File No.: E228329

### DESCRIPTION

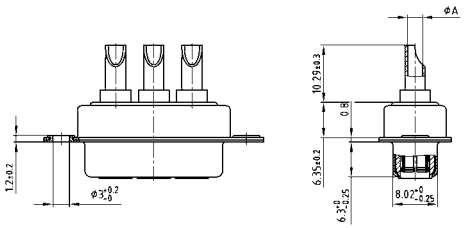
- 707 VDC (other DWV on request)
- Mounting styles:
  - with through-hole, Ø .118"/3 mm
  - with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

### SOCKET CONNECTOR

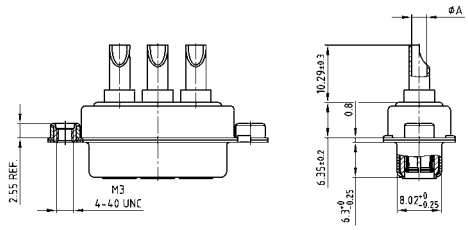


| Termination Code | Current Rating | Wire Size | Ø A |
|---|---|---|---|
| 41 | 10A | AWG 16-20 | 1.80 |
| 42 | 20A | AWG 12-14 | 2.70 |
| 43 | 30A | AWG 10-12 | 3.50 |
| 44 | 40A | AWG 8-10 | 4.80 |

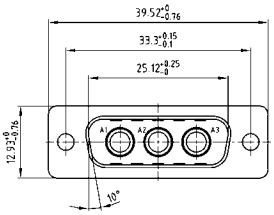
Mounting style: Through-hole



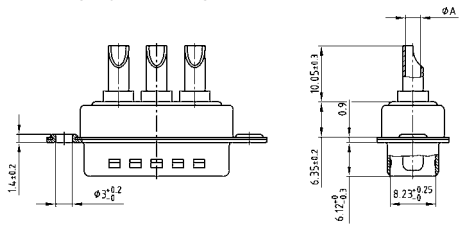
Mounting style: Threaded insert



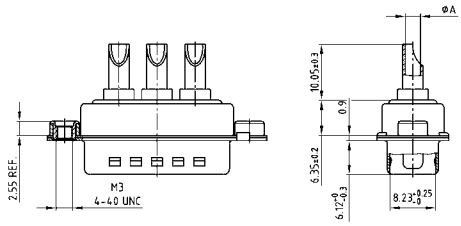
### PLUG CONNECTOR



Mounting style: Through-hole



Mounting style: Threaded insert



### ORDER DATA

**SOCKET CONNECTOR**

| Type | Mounting style | AWG | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3 | Through-hole | 16...20 | 47 nF | 3F3SSA 22 S41A10X |
| 3W3 | Through-hole | 12...14 | 47 nF | 3F3SSA 22 S42A10X |
| 3W3 | Through-hole | 10...12 | 47 nF | 3F3SSA 22 S43A10X |
| 3W3 | Through-hole | 8...10 | 47 nF | 3F3SSA 22 S44A10X |
| 3W3 | 4-40 UNC Threaded insert | 16...20 | 47 nF | 3F3SSA 22 S41A30X |
| 3W3 | 4-40 UNC Threaded insert | 12...14 | 47 nF | 3F3SSA 22 S42A30X |
| 3W3 | 4-40 UNC Threaded insert | 10...12 | 47 nF | 3F3SSA 22 S43A30X |
| 3W3 | 4-40 UNC Threaded insert | 8...10 | 47 nF | 3F3SSA 22 S44A30X |
| 3W3 | M3 Threaded insert | 16...20 | 47 nF | 3F3SSA 22 S41A20X |
| 3W3 | M3 Threaded insert | 12...14 | 47 nF | 3F3SSA 22 S42A20X |
| 3W3 | M3 Threaded insert | 10...12 | 47 nF | 3F3SSA 22 S43A20X |
| 3W3 | M3 Threaded insert | 8...10 | 47 nF | 3F3SSA 22 S44A20X |

**PLUG CONNECTOR**

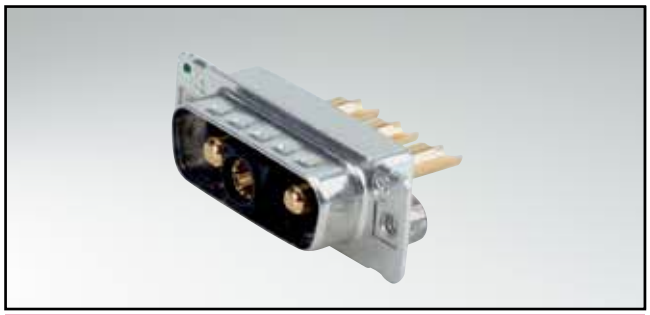
| Type | Mounting style | AWG | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3 | Through-hole | 16...20 | 47 nF | 3F3SPA 22 S41A10X |
| 3W3 | Through-hole | 12...14 | 47 nF | 3F3SPA 22 S42A10X |
| 3W3 | Through-hole | 10...12 | 47 nF | 3F3SPA 22 S43A10X |
| 3W3 | Through-hole | 8...10 | 47 nF | 3F3SPA 22 S44A10X |
| 3W3 | 4-40 UNC Threaded insert | 16...20 | 47 nF | 3F3SPA 22 S41A30X |
| 3W3 | 4-40 UNC Threaded insert | 12...14 | 47 nF | 3F3SPA 22 S42A30X |
| 3W3 | 4-40 UNC Threaded insert | 10...12 | 47 nF | 3F3SPA 22 S43A30X |
| 3W3 | 4-40 UNC Threaded insert | 8...10 | 47 nF | 3F3SPA 22 S44A30X |
| 3W3 | M3 Threaded insert | 16...20 | 47 nF | 3F3SPA 22 S41A20X |
| 3W3 | M3 Threaded insert | 12...14 | 47 nF | 3F3SPA 22 S42A20X |
| 3W3 | M3 Threaded insert | 10...12 | 47 nF | 3F3SPA 22 S43A20X |
| 3W3 | M3 Threaded insert | 8...10 | 47 nF | 3F3SPA 22 S44A20X |

For other capacitance values refer to the part number creator.

| Capacitance value | Code |
|---|---|
| 100 nF | 28 |
| 47 nF | 22 |
| 12 nF | 14 |
| 10 nF | 12 |
| 5 nF | 08 |
| 1.3 nF | 05 |

# C-FILTER COMBINATION D-SUB 3W3C

## Solder cup – Precision machined contacts – For wire size AWG 8...20

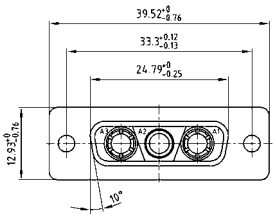


RoHS compliant – UL listed, File No.: E228329

### DESCRIPTION

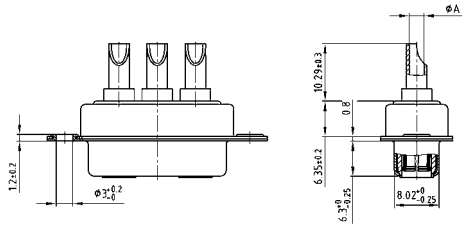
- Coded socket connector = 1 Plug and 2 Socket contacts
- Coded plug connector = 2 Plugs and 1 Socket contact
- 707 VDC (other DWV on request)
- Mounting styles:
  - with through-hole, Ø .118"/3 mm
  - with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

### SOCKET CONNECTOR

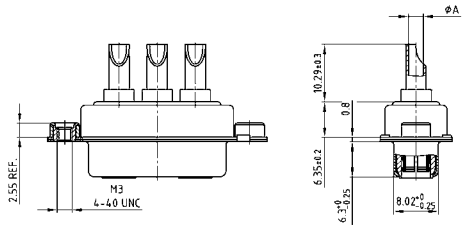


| Termination Code | Current Rating | Wire Size | Ø A |
|---|---|---|---|
| 41 | 10A | AWG 16-20 | 1.80 |
| 42 | 20A | AWG 12-14 | 2.70 |
| 43 | 30A | AWG 10-12 | 3.50 |
| 44 | 40A | AWG 8-10 | 4.80 |

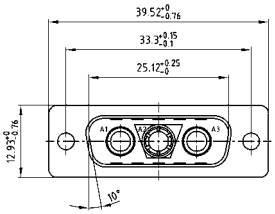
Mounting style: Through-hole



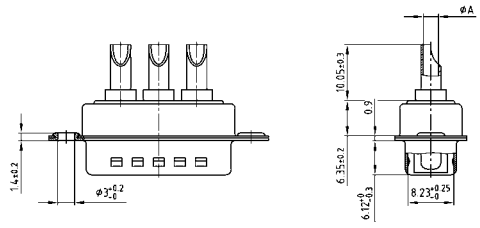
Mounting style: Threaded insert



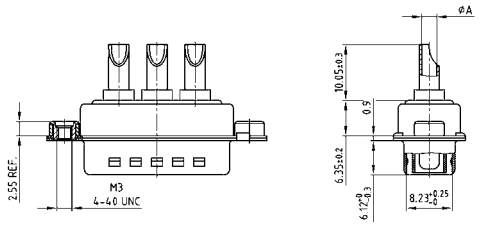
### PLUG CONNECTOR



Mounting style: Through-hole



Mounting style: Threaded insert



### ORDER DATA

**SOCKET CONNECTOR**

| Type | Mounting style | AWG | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3C | Through-hole | 16...20 | 47 nF | 3F3CSA 22 S41A10X |
| 3W3C | Through-hole | 12...14 | 47 nF | 3F3CSA 22 S42A10X |
| 3W3C | Through-hole | 10...12 | 47 nF | 3F3CSA 22 S43A10X |
| 3W3C | Through-hole | 8...10 | 47 nF | 3F3CSA 22 S44A10X |
| 3W3C | 4-40 UNC Threaded insert | 16...20 | 47 nF | 3F3CSA 22 S41A30X |
| 3W3C | 4-40 UNC Threaded insert | 12...14 | 47 nF | 3F3CSA 22 S42A30X |
| 3W3C | 4-40 UNC Threaded insert | 10...12 | 47 nF | 3F3CSA 22 S43A30X |
| 3W3C | 4-40 UNC Threaded insert | 8...10 | 47 nF | 3F3CSA 22 S44A30X |
| 3W3C | M3 Threaded insert | 16...20 | 47 nF | 3F3CSA 22 S41A20X |
| 3W3C | M3 Threaded insert | 12...14 | 47 nF | 3F3CSA 22 S42A20X |
| 3W3C | M3 Threaded insert | 10...12 | 47 nF | 3F3CSA 22 S43A20X |
| 3W3C | M3 Threaded insert | 8...10 | 47 nF | 3F3CSA 22 S44A20X |

**PLUG CONNECTOR**

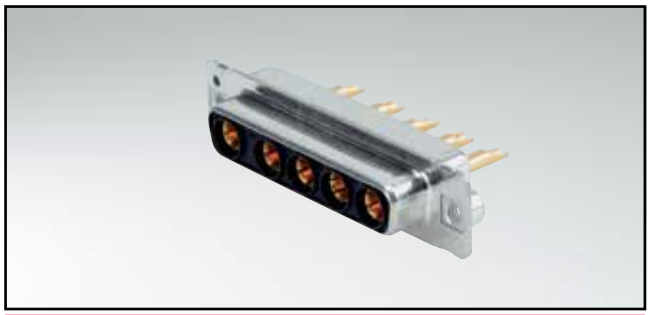
| Type | Mounting style | AWG | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3C | Through-hole | 16...20 | 47 nF | 3F3CPA 22 S41A10X |
| 3W3C | Through-hole | 12...14 | 47 nF | 3F3CPA 22 S42A10X |
| 3W3C | Through-hole | 10...12 | 47 nF | 3F3CPA 22 S43A10X |
| 3W3C | Through-hole | 8...10 | 47 nF | 3F3CPA 22 S44A10X |
| 3W3C | 4-40 UNC Threaded insert | 16...20 | 47 nF | 3F3CPA 22 S41A30X |
| 3W3C | 4-40 UNC Threaded insert | 12...14 | 47 nF | 3F3CPA 22 S42A30X |
| 3W3C | 4-40 UNC Threaded insert | 10...12 | 47 nF | 3F3CPA 22 S43A30X |
| 3W3C | 4-40 UNC Threaded insert | 8...10 | 47 nF | 3F3CPA 22 S44A30X |
| 3W3C | M3 Threaded insert | 16...20 | 47 nF | 3F3CPA 22 S41A20X |
| 3W3C | M3 Threaded insert | 12...14 | 47 nF | 3F3CPA 22 S42A20X |
| 3W3C | M3 Threaded insert | 10...12 | 47 nF | 3F3CPA 22 S43A20X |
| 3W3C | M3 Threaded insert | 8...10 | 47 nF | 3F3CPA 22 S44A20X |

For other capacitance values refer to the part number creator.

| Capacitance value | Code |
|---|---|
| 100 nF | 28 |
| 47 nF | 22 |
| 12 nF | 14 |
| 10 nF | 12 |
| 5 nF | 08 |
| 1.3 nF | 05 |

# C-Filter Combination D-SUB 5W5

## Solder cup – Precision machined contacts – For wire size AWG 8...20

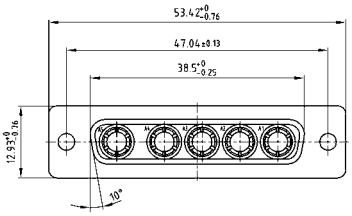


RoHS compliant – UL listed, File No.: E228329

### Description

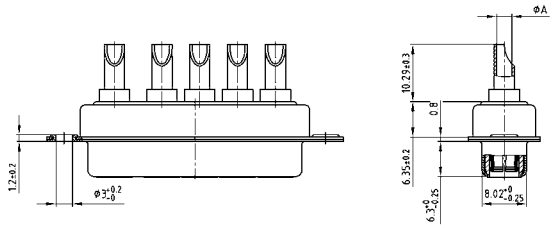
- 707 VDC (other DWV on request)
- Mounting styles:
  - with through-hole, Ø .118" / 3 mm
  - with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

### Socket connector

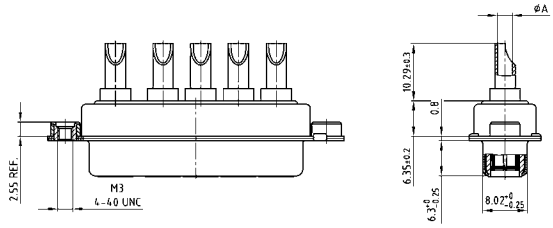


| Termination Code | Current Rating | Wire Size | Ø A |
|---|---|---|---|
| 41 | 10A | AWG 16-20 | 1.80 |
| 42 | 20A | AWG 12-14 | 2.70 |
| 43 | 30A | AWG 10-12 | 3.50 |
| 44 | 40A | AWG 8-10 | 4.80 |

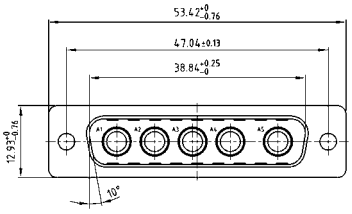
Mounting style: Through-hole



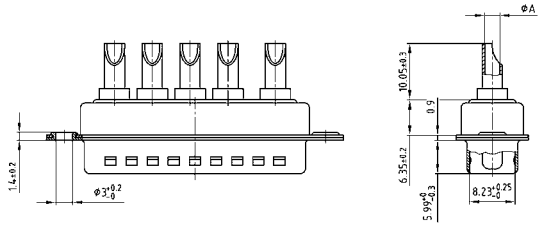
Mounting style: Threaded insert



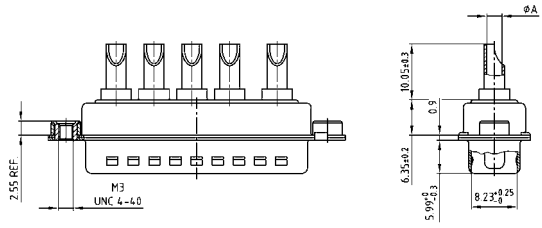
### Plug connector



Mounting style: Through-hole



Mounting style: Threaded insert



### Order data

**Socket connector**

| Type | Mounting style | AWG | Capacitance | Part Number |
|---|---|---|---|---|
| 5W5 | Through-hole | 16...20 | 47 nF | 5F5SSA 22 S41A10X |
| 5W5 | Through-hole | 12...14 | 47 nF | 5F5SSA 22 S42A10X |
| 5W5 | Through-hole | 10...12 | 47 nF | 5F5SSA 22 S43A10X |
| 5W5 | Through-hole | 8...10 | 47 nF | 5F5SSA 22 S44A10X |
| 5W5 | 4-40 UNC Threaded insert | 16...20 | 47 nF | 5F5SSA 22 S41A30X |
| 5W5 | 4-40 UNC Threaded insert | 12...14 | 47 nF | 5F5SSA 22 S42A30X |
| 5W5 | 4-40 UNC Threaded insert | 10...12 | 47 nF | 5F5SSA 22 S43A30X |
| 5W5 | 4-40 UNC Threaded insert | 8...10 | 47 nF | 5F5SSA 22 S44A30X |
| 5W5 | M3 Threaded insert | 16...20 | 47 nF | 5F5SSA 22 S41A20X |
| 5W5 | M3 Threaded insert | 12...14 | 47 nF | 5F5SSA 22 S42A20X |
| 5W5 | M3 Threaded insert | 10...12 | 47 nF | 5F5SSA 22 S43A20X |
| 5W5 | M3 Threaded insert | 8...10 | 47 nF | 5F5SSA 22 S44A20X |

**Plug connector**

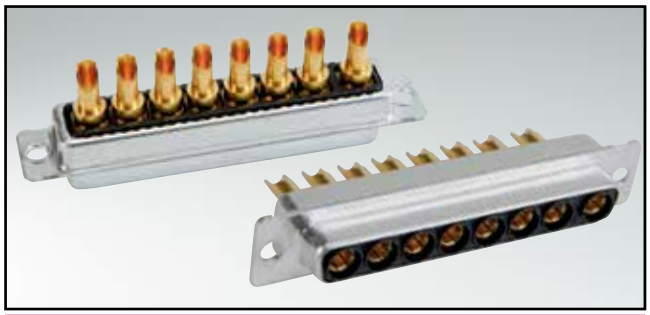
| Type | Mounting style | AWG | Capacitance | Part Number |
|---|---|---|---|---|
| 5W5 | Through-hole | 16...20 | 47 nF | 5F5SPA 22 S41A10X |
| 5W5 | Through-hole | 12...14 | 47 nF | 5F5SPA 22 S42A10X |
| 5W5 | Through-hole | 10...12 | 47 nF | 5F5SPA 22 S43A10X |
| 5W5 | Through-hole | 8...10 | 47 nF | 5F5SPA 22 S44A10X |
| 5W5 | 4-40 UNC Threaded insert | 16...20 | 47 nF | 5F5SPA 22 S41A30X |
| 5W5 | 4-40 UNC Threaded insert | 12...14 | 47 nF | 5F5SPA 22 S42A30X |
| 5W5 | 4-40 UNC Threaded insert | 10...12 | 47 nF | 5F5SPA 22 S43A30X |
| 5W5 | 4-40 UNC Threaded insert | 8...10 | 47 nF | 5F5SPA 22 S44A30X |
| 5W5 | M3 Threaded insert | 16...20 | 47 nF | 5F5SPA 22 S41A20X |
| 5W5 | M3 Threaded insert | 12...14 | 47 nF | 5F5SPA 22 S42A20X |
| 5W5 | M3 Threaded insert | 10...12 | 47 nF | 5F5SPA 22 S43A20X |
| 5W5 | M3 Threaded insert | 8...10 | 47 nF | 5F5SPA 22 S44A20X |

For other capacitance values refer to the part number creator.

| Capacitance value | Code |
|---|---|
| 100 nF | 28 |
| 47 nF | 22 |
| 12 nF | 14 |
| 10 nF | 12 |
| 5 nF | 08 |
| 1.3 nF | 05 |

# C-FILTER COMBINATION D-SUB 8W8

## Solder cup – Precision machined contacts – For wire size AWG 8...20

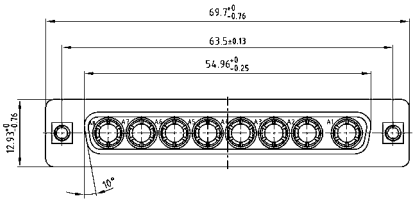


RoHS compliant – UL listed, File No.: E228329

### DESCRIPTION

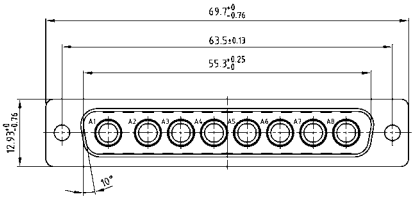
- 707 VDC (other DWV on request)
- Mounting styles:
  - with through-hole, Ø .118"/3 mm
  - with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

### SOCKET CONNECTOR

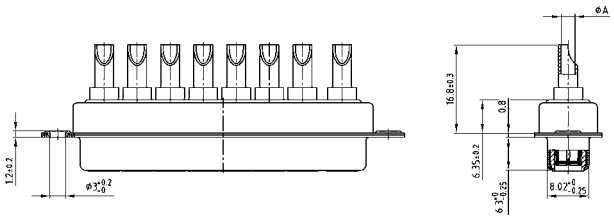


| Termination Code | Current Rating | Wire Size | Ø A |
|---|---|---|---|
| 41 | 10A | AWG 16-20 | 1.80 |
| 42 | 20A | AWG 12-14 | 2.70 |
| 43 | 30A | AWG 10-12 | 3.50 |
| 44 | 40A | AWG 8-10 | 4.80 |

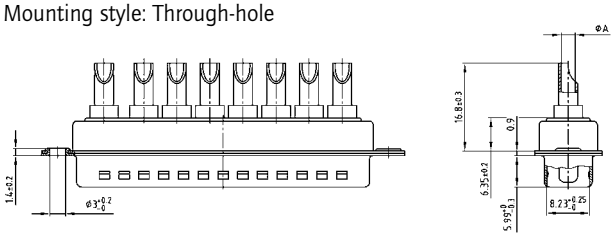
### PLUG CONNECTOR



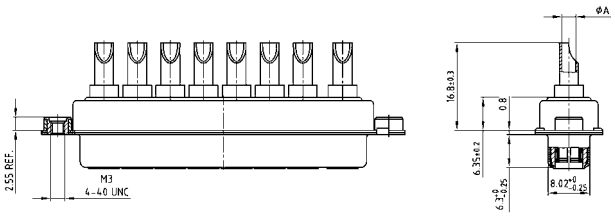
Mounting style: Through-hole



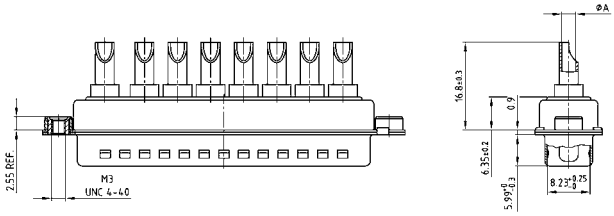
Mounting style: Through-hole



Mounting style: Threaded insert



Mounting style: Threaded insert



### ORDER DATA

**SOCKET CONNECTOR**

| Type | Mounting style | AWG | Capacitance | Part Number |
|---|---|---|---|---|
| 8W8 | Through-hole | 16...20 | 47 nF | 8F8SSA 22 S41A10X |
| 8W8 | Through-hole | 12...14 | 47 nF | 8F8SSA 22 S42A10X |
| 8W8 | Through-hole | 10...12 | 47 nF | 8F8SSA 22 S43A10X |
| 8W8 | Through-hole | 8...10 | 47 nF | 8F8SSA 22 S44A10X |
| 8W8 | 4-40 UNC Threaded insert | 16...20 | 47 nF | 8F8SSA 22 S41A30X |
| 8W8 | 4-40 UNC Threaded insert | 12...14 | 47 nF | 8F8SSA 22 S42A30X |
| 8W8 | 4-40 UNC Threaded insert | 10...12 | 47 nF | 8F8SSA 22 S43A30X |
| 8W8 | 4-40 UNC Threaded insert | 8...10 | 47 nF | 8F8SSA 22 S44A30X |
| 8W8 | M3 Threaded insert | 16...20 | 47 nF | 8F8SSA 22 S41A20X |
| 8W8 | M3 Threaded insert | 12...14 | 47 nF | 8F8SSA 22 S42A20X |
| 8W8 | M3 Threaded insert | 10...12 | 47 nF | 8F8SSA 22 S43A20X |
| 8W8 | M3 Threaded insert | 8...10 | 47 nF | 8F8SSA 22 S44A20X |

**PLUG CONNECTOR**

| Type | Mounting style | AWG | Capacitance | Part Number |
|---|---|---|---|---|
| 8W8 | Through-hole | 16...20 | 47 nF | 8F8SPA 22 S41A10X |
| 8W8 | Through-hole | 12...14 | 47 nF | 8F8SPA 22 S42A10X |
| 8W8 | Through-hole | 10...12 | 47 nF | 8F8SPA 22 S43A10X |
| 8W8 | Through-hole | 8...10 | 47 nF | 8F8SPA 22 S44A10X |
| 8W8 | 4-40 UNC Threaded insert | 16...20 | 47 nF | 8F8SPA 22 S41A30X |
| 8W8 | 4-40 UNC Threaded insert | 12...14 | 47 nF | 8F8SPA 22 S42A30X |
| 8W8 | 4-40 UNC Threaded insert | 10...12 | 47 nF | 8F8SPA 22 S43A30X |
| 8W8 | 4-40 UNC Threaded insert | 8...10 | 47 nF | 8F8SPA 22 S44A30X |
| 8W8 | M3 Threaded insert | 16...20 | 47 nF | 8F8SPA 22 S41A20X |
| 8W8 | M3 Threaded insert | 12...14 | 47 nF | 8F8SPA 22 S42A20X |
| 8W8 | M3 Threaded insert | 10...12 | 47 nF | 8F8SPA 22 S43A20X |
| 8W8 | M3 Threaded insert | 8...10 | 47 nF | 8F8SPA 22 S44A20X |

For other capacitance values refer to the part number creator.

| Capacitance value | Code |
|---|---|
| 100 nF | 28 |
| 47 nF | 22 |
| 12 nF | 14 |
| 10 nF | 12 |
| 5 nF | 08 |
| 1.3 nF | 05 |

# C-FILTER COMBINATION D-SUB 2W2C

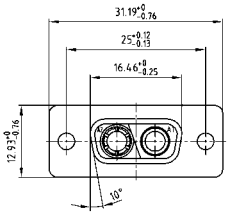
## Solder pin – Straight – Precision machined contacts

RoHS compliant – UL listed, File No.: E228329

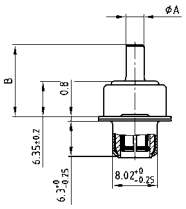
### DESCRIPTION

- Coded design = 1 plug and 1 socket concact
- 707 VDC (other DWV on request)
- Mounting styles:
  - with through-hole Ø .118"/3.0 mm
  - with 4-40 UNC threaded insert
  - with 4-40 UNC threaded rear spacer
  - with 4-40 UNC threaded rear spacer with PCB clip, .291"/7.4 mm
- Mounting styles with M3 thread on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

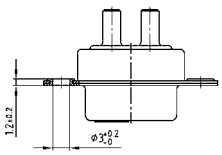
### SOCKET CONNECTOR



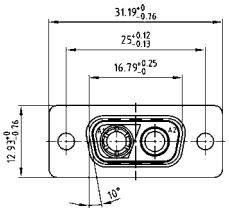
| Termination Code | Current Rating | Ø A | B ± 0,3 | PCB Thickness |
|---|---|---|---|---|
| 48 | 20A | 1.95 | 9.65 | 1.6 |
| 49 | 20A | 2.60 | 10.65 | 1.6 |
| 50 | 20A | 2.85 | 10.05 | 1.6 |
| 51 | 30A | 3.18 | 12.85 | 1.6/ 2.3/ 3.2 |
| 52 | 40A | 3.75 | 11.10 | 1.6/ 2.3/ 3.2 |

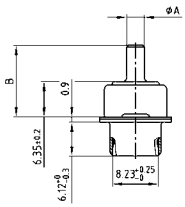


Mounting style: Through-hole

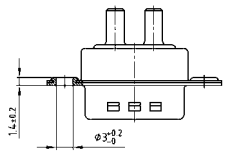


### PLUG CONNECTOR





Mounting style: Through-hole



### ORDER DATA

**SOCKET CONNECTOR**

| Type | Mounting style | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 2W2C | Through-hole | .080"/1.95 | 47 nF | 2F2CSA 22 S48A10X |
| 2W2C | Through-hole | .102"/2.60 | 47 nF | 2F2CSA 22 S49A10X |
| 2W2C | Through-hole | .110"/2.85 | 47 nF | 2F2CSA 22 S50A10X |
| 2W2C | Through-hole | .130"/3.18 | 47 nF | 2F2CSA 22 S51A10X |
| 2W2C | Through-hole | .150"/3.75 | 47 nF | 2F2CSA 22 S52A10X |

**PLUG CONNECTOR**

| Type | Mounting style | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 2W2C | Through-hole | .080"/1.95 | 47 nF | 2F2CPA 22 S48A10X |
| 2W2C | Through-hole | .102"/2.60 | 47 nF | 2F2CPA 22 S49A10X |
| 2W2C | Through-hole | .110"/2.85 | 47 nF | 2F2CPA 22 S50A10X |
| 2W2C | Through-hole | .130"/3.18 | 47 nF | 2F2CPA 22 S51A10X |
| 2W2C | Through-hole | .150"/3.75 | 47 nF | 2F2CPA 22 S52A10X |

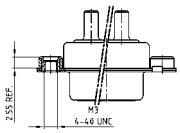
For other capacitance values refer to the part number creator.

| Capacitance value | Code |
|---|---|
| 100 nF | 28 |
| 47 nF | 22 |
| 12 nF | 14 |
| 10 nF | 12 |
| 5 nF | 08 |
| 1.3 nF | 05 |

# C-Filter Combination D-SUB 2W2C – Mounting styles

## Solder pin – Straight – Precision machined contacts

### Order data

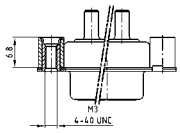



**Socket connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 2W2C | Threaded insert | .080"/1.95 | 47 nF | 2F2CSA 22 S48A30X |
| 2W2C | Threaded insert | .102"/2.60 | 47 nF | 2F2CSA 22 S49A30X |
| 2W2C | Threaded insert | .110"/2.85 | 47 nF | 2F2CSA 22 S50A30X |
| 2W2C | Threaded insert | .130"/3.18 | 47 nF | 2F2CSA 22 S51A30X |
| 2W2C | Threaded insert | .150"/3.75 | 47 nF | 2F2CSA 22 S52A30X |

**Plug connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 2W2C | Threaded insert | .080"/1.95 | 47 nF | 2F2CPA 22 S48A30X |
| 2W2C | Threaded insert | .102"/2.60 | 47 nF | 2F2CPA 22 S49A30X |
| 2W2C | Threaded insert | .110"/2.85 | 47 nF | 2F2CPA 22 S50A30X |
| 2W2C | Threaded insert | .130"/3.18 | 47 nF | 2F2CPA 22 S51A30X |
| 2W2C | Threaded insert | .150"/3.75 | 47 nF | 2F2CPA 22 S52A30X |



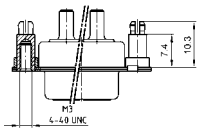

**Socket connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 2W2C | Threaded rear spacer | .080"/1.95 | 47 nF | 2F2CSA 22 S48A50X |
| 2W2C | Threaded rear spacer | .102"/2.60 | 47 nF | 2F2CSA 22 S49A50X |
| 2W2C | Threaded rear spacer | .110"/2.85 | 47 nF | 2F2CSA 22 S50A50X |
| 2W2C | Threaded rear spacer | .130"/3.18 | 47 nF | 2F2CSA 22 S51A50X |
| 2W2C | Threaded rear spacer | .150"/3.75 | 47 nF | 2F2CSA 22 S52A50X |

**Plug connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 2W2C | Threaded rear spacer | .080"/1.95 | 47 nF | 2F2CPA 22 S48A50X |
| 2W2C | Threaded rear spacer | .102"/2.60 | 47 nF | 2F2CPA 22 S49A50X |
| 2W2C | Threaded rear spacer | .110"/2.85 | 47 nF | 2F2CPA 22 S50A50X |
| 2W2C | Threaded rear spacer | .130"/3.18 | 47 nF | 2F2CPA 22 S51A50X |
| 2W2C | Threaded rear spacer | .150"/3.75 | 47 nF | 2F2CPA 22 S52A50X |

.291"/7.4 mm for .063"/1.6 mm circuit board thickness. (Length of spacer .256"/6.5 mm on request)



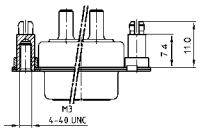

**Socket connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 2W2C | Threaded rear spacer PCB clip | .080"/1.95 | 47 nF | 2F2CSA 22 S48E20X |
| 2W2C | Threaded rear spacer PCB clip | .102"/2.60 | 47 nF | 2F2CSA 22 S49E20X |
| 2W2C | Threaded rear spacer PCB clip | .110"/2.85 | 47 nF | 2F2CSA 22 S50E20X |
| 2W2C | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 2F2CSA 22 S51E20X |
| 2W2C | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 2F2CSA 22 S52E20X |

**Plug connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 2W2C | Threaded rear spacer PCB clip | .080"/1.95 | 47 nF | 2F2CPA 22 S48E20X |
| 2W2C | Threaded rear spacer PCB clip | .102"/2.60 | 47 nF | 2F2CPA 22 S49E20X |
| 2W2C | Threaded rear spacer PCB clip | .110"/2.85 | 47 nF | 2F2CPA 22 S50E20X |
| 2W2C | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 2F2CPA 22 S51E20X |
| 2W2C | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 2F2CPA 22 S52E20X |

.291"/7.4 mm for .091"/2.3 mm circuit board thickness. (Length of spacer .256"/6.5 mm on request)



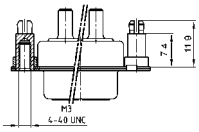

**Socket connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 2W2C | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 2F2CSA 22 S51E40X |
| 2W2C | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 2F2CSA 22 S52E40X |

**Plug connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 2W2C | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 2F2CPA 22 S51E40X |
| 2W2C | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 2F2CPA 22 S52E40X |

.291"/7.4 mm for .126"/3.2 mm circuit board thickness. (Length of spacer .256"/6.5 mm on request)




**Socket connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 2W2C | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 2F2CSA 22 S51E60X |
| 2W2C | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 2F2CSA 22 S52E60X |

**Plug connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 2W2C | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 2F2CPA 22 S51E60X |
| 2W2C | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 2F2CPA 22 S52E60X |

For other capacitance values refer to the part number creator.

# C-FILTER COMBINATION D-SUB 3W3

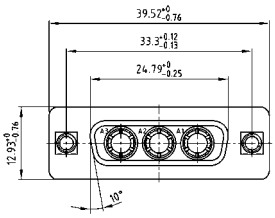
## Solder pin – Straight – Precision machined contacts

RoHS compliant – UL listed, File No.: E228329

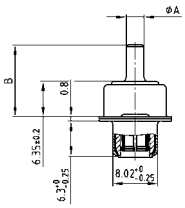
### DESCRIPTION

- 707 VDC (other DWV on request)
- Mounting styles:
  - with through-hole Ø .118"/3.0 mm
  - with 4-40 UNC threaded insert
  - with 4-40 UNC threaded rear spacer
  - with 4-40 UNC threaded rear spacer with PCB clip, .291"/7.4 mm
- Mounting styles with M3 thread on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

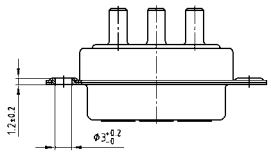
### SOCKET CONNECTOR



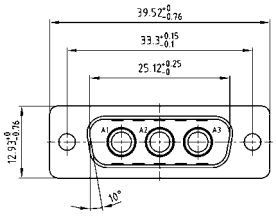
| Termination Code | Current Rating | Ø A | B ± 0,3 | PCB Thickness |
|---|---|---|---|---|
| 48 | 20A | 1.95 | 9.65 | 1.6 |
| 49 | 20A | 2.60 | 10.65 | 1.6 |
| 50 | 20A | 2.85 | 10.05 | 1.6 |
| 51 | 30A | 3.18 | 12.85 | 1.6/ 2.3/ 3.2 |
| 52 | 40A | 3.75 | 11.10 | 1.6/ 2.3/ 3.2 |

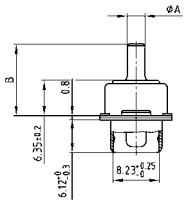


Mounting style: Through-hole

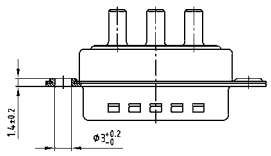


### PLUG CONNECTOR





Mounting style: Through-hole



### ORDER DATA

**SOCKET CONNECTOR**

| Type | Mounting style | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3 | Through-hole | .080"/1.95 | 47 nF | 3F3SSA 22 S48A10X |
| 3W3 | Through-hole | .102"/2.60 | 47 nF | 3F3SSA 22 S49A10X |
| 3W3 | Through-hole | .110"/2.85 | 47 nF | 3F3SSA 22 S50A10X |
| 3W3 | Through-hole | .130"/3.18 | 47 nF | 3F3SSA 22 S51A10X |
| 3W3 | Through-hole | .150"/3.75 | 47 nF | 3F3SSA 22 S52A10X |

**PLUG CONNECTOR**

| Type | Mounting style | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3 | Through-hole | .080"/1.95 | 47 nF | 3F3SPA 22 S48A10X |
| 3W3 | Through-hole | .102"/2.60 | 47 nF | 3F3SPA 22 S49A10X |
| 3W3 | Through-hole | .110"/2.85 | 47 nF | 3F3SPA 22 S50A10X |
| 3W3 | Through-hole | .130"/3.18 | 47 nF | 3F3SPA 22 S51A10X |
| 3W3 | Through-hole | .150"/3.75 | 47 nF | 3F3SPA 22 S52A10X |

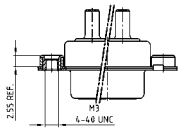
For other capacitance values refer to the part number creator.

| Capacitance value | Code |
|---|---|
| 100 nF | 28 |
| 47 nF | 22 |
| 12 nF | 14 |
| 10 nF | 12 |
| 5 nF | 08 |
| 1.3 nF | 05 |

# C-Filter Combination D-SUB 3W3 – Mounting styles

## Solder pin – Straight – Precision machined contacts

### Order data

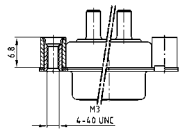



**Socket connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3 | Threaded insert | .080"/1.95 | 47 nF | 3F3SSA 22 S48A30X |
| 3W3 | Threaded insert | .102"/2.60 | 47 nF | 3F3SSA 22 S49A30X |
| 3W3 | Threaded insert | .110"/2.85 | 47 nF | 3F3SSA 22 S50A30X |
| 3W3 | Threaded insert | .130"/3.18 | 47 nF | 3F3SSA 22 S51A30X |
| 3W3 | Threaded insert | .150"/3.75 | 47 nF | 3F3SSA 22 S52A30X |

**Plug connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3 | Threaded insert | .080"/1.95 | 47 nF | 3F3SPA 22 S48A30X |
| 3W3 | Threaded insert | .102"/2.60 | 47 nF | 3F3SPA 22 S49A30X |
| 3W3 | Threaded insert | .110"/2.85 | 47 nF | 3F3SPA 22 S50A30X |
| 3W3 | Threaded insert | .130"/3.18 | 47 nF | 3F3SPA 22 S51A30X |
| 3W3 | Threaded insert | .150"/3.75 | 47 nF | 3F3SPA 22 S52A30X |



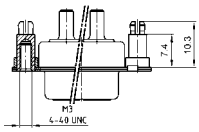

**Socket connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3 | Threaded rear spacer | .080"/1.95 | 47 nF | 3F3SSA 22 S48A50X |
| 3W3 | Threaded rear spacer | .102"/2.60 | 47 nF | 3F3SSA 22 S49A50X |
| 3W3 | Threaded rear spacer | .110"/2.85 | 47 nF | 3F3SSA 22 S50A50X |
| 3W3 | Threaded rear spacer | .130"/3.18 | 47 nF | 3F3SSA 22 S51A50X |
| 3W3 | Threaded rear spacer | .150"/3.75 | 47 nF | 3F3SSA 22 S52A50X |

**Plug connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3 | Threaded rear spacer | .080"/1.95 | 47 nF | 3F3SPA 22 S48A50X |
| 3W3 | Threaded rear spacer | .102"/2.60 | 47 nF | 3F3SPA 22 S49A50X |
| 3W3 | Threaded rear spacer | .110"/2.85 | 47 nF | 3F3SPA 22 S50A50X |
| 3W3 | Threaded rear spacer | .130"/3.18 | 47 nF | 3F3SPA 22 S51A50X |
| 3W3 | Threaded rear spacer | .150"/3.75 | 47 nF | 3F3SPA 22 S52A50X |

.291"/7.4 mm for .063"/1.6 mm circuit board thickness. (Length of spacer .256"/6.5 mm on request)



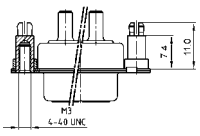

**Socket connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3 | Threaded rear spacer PCB clip | .080"/1.95 | 47 nF | 3F3SSA 22 S48E20X |
| 3W3 | Threaded rear spacer PCB clip | .102"/2.60 | 47 nF | 3F3SSA 22 S49E20X |
| 3W3 | Threaded rear spacer PCB clip | .110"/2.85 | 47 nF | 3F3SSA 22 S50E20X |
| 3W3 | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 3F3SSA 22 S51E20X |
| 3W3 | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 3F3SSA 22 S52E20X |

**Plug connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3 | Threaded rear spacer PCB clip | .080"/1.95 | 47 nF | 3F3SPA 22 S48E20X |
| 3W3 | Threaded rear spacer PCB clip | .102"/2.60 | 47 nF | 3F3SPA 22 S49E20X |
| 3W3 | Threaded rear spacer PCB clip | .110"/2.85 | 47 nF | 3F3SPA 22 S50E20X |
| 3W3 | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 3F3SPA 22 S51E20X |
| 3W3 | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 3F3SPA 22 S52E20X |

.291"/7.4 mm for .091"/2.3 mm circuit board thickness. (Length of spacer .256"/6.5 mm on request)



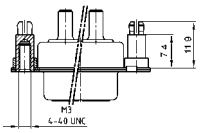

**Socket connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3 | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 3F3SSA 22 S51E40X |
| 3W3 | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 3F3SSA 22 S52E40X |

**Plug connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3 | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 3F3SPA 22 S51E40X |
| 3W3 | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 3F3SPA 22 S52E40X |

.291"/7.4 mm for .126"/3.2 mm circuit board thickness. (Length of spacer .256"/6.5 mm on request)




**Socket connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3 | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 3F3SSA 22 S51E60X |
| 3W3 | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 3F3SSA 22 S52E60X |

**Plug connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3 | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 3F3SPA 22 S51E60X |
| 3W3 | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 3F3SPA 22 S52E60X |

For other capacitance values refer to the part number creator.

# C-FILTER COMBINATION D-SUB 3W3C

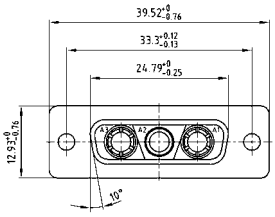
## Solder pin – Straight – Precision machined contacts

RoHS compliant – UL listed, File No.: E228329

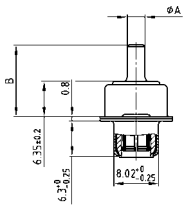
### DESCRIPTION

- Coded socket connectors = 1 plug and 2 socket contacts
- Coded plug connectors = 2 plugs and 1 socket contact
- 707 VDC (other DWV on request)
- Mounting styles: - with through-hole Ø .118"/3.0 mm
  - with 4-40 UNC threaded insert (M3 on request)
  - with 4-40 UNC threaded rear spacer (M3 on request)
  - with 4-40 UNC threaded rear spacer, PCB clip, .291"/7.4 mm (M3 on request)
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

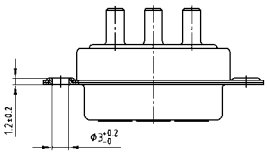
### SOCKET CONNECTOR



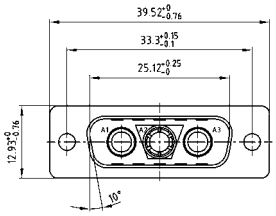
| Termination Code | Current Rating | Ø A | B ± 0,3 | PCB Thickness |
|---|---|---|---|---|
| 48 | 20A | 1.95 | 9.65 | 1.6 |
| 49 | 20A | 2.60 | 10.65 | 1.6 |
| 50 | 20A | 2.85 | 10.05 | 1.6 |
| 51 | 30A | 3.18 | 12.85 | 1.6/ 2.3/ 3.2 |
| 52 | 40A | 3.75 | 11.10 | 1.6/ 2.3/ 3.2 |

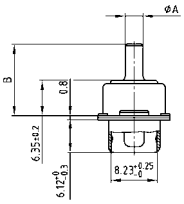


Mounting style: Through-hole

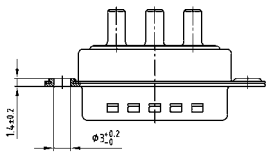


### PLUG CONNECTOR





Mounting style: Through-hole



### ORDER DATA

**SOCKET CONNECTOR**

| Type | Mounting style | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3C | Through-hole | .080"/1.95 | 47 nF | 3F3CSA 22 S48A10X |
| 3W3C | Through-hole | .102"/2.60 | 47 nF | 3F3CSA 22 S49A10X |
| 3W3C | Through-hole | .110"/2.85 | 47 nF | 3F3CSA 22 S50A10X |
| 3W3C | Through-hole | .130"/3.18 | 47 nF | 3F3CSA 22 S51A10X |
| 3W3C | Through-hole | .150"/3.75 | 47 nF | 3F3CSA 22 S52A10X |

**PLUG CONNECTOR**

| Type | Mounting style | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3C | Through-hole | .080"/1.95 | 47 nF | 3F3CPA 22 S48A10X |
| 3W3C | Through-hole | .102"/2.60 | 47 nF | 3F3CPA 22 S49A10X |
| 3W3C | Through-hole | .110"/2.85 | 47 nF | 3F3CPA 22 S50A10X |
| 3W3C | Through-hole | .130"/3.18 | 47 nF | 3F3CPA 22 S51A10X |
| 3W3C | Through-hole | .150"/3.75 | 47 nF | 3F3CPA 22 S52A10X |

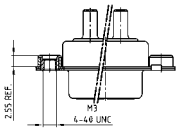
For other capacitance values refer to the part number creator.

| Capacitance value | Code |
|---|---|
| 100 nF | 28 |
| 47 nF | 22 |
| 12 nF | 14 |
| 10 nF | 12 |
| 5 nF | 08 |
| 1.3 nF | 05 |

# C-Filter Combination D-SUB 3W3C – Mounting styles

## Solder pin – Straight – Precision machined contacts

### Order data

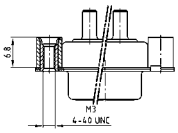



**Socket connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3C | Threaded insert | .080"/1.95 | 47 nF | 3F3CSA 22 S48A30X |
| 3W3C | Threaded insert | .102"/2.60 | 47 nF | 3F3CSA 22 S49A30X |
| 3W3C | Threaded insert | .110"/2.85 | 47 nF | 3F3CSA 22 S50A30X |
| 3W3C | Threaded insert | .130"/3.18 | 47 nF | 3F3CSA 22 S51A30X |
| 3W3C | Threaded insert | .150"/3.75 | 47 nF | 3F3CSA 22 S52A30X |

**Plug connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3C | Threaded insert | .080"/1.95 | 47 nF | 3F3CPA 22 S48A30X |
| 3W3C | Threaded insert | .102"/2.60 | 47 nF | 3F3CPA 22 S49A30X |
| 3W3C | Threaded insert | .110"/2.85 | 47 nF | 3F3CPA 22 S50A30X |
| 3W3C | Threaded insert | .130"/3.18 | 47 nF | 3F3CPA 22 S51A30X |
| 3W3C | Threaded insert | .150"/3.75 | 47 nF | 3F3CPA 22 S52A30X |



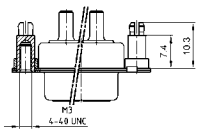

**Socket connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3C | Threaded rear spacer | .080"/1.95 | 47 nF | 3F3CSA 22 S48A50X |
| 3W3C | Threaded rear spacer | .102"/2.60 | 47 nF | 3F3CSA 22 S49A50X |
| 3W3C | Threaded rear spacer | .110"/2.85 | 47 nF | 3F3CSA 22 S50A50X |
| 3W3C | Threaded rear spacer | .130"/3.18 | 47 nF | 3F3CSA 22 S51A50X |
| 3W3C | Threaded rear spacer | .150"/3.75 | 47 nF | 3F3CSA 22 S52A50X |

**Plug connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3C | Threaded rear spacer | .080"/1.95 | 47 nF | 3F3CPA 22 S48A50X |
| 3W3C | Threaded rear spacer | .102"/2.60 | 47 nF | 3F3CPA 22 S49A50X |
| 3W3C | Threaded rear spacer | .110"/2.85 | 47 nF | 3F3CPA 22 S50A50X |
| 3W3C | Threaded rear spacer | .130"/3.18 | 47 nF | 3F3CPA 22 S51A50X |
| 3W3C | Threaded rear spacer | .150"/3.75 | 47 nF | 3F3CPA 22 S52A50X |

.291"/7.4 mm for .063"/1.6 mm circuit board thickness. (Length of spacer .256"/6.5 mm on request)



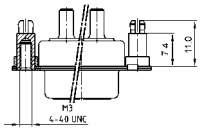

**Socket connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3C | Threaded rear spacer PCB clip | .080"/1.95 | 47 nF | 3F3CSA 22 S48E20X |
| 3W3C | Threaded rear spacer PCB clip | .102"/2.60 | 47 nF | 3F3CSA 22 S49E20X |
| 3W3C | Threaded rear spacer PCB clip | .110"/2.85 | 47 nF | 3F3CSA 22 S50E20X |
| 3W3C | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 3F3CSA 22 S51E20X |
| 3W3C | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 3F3CSA 22 S52E20X |

**Plug connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3C | Threaded rear spacer PCB clip | .080"/1.95 | 47 nF | 3F3CPA 22 S48E20X |
| 3W3C | Threaded rear spacer PCB clip | .102"/2.60 | 47 nF | 3F3CPA 22 S49E20X |
| 3W3C | Threaded rear spacer PCB clip | .110"/2.85 | 47 nF | 3F3CPA 22 S50E20X |
| 3W3C | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 3F3CPA 22 S51E20X |
| 3W3C | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 3F3CPA 22 S52E20X |

.291"/7.4 mm for .091"/2.3 mm circuit board thickness. (Length of spacer .256"/6.5 mm on request)



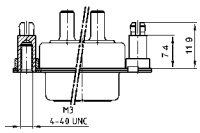

**Socket connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3C | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 3F3CSA 22 S51E40X |
| 3W3C | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 3F3CSA 22 S52E40X |

**Plug connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3C | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 3F3CPA 22 S51E40X |
| 3W3C | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 3F3CPA 22 S52E40X |

.291"/7.4 mm for .126"/3.2 mm circuit board thickness. (Length of spacer .256"/6.5 mm on request)




**Socket connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3C | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 3F3CSA 22 S51E60X |
| 3W3C | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 3F3CSA 22 S52E60X |

**Plug connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3C | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 3F3CPA 22 S51E60X |
| 3W3C | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 3F3CPA 22 S52E60X |

For other capacitance values refer to the part number creator.

# C-FILTER COMBINATION D-SUB 5W5

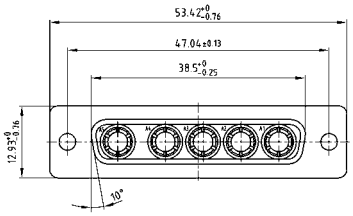
## Solder pin – Straight – Precision machined contacts

RoHS compliant – UL listed, File No.: E228329

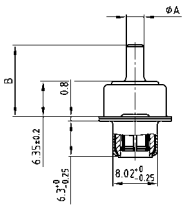
### DESCRIPTION

- 707 VDC (other DWV on request)
- Mounting styles:
  - with through-hole Ø .118"/3.0 mm
  - with 4-40 UNC threaded insert
  - with 4-40 UNC threaded rear spacer
  - with 4-40 UNC threaded rear spacer, PCB clip, .291"/7.4 mm
- Mounting styles with M3 thread on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

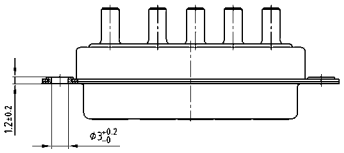
### SOCKET CONNECTOR



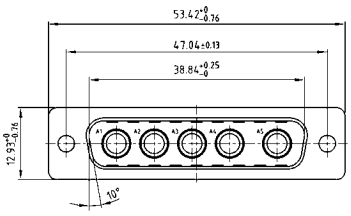
| Termination Code | Current Rating | Ø A | B ± 0,3 | PCB Thickness |
|---|---|---|---|---|
| 48 | 20A | 1.95 | 9.65 | 1.6 |
| 49 | 20A | 2.60 | 10.65 | 1.6 |
| 50 | 20A | 2.85 | 10.05 | 1.6 |
| 51 | 30A | 3.18 | 12.85 | 1.6/ 2.3/ 3.2 |
| 52 | 40A | 3.75 | 11.10 | 1.6/ 2.3/ 3.2 |

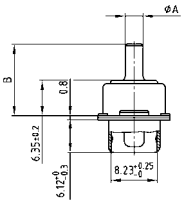


Mounting style: Through-hole

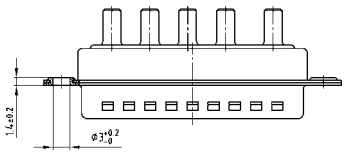


### PLUG CONNECTOR





Mounting style: Through-hole



### ORDER DATA

**SOCKET CONNECTOR**

| Type | Mounting style | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 5W5 | Through-hole | .080"/1.95 | 47 nF | 5F5SSA 22 S48A10X |
| 5W5 | Through-hole | .102"/2.60 | 47 nF | 5F5SSA 22 S49A10X |
| 5W5 | Through-hole | .110"/2.85 | 47 nF | 5F5SSA 22 S50A10X |
| 5W5 | Through-hole | .130"/3.18 | 47 nF | 5F5SSA 22 S51A10X |
| 5W5 | Through-hole | .150"/3.75 | 47 nF | 5F5SSA 22 S52A10X |

**PLUG CONNECTOR**

| Type | Mounting style | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 5W5 | Through-hole | .080"/1.95 | 47 nF | 5F5SPA 22 S48A10X |
| 5W5 | Through-hole | .102"/2.60 | 47 nF | 5F5SPA 22 S49A10X |
| 5W5 | Through-hole | .110"/2.85 | 47 nF | 5F5SPA 22 S50A10X |
| 5W5 | Through-hole | .130"/3.18 | 47 nF | 5F5SPA 22 S51A10X |
| 5W5 | Through-hole | .150"/3.75 | 47 nF | 5F5SPA 22 S52A10X |

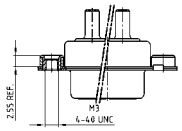
For other capacitance values refer to the part number creator.

| Capacitance value | Code |
|---|---|
| 100 nF | 28 |
| 47 nF | 22 |
| 12 nF | 14 |
| 10 nF | 12 |
| 5 nF | 08 |
| 1.3 nF | 05 |

# C-Filter Combination D-SUB 5W5 – Mounting styles

## Solder pin – Straight – Precision machined contacts

### Order data

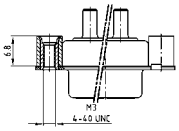



**Socket connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 5W5 | Threaded insert | .080"/1.95 | 47 nF | 5F5SSA 22 S48A30X |
| 5W5 | Threaded insert | .102"/2.60 | 47 nF | 5F5SSA 22 S49A30X |
| 5W5 | Threaded insert | .110"/2.85 | 47 nF | 5F5SSA 22 S50A30X |
| 5W5 | Threaded insert | .130"/3.18 | 47 nF | 5F5SSA 22 S51A30X |
| 5W5 | Threaded insert | .150"/3.75 | 47 nF | 5F5SSA 22 S52A30X |

**Plug connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 5W5 | Threaded insert | .080"/1.95 | 47 nF | 5F5SPA 22 S48A30X |
| 5W5 | Threaded insert | .102"/2.60 | 47 nF | 5F5SPA 22 S49A30X |
| 5W5 | Threaded insert | .110"/2.85 | 47 nF | 5F5SPA 22 S50A30X |
| 5W5 | Threaded insert | .130"/3.18 | 47 nF | 5F5SPA 22 S51A30X |
| 5W5 | Threaded insert | .150"/3.75 | 47 nF | 5F5SPA 22 S52A30X |



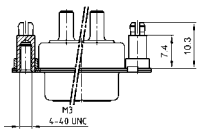

**Socket connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 5W5 | Threaded rear spacer | .080"/1.95 | 47 nF | 5F5SSA 22 S48A50X |
| 5W5 | Threaded rear spacer | .102"/2.60 | 47 nF | 5F5SSA 22 S49A50X |
| 5W5 | Threaded rear spacer | .110"/2.85 | 47 nF | 5F5SSA 22 S50A50X |
| 5W5 | Threaded rear spacer | .130"/3.18 | 47 nF | 5F5SSA 22 S51A50X |
| 5W5 | Threaded rear spacer | .150"/3.75 | 47 nF | 5F5SSA 22 S52A50X |

**Plug connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 5W5 | Threaded rear spacer | .080"/1.95 | 47 nF | 5F5SPA 22 S48A50X |
| 5W5 | Threaded rear spacer | .102"/2.60 | 47 nF | 5F5SPA 22 S49A50X |
| 5W5 | Threaded rear spacer | .110"/2.85 | 47 nF | 5F5SPA 22 S50A50X |
| 5W5 | Threaded rear spacer | .130"/3.18 | 47 nF | 5F5SPA 22 S51A50X |
| 5W5 | Threaded rear spacer | .150"/3.75 | 47 nF | 5F5SPA 22 S52A50X |

.291"/7.4 mm for .063"/1.6 mm circuit board thickness. (Length of spacer .256"/6.5 mm on request)



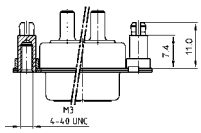

**Socket connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 5W5 | Threaded rear spacer PCB clip | .080"/1.95 | 47 nF | 5F5SSA 22 S48E20X |
| 5W5 | Threaded rear spacer PCB clip | .102"/2.60 | 47 nF | 5F5SSA 22 S49E20X |
| 5W5 | Threaded rear spacer PCB clip | .110"/2.85 | 47 nF | 5F5SSA 22 S50E20X |
| 5W5 | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 5F5SSA 22 S51E20X |
| 5W5 | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 5F5SSA 22 S52E20X |

**Plug connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 5W5 | Threaded rear spacer PCB clip | .080"/1.95 | 47 nF | 5F5SPA 22 S48E20X |
| 5W5 | Threaded rear spacer PCB clip | .102"/2.60 | 47 nF | 5F5SPA 22 S49E20X |
| 5W5 | Threaded rear spacer PCB clip | .110"/2.85 | 47 nF | 5F5SPA 22 S50E20X |
| 5W5 | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 5F5SPA 22 S51E20X |
| 5W5 | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 5F5SPA 22 S52E20X |

.291"/7.4 mm for .091"/2.3 mm circuit board thickness. (Length of spacer .256"/6.5 mm on request)



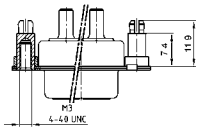

**Socket connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 5W5 | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 5F5SSA 22 S51E40X |
| 5W5 | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 5F5SSA 22 S52E40X |

**Plug connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 5W5 | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 5F5SPA 22 S51E40X |
| 5W5 | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 5F5SPA 22 S52E40X |

.291"/7.4 mm for .126"/3.2 mm circuit board thickness. (Length of spacer .256"/6.5 mm on request)




**Socket connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 5W5 | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 5F5SSA 22 S51E60X |
| 5W5 | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 5F5SSA 22 S52E60X |

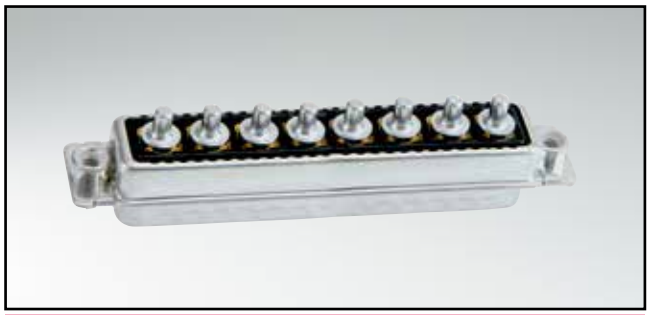
**Plug connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 5W5 | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 5F5SPA 22 S51E60X |
| 5W5 | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 5F5SPA 22 S52E60X |

For other capacitance values refer to the part number creator.

# C-FILTER COMBINATION D-SUB 8W8

## Solder pin – Straight – Precision machined contacts

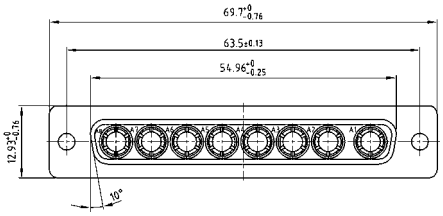


RoHS compliant – UL listed, File No.: E228329

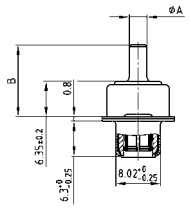
### DESCRIPTION

- 707 VDC (other DWV on request)
- Mounting styles:
  - with through-hole Ø .118"/3.0 mm
  - with 4-40 UNC threaded insert
  - with 4-40 UNC threaded rear spacer
  - with 4-40 UNC threaded rear spacer, PCB clip, .291"/7.4 mm
- Mounting styles with M3 thread on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

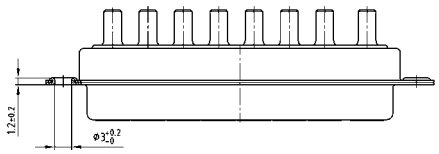
### SOCKET CONNECTOR



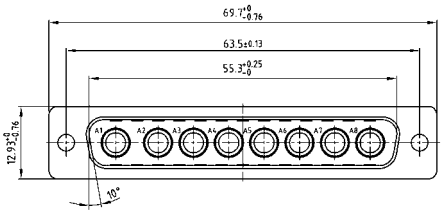
| Termination Code | Current Rating | Ø A | B ± 0,3 | PCB Thickness |
|---|---|---|---|---|
| 48 | 20A | 1.95 | 9.65 | 1.6 |
| 49 | 20A | 2.60 | 10.65 | 1.6 |
| 50 | 20A | 2.85 | 10.05 | 1.6 |
| 51 | 30A | 3.18 | 12.85 | 1.6/ 2.3/ 3.2 |
| 52 | 40A | 3.75 | 11.10 | 1.6/ 2.3/ 3.2 |

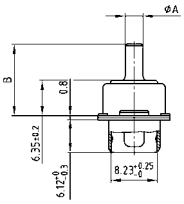


Mounting style: Through-hole

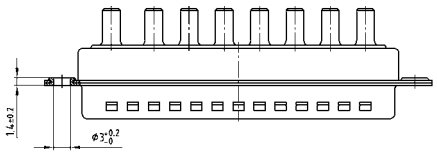


### PLUG CONNECTOR





Mounting style: Through-hole



### ORDER DATA

**SOCKET CONNECTOR**

| Type | Mounting style | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 8W8 | Through-hole | .080"/1.95 | 47 nF | 8F8SSA 22 S48A10X |
| 8W8 | Through-hole | .102"/2.60 | 47 nF | 8F8SSA 22 S49A10X |
| 8W8 | Through-hole | .110"/2.85 | 47 nF | 8F8SSA 22 S50A10X |
| 8W8 | Through-hole | .130"/3.18 | 47 nF | 8F8SSA 22 S51A10X |
| 8W8 | Through-hole | .150"/3.75 | 47 nF | 8F8SSA 22 S52A10X |

**PLUG CONNECTOR**

| Type | Mounting style | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 8W8 | Through-hole | .080"/1.95 | 47 nF | 8F8SPA 22 S48A10X |
| 8W8 | Through-hole | .102"/2.60 | 47 nF | 8F8SPA 22 S49A10X |
| 8W8 | Through-hole | .110"/2.85 | 47 nF | 8F8SPA 22 S50A10X |
| 8W8 | Through-hole | .130"/3.18 | 47 nF | 8F8SPA 22 S51A10X |
| 8W8 | Through-hole | .150"/3.75 | 47 nF | 8F8SPA 22 S52A10X |

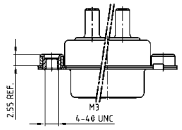
For other capacitance values refer to the part number creator.

| Capacitance value | Code |
|---|---|
| 100 nF | 28 |
| 47 nF | 22 |
| 12 nF | 14 |
| 10 nF | 12 |
| 5 nF | 08 |
| 1.3 nF | 05 |

# C-Filter Combination D-SUB 8W8 – Mounting styles

## Solder pin – Straight – Precision machined contacts

### Order data

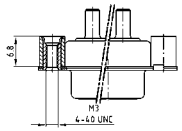



**Socket connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 8W8 | Threaded insert | .080"/1.95 | 47 nF | 8F8SSA 22 S48A30X |
| 8W8 | Threaded insert | .102"/2.60 | 47 nF | 8F8SSA 22 S49A30X |
| 8W8 | Threaded insert | .110"/2.85 | 47 nF | 8F8SSA 22 S50A30X |
| 8W8 | Threaded insert | .130"/3.18 | 47 nF | 8F8SSA 22 S51A30X |
| 8W8 | Threaded insert | .150"/3.75 | 47 nF | 8F8SSA 22 S52A30X |

**Plug connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 8W8 | Threaded insert | .080"/1.95 | 47 nF | 8F8SPA 22 S48A30X |
| 8W8 | Threaded insert | .102"/2.60 | 47 nF | 8F8SPA 22 S49A30X |
| 8W8 | Threaded insert | .110"/2.85 | 47 nF | 8F8SPA 22 S50A30X |
| 8W8 | Threaded insert | .130"/3.18 | 47 nF | 8F8SPA 22 S51A30X |
| 8W8 | Threaded insert | .150"/3.75 | 47 nF | 8F8SPA 22 S52A30X |



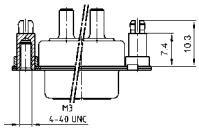

**Socket connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 8W8 | Threaded rear spacer | .080"/1.95 | 47 nF | 8F8SSA 22 S48A50X |
| 8W8 | Threaded rear spacer | .102"/2.60 | 47 nF | 8F8SSA 22 S49A50X |
| 8W8 | Threaded rear spacer | .110"/2.85 | 47 nF | 8F8SSA 22 S50A50X |
| 8W8 | Threaded rear spacer | .130"/3.18 | 47 nF | 8F8SSA 22 S51A50X |
| 8W8 | Threaded rear spacer | .150"/3.75 | 47 nF | 8F8SSA 22 S52A50X |

**Plug connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 8W8 | Threaded rear spacer | .080"/1.95 | 47 nF | 8F8SPA 22 S48A50X |
| 8W8 | Threaded rear spacer | .102"/2.60 | 47 nF | 8F8SPA 22 S49A50X |
| 8W8 | Threaded rear spacer | .110"/2.85 | 47 nF | 8F8SPA 22 S50A50X |
| 8W8 | Threaded rear spacer | .130"/3.18 | 47 nF | 8F8SPA 22 S51A50X |
| 8W8 | Threaded rear spacer | .150"/3.75 | 47 nF | 8F8SPA 22 S52A50X |

.291"/7.4 mm for .063"/1.6 mm circuit board thickness. (Length of spacer .256"/6.5 mm on request)



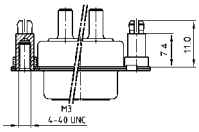

**Socket connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 8W8 | Threaded rear spacer PCB clip | .080"/1.95 | 47 nF | 8F8SSA 22 S48E20X |
| 8W8 | Threaded rear spacer PCB clip | .102"/2.60 | 47 nF | 8F8SSA 22 S49E20X |
| 8W8 | Threaded rear spacer PCB clip | .110"/2.85 | 47 nF | 8F8SSA 22 S50E20X |
| 8W8 | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 8F8SSA 22 S51E20X |
| 8W8 | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 8F8SSA 22 S52E20X |

**Plug connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 8W8 | Threaded rear spacer PCB clip | .080"/1.95 | 47 nF | 8F8SPA 22 S48E20X |
| 8W8 | Threaded rear spacer PCB clip | .102"/2.60 | 47 nF | 8F8SPA 22 S49E20X |
| 8W8 | Threaded rear spacer PCB clip | .110"/2.85 | 47 nF | 8F8SPA 22 S50E20X |
| 8W8 | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 8F8SPA 22 S51E20X |
| 8W8 | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 8F8SPA 22 S52E20X |

.291"/7.4 mm for .091"/2.3 mm circuit board thickness. (Length of spacer .256"/6.5 mm on request)



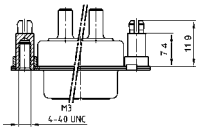

**Socket connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 8W8 | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 8F8SSA 22 S51E40X |
| 8W8 | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 8F8SSA 22 S52E40X |

**Plug connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 8W8 | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 8F8SPA 22 S51E40X |
| 8W8 | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 8F8SPA 22 S52E40X |

.291"/7.4 mm for .126"/3.2 mm circuit board thickness. (Length of spacer .256"/6.5 mm on request)




**Socket connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 8W8 | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 8F8SSA 22 S51E60X |
| 8W8 | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 8F8SSA 22 S52E60X |

**Plug connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 8W8 | Threaded rear spacer PCB clip | .130"/3.18 | 47 nF | 8F8SPA 22 S51E60X |
| 8W8 | Threaded rear spacer PCB clip | .150"/3.75 | 47 nF | 8F8SPA 22 S52E60X |

For other capacitance values refer to the part number creator.

# C-Filter Combination D-SUB 2W2C

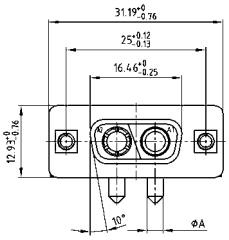
## Solder pin – Angled – Precision machined contacts – Metal bracket

RoHS compliant – UL listed, File No.: E228329

### Description

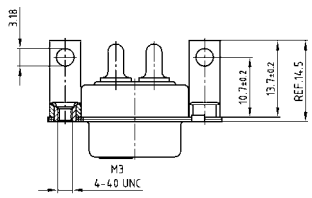
- coded design = 1 plug and 1 socket contact
- 707 VDC (other DWV on request)
- Mounting styles:
  - with mounting bracket and 4-40 UNC threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC threaded insert
- Mounting styles with M3 thread on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

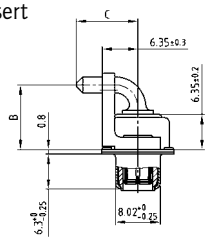
### Socket connector



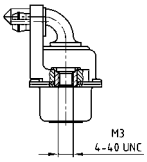
| Termination Code | Current Rating | Ø A | B ± 0.3 | C ± 0.3 |
|---|---|---|---|---|
| 56 | 20A | 2.85 | 11.65 | 11.00 |
| 57 | 30A | 3.18 | 20.35 | 9.50 |
| 58 | 40A | 3.75 | 11.65 | 11.00 |

Mounting style: Mounting bracket, threaded insert

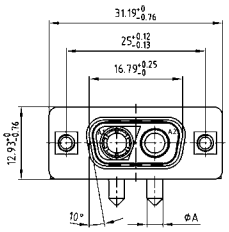




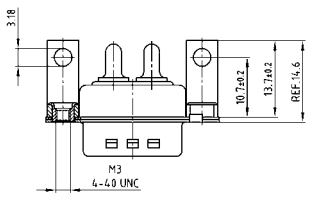
Mounting style: Mounting bracket, PCB clip and threaded insert

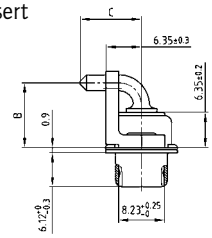


### Plug connector

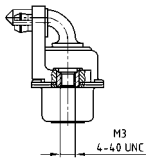


Mounting style: Mounting bracket, threaded insert





Mounting style: Mounting bracket, PCB clip and threaded insert



### Order data

**Socket connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 2W2C | Mounting bracket/Threaded insert | .110"/2.85 | 47 nF | 2F2CSA 22 S56K20X |
| 2W2C | Mounting bracket/Threaded insert | .126"/3.20 | 47 nF | 2F2CSA 22 S57K20X |
| 2W2C | Mounting bracket/Threaded insert | .150"/3.75 | 47 nF | 2F2CSA 22 S58K20X |
| 2W2C | Mounting bracket/PCB clip/Threaded insert | .110"/2.85 | 47 nF | 2F2CSA 22 S56K40X |
| 2W2C | Mounting bracket/PCB clip/Threaded insert | .126"/3.20 | 47 nF | 2F2CSA 22 S57K40X |
| 2W2C | Mounting bracket/PCB clip/Threaded insert | .150"/3.75 | 47 nF | 2F2CSA 22 S58K40X |

**Plug connector**

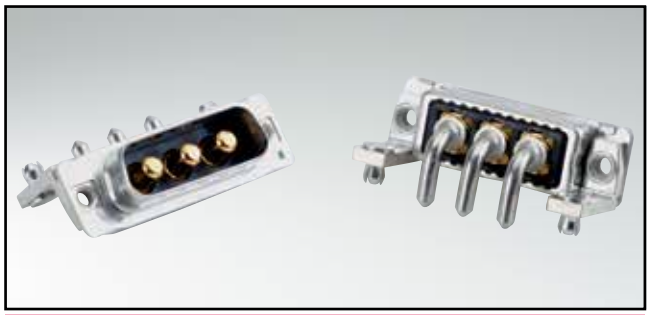
| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 2W2C | Mounting bracket/Threaded insert | .110"/2.85 | 47 nF | 2F2CPA 22 S56K20X |
| 2W2C | Mounting bracket/Threaded insert | .126"/3.20 | 47 nF | 2F2CPA 22 S57K20X |
| 2W2C | Mounting bracket/Threaded insert | .150"/3.75 | 47 nF | 2F2CPA 22 S58K20X |
| 2W2C | Mounting bracket/PCB clip/Threaded insert | .110"/2.85 | 47 nF | 2F2CPA 22 S56K40X |
| 2W2C | Mounting bracket/PCB clip/Threaded insert | .126"/3.20 | 47 nF | 2F2CPA 22 S57K40X |
| 2W2C | Mounting bracket/PCB clip/Threaded insert | .150"/3.75 | 47 nF | 2F2CPA 22 S58K40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness.
For other capacitance values refer to the part number creator.

| Capacitance value | Code |
|---|---|
| 100 nF | 28 |
| 47 nF | 22 |
| 12 nF | 14 |
| 10 nF | 12 |
| 5 nF | 08 |
| 1.3 nF | 05 |

# C-FILTER COMBINATION D-SUB 3W3

## Solder pin – Angled – Precision machined contacts – Metal bracket

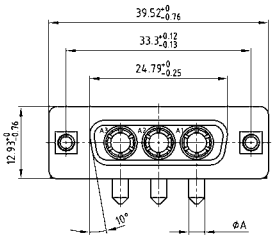


RoHS compliant – UL listed, File No.: E228329

### DESCRIPTION

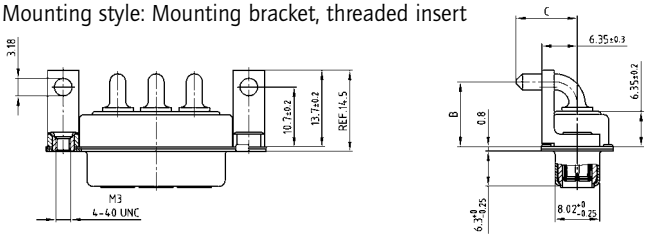
- 707 VDC (other DWV on request)
- Mounting styles:
  - with mounting bracket and 4-40 UNC threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC threaded insert
- Mounting styles with M3 thread on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

### SOCKET CONNECTOR

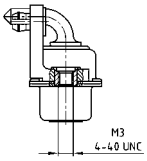


| Termination Code | Current Rating | Ø A | B ± 0.3 | C ± 0.3 |
|---|---|---|---|---|
| 56 | 20A | 2.85 | 11.65 | 11.00 |
| 57 | 30A | 3.18 | 20.35 | 9.50 |
| 58 | 40A | 3.75 | 11.65 | 11.00 |

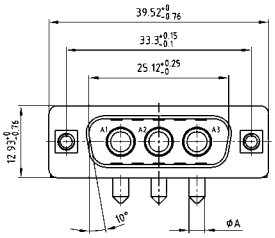
Mounting style: Mounting bracket, threaded insert



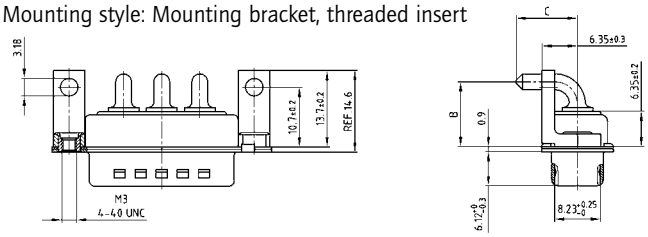
Mounting style: Mounting bracket, PCB clip and threaded insert



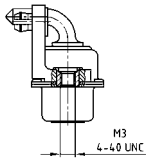
### PLUG CONNECTOR



Mounting style: Mounting bracket, threaded insert



Mounting style: Mounting bracket, PCB clip and threaded insert



### ORDER DATA

**SOCKET CONNECTOR**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3 | Mounting bracket/Threaded insert | .110"/2.85 | 47 nF | 3F3SSA 22 S56K20X |
| 3W3 | Mounting bracket/Threaded insert | .126"/3.20 | 47 nF | 3F3SSA 22 S57K20X |
| 3W3 | Mounting bracket/Threaded insert | .150"/3.75 | 47 nF | 3F3SSA 22 S58K20X |
| 3W3 | Mounting bracket/PCB clip/Threaded insert | .110"/2.85 | 47 nF | 3F3SSA 22 S56K40X |
| 3W3 | Mounting bracket/PCB clip/Threaded insert | .126"/3.20 | 47 nF | 3F3SSA 22 S57K40X |
| 3W3 | Mounting bracket/PCB clip/Threaded insert | .150"/3.75 | 47 nF | 3F3SSA 22 S58K40X |

**PLUG CONNECTOR**

| Type | Mounting style | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3 | Mounting bracket/Threaded insert | .110"/2.85 | 47 nF | 3F3SPA 22 S56K20X |
| 3W3 | Mounting bracket/Threaded insert | .126"/3.20 | 47 nF | 3F3SPA 22 S57K20X |
| 3W3 | Mounting bracket/Threaded insert | .150"/3.75 | 47 nF | 3F3SPA 22 S58K20X |
| 3W3 | Mounting bracket/PCB clip/Threaded insert | .110"/2.85 | 47 nF | 3F3SPA 22 S56K40X |
| 3W3 | Mounting bracket/PCB clip/Threaded insert | .126"/3.20 | 47 nF | 3F3SPA 22 S57K40X |
| 3W3 | Mounting bracket/PCB clip/Threaded insert | .150"/3.75 | 47 nF | 3F3SPA 22 S58K40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness.
For other capacitance values refer to the part number creator.

| Capacitance value | Code |
|---|---|
| 100 nF | 28 |
| 47 nF | 22 |
| 12 nF | 14 |
| 10 nF | 12 |
| 5 nF | 08 |
| 1.3 nF | 05 |

# C-FILTER COMBINATION D-SUB 3W3C

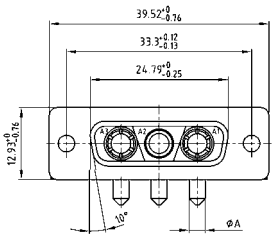
## Solder pin – Angled – Precision machined contacts – Metal bracket

RoHS compliant – UL listed, File No.: E228329

### DESCRIPTION

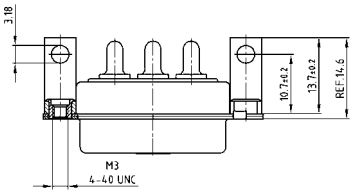
- Coded socket connector = 1 plug and 2 socket contacts
- Coded plug connector = 2 plugs and 1 socket contact
- 707 VDC (other DWV on request)
- Mounting styles:
  - with mounting bracket and 4-40 UNC threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC threaded insert
- Mounting styles with M3 thread on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

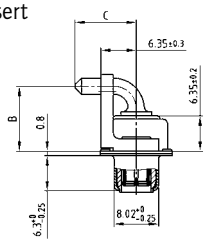
### SOCKET CONNECTOR



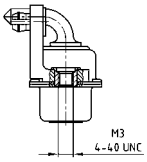
| Termination Code | Current Rating | Ø A | B ± 0.3 | C ± 0.3 |
|---|---|---|---|---|
| 56 | 20A | 2.85 | 11.65 | 11.00 |
| 57 | 30A | 3.18 | 20.35 | 9.50 |
| 58 | 40A | 3.75 | 11.65 | 11.00 |

Mounting style: Mounting bracket, threaded insert

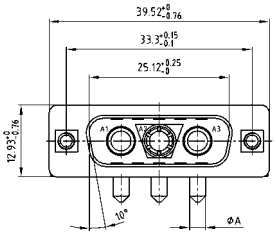




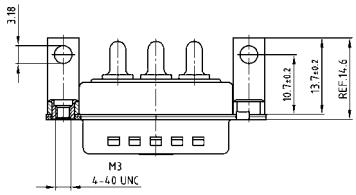
Mounting style:
Mounting bracket, PCB clip and threaded insert

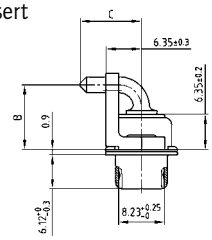


### PLUG CONNECTOR

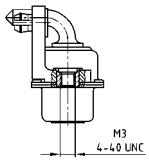


Mounting style: Mounting bracket, threaded insert





Mounting style:
Mounting bracket, PCB clip and threaded insert



### ORDER DATA

**SOCKET CONNECTOR**

| Type | Mounting style | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3C | Mounting bracket/Threaded insert | .110"/2.85 | 47 nF | 3F3CSA 22 S56K20X |
| 3W3C | Mounting bracket/Threaded insert | .126"/3.20 | 47 nF | 3F3CSA 22 S57K20X |
| 3W3C | Mounting bracket/Threaded insert | .150"/3.75 | 47 nF | 3F3CSA 22 S58K20X |
| 3W3C | Mounting bracket/PCB clip/Threaded insert | .110"/2.85 | 47 nF | 3F3CSA 22 S56K40X |
| 3W3C | Mounting bracket/PCB clip/Threaded insert | .126"/3.20 | 47 nF | 3F3CSA 22 S57K40X |
| 3W3C | Mounting bracket/PCB clip/Threaded insert | .150"/3.75 | 47 nF | 3F3CSA 22 S58K40X |

**PLUG CONNECTOR**

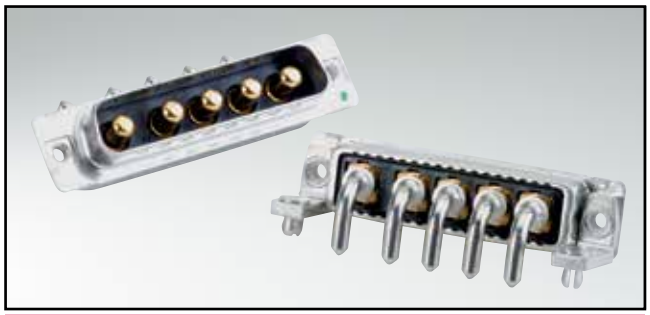
| Type | Mounting style | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3C | Mounting bracket/Threaded insert | .110"/2.85 | 47 nF | 3F3CPA 22 S56K20X |
| 3W3C | Mounting bracket/Threaded insert | .126"/3.20 | 47 nF | 3F3CPA 22 S57K20X |
| 3W3C | Mounting bracket/Threaded insert | .150"/3.75 | 47 nF | 3F3CPA 22 S58K20X |
| 3W3C | Mounting bracket/PCB clip/Threaded insert | .110"/2.85 | 47 nF | 3F3CPA 22 S56K40X |
| 3W3C | Mounting bracket/PCB clip/Threaded insert | .126"/3.20 | 47 nF | 3F3CPA 22 S57K40X |
| 3W3C | Mounting bracket/PCB clip/Threaded insert | .150"/3.75 | 47 nF | 3F3CPA 22 S58K40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness.
For other capacitance values refer to the part number creator.

| Capacitance value | Code |
|---|---|
| 100 nF | 28 |
| 47 nF | 22 |
| 12 nF | 14 |
| 10 nF | 12 |
| 5 nF | 08 |
| 1.3 nF | 05 |

# C-FILTER COMBINATION D-SUB 5W5

## Solder pin – Angled – Precision machined contacts – Metal bracket

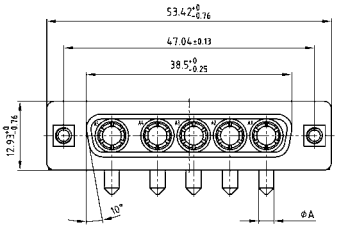


RoHS compliant – UL listed, File No.: E228329

### DESCRIPTION

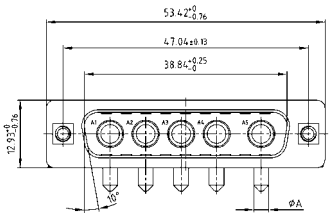
- 707 VDC (other DWV on request)
- Mounting styles:
  - with mounting bracket and 4-40 UNC threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC threaded insert
- Mounting styles with M3 thread on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

### SOCKET CONNECTOR

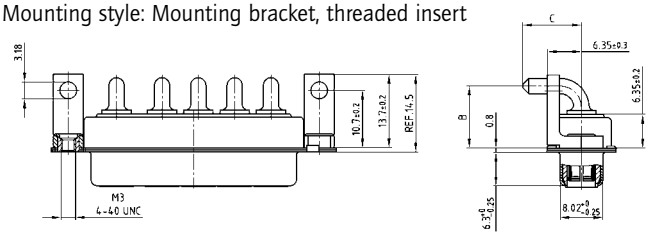


| Termination Code | Current Rating | Ø A | B ± 0.3 | C ± 0.3 |
|---|---|---|---|---|
| 56 | 20A | 2.85 | 11.65 | 11.00 |
| 57 | 30A | 3.18 | 20.35 | 9.50 |
| 58 | 40A | 3.75 | 11.65 | 11.00 |

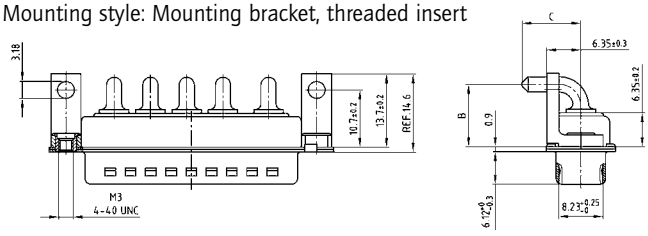
### PLUG CONNECTOR



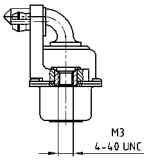
Mounting style: Mounting bracket, threaded insert



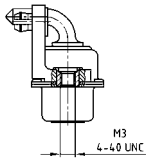
Mounting style: Mounting bracket, threaded insert



Mounting style:
Mounting bracket, PCB clip and threaded insert



Mounting style:
Mounting bracket, PCB clip and threaded insert



### ORDER DATA

**SOCKET CONNECTOR**

| Type | Mounting style | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 5W5 | Mounting bracket/Threaded insert | .110"/2.85 | 47 nF | 5F5SSA 22 S56K20X |
| 5W5 | Mounting bracket/Threaded insert | .126"/3.20 | 47 nF | 5F5SSA 22 S57K20X |
| 5W5 | Mounting bracket/Threaded insert | .150"/3.75 | 47 nF | 5F5SSA 22 S58K20X |
| 5W5 | Mounting bracket/PCB clip/Threaded insert | .110"/2.85 | 47 nF | 5F5SSA 22 S56K40X |
| 5W5 | Mounting bracket/PCB clip/Threaded insert | .126"/3.20 | 47 nF | 5F5SSA 22 S57K40X |
| 5W5 | Mounting bracket/PCB clip/Threaded insert | .150"/3.75 | 47 nF | 5F5SSA 22 S58K40X |

**PLUG CONNECTOR**

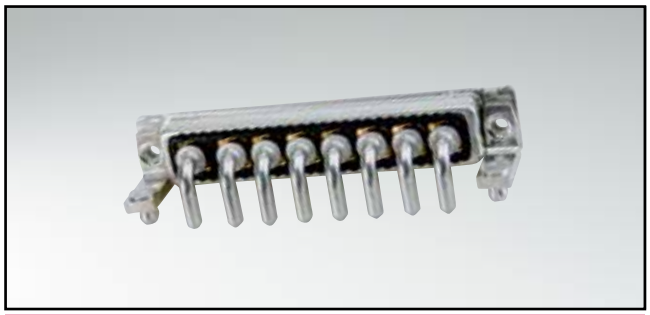
| Type | Mounting style | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 5W5 | Mounting bracket/Threaded insert | .110"/2.85 | 47 nF | 5F5SPA 22 S56K20X |
| 5W5 | Mounting bracket/Threaded insert | .126"/3.20 | 47 nF | 5F5SPA 22 S57K20X |
| 5W5 | Mounting bracket/Threaded insert | .150"/3.75 | 47 nF | 5F5SPA 22 S58K20X |
| 5W5 | Mounting bracket/PCB clip/Threaded insert | .110"/2.85 | 47 nF | 5F5SPA 22 S56K40X |
| 5W5 | Mounting bracket/PCB clip/Threaded insert | .126"/3.20 | 47 nF | 5F5SPA 22 S57K40X |
| 5W5 | Mounting bracket/PCB clip/Threaded insert | .150"/3.75 | 47 nF | 5F5SPA 22 S58K40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness.
For other capacitance values refer to the part number creator.

| Capacitance value | Code |
|---|---|
| 100 nF | 28 |
| 47 nF | 22 |
| 12 nF | 14 |
| 10 nF | 12 |
| 5 nF | 08 |
| 1.3 nF | 05 |

# C-FILTER COMBINATION D-SUB 8W8

## Solder pin – Angled – Precision machined contacts – Metal bracket

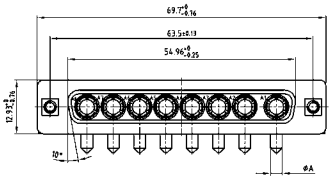


RoHS compliant – UL listed, File No.: E228329

### DESCRIPTION

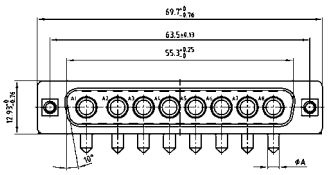
- 707 VDC (other DWV on request)
- Mounting styles:
  - with mounting bracket and 4-40 UNC threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC threaded insert
- Mounting styles with M3 thread on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

### SOCKET CONNECTOR

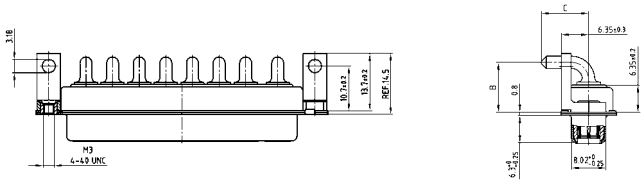


| Termination Code | Current Rating | Ø A | B ± 0.3 | C ± 0.3 |
|---|---|---|---|---|
| 56 | 20A | 2.85 | 11.65 | 11.00 |
| 57 | 30A | 3.18 | 20.35 | 9.50 |
| 58 | 40A | 3.75 | 11.65 | 11.00 |

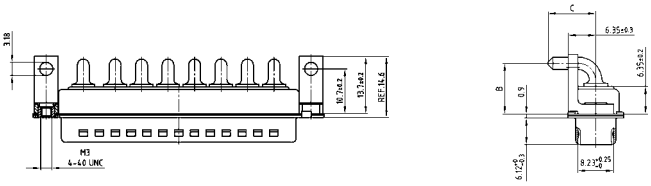
### PLUG CONNECTOR



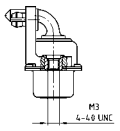
Mounting style: Mounting bracket, threaded insert



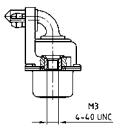
Mounting style: Mounting bracket, threaded insert



Mounting style:
Mounting bracket, PCB clip and threaded insert



Mounting style:
Mounting bracket, PCB clip and threaded insert



### ORDER DATA

**SOCKET CONNECTOR**

| Type | Mounting style | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 8W8 | Mounting bracket/Threaded insert | .110"/2.85 | 47 nF | 8F8SSA 22 S56K20X |
| 8W8 | Mounting bracket/Threaded insert | .126"/3.20 | 47 nF | 8F8SSA 22 S57K20X |
| 8W8 | Mounting bracket/Threaded insert | .150"/3.75 | 47 nF | 8F8SSA 22 S58K20X |
| 8W8 | Mounting bracket/PCB clip/Threaded insert | .110"/2.85 | 47 nF | 8F8SSA 22 S56K40X |
| 8W8 | Mounting bracket/PCB clip/Threaded insert | .126"/3.20 | 47 nF | 8F8SSA 22 S57K40X |
| 8W8 | Mounting bracket/PCB clip/Threaded insert | .150"/3.75 | 47 nF | 8F8SSA 22 S58K40X |

**PLUG CONNECTOR**

| Type | Mounting style | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 8W8 | Mounting bracket/Threaded insert | .110"/2.85 | 47 nF | 8F8SPA 22 S56K20X |
| 8W8 | Mounting bracket/Threaded insert | .126"/3.20 | 47 nF | 8F8SPA 22 S57K20X |
| 8W8 | Mounting bracket/Threaded insert | .150"/3.75 | 47 nF | 8F8SPA 22 S58K20X |
| 8W8 | Mounting bracket/PCB clip/Threaded insert | .110"/2.85 | 47 nF | 8F8SPA 22 S56K40X |
| 8W8 | Mounting bracket/PCB clip/Threaded insert | .126"/3.20 | 47 nF | 8F8SPA 22 S57K40X |
| 8W8 | Mounting bracket/PCB clip/Threaded insert | .150"/3.75 | 47 nF | 8F8SPA 22 S58K40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness.
For other capacitance values refer to the part number creator.

| Capacitance value | Code |
|---|---|
| 100 nF | 28 |
| 47 nF | 22 |
| 12 nF | 14 |
| 10 nF | 12 |
| 5 nF | 08 |
| 1.3 nF | 05 |

# C-FILTER COMBINATION D-SUB 2W2C

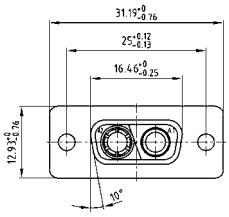
## Press-fit contact – Straight – Precision machined contacts

RoHS compliant – UL listed, File No.: E228329

### DESCRIPTION

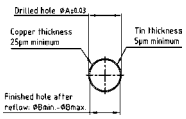
- Coded design = 1 plug and 1 socket contact
- 707 VDC (other DWV on request)
- Mounting styles:
  - with threaded rear spacer and 4-40 UNC threaded insert
  - with rear press-fit spacer and 4-40 UNC threaded insert
- Mounting styles with M3 thread on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

### SOCKET CONNECTOR

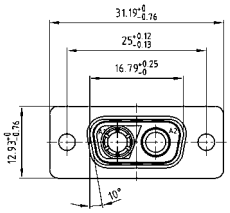


| Termination Code | Current Rating | A ± 0.03 | B min. | B max. |
|---|---|---|---|---|
| P1 | 30A | 3.13 | 2.96 | 3.11 |
| P2 | 30A | 3.27 | 3.10 | 3.25 |
| P4 | 30A | 3.22 | 3.02 | 3.20 |

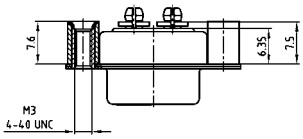
PCB hole drilling for high power press fit contact.

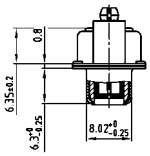



### PLUG CONNECTOR

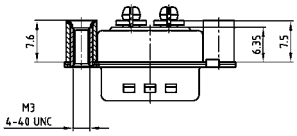


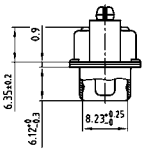
Mounting style: 4-40 UNC threaded rear spacer



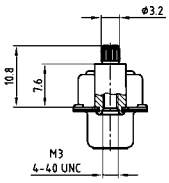



Mounting style: 4-40 UNC threaded rear spacer

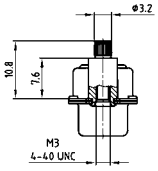


Mounting style: 4-40 UNC rear press-fit spacer



Mounting style: 4-40 UNC rear press-fit spacer




### ORDER DATA

**SOCKET CONNECTOR**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 2W2C | Threaded rear spacer | .120"/3.13 | 47 nF | 2F2CSA 22 SP1AA0X |
| 2W2C | Threaded rear spacer | .130"/3.27 | 47 nF | 2F2CSA 22 SP2AA0X |
| 2W2C | Threaded rear spacer | .120"/3.22 | 47 nF | 2F2CSA 22 SP4AA0X |
| 2W2C | Rear press-fit spacer | .120"/3.13 | 47 nF | 2F2CSA 22 SP1W40X |
| 2W2C | Rear press-fit spacer | .120"/3.27 | 47 nF | 2F2CSA 22 SP2W40X |
| 2W2C | Rear press-fit spacer | .120"/3.22 | 47 nF | 2F2CSA 22 SP4W40X |

**PLUG CONNECTOR**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 2W2C | Threaded rear spacer | .120"/3.13 | 47 nF | 2F2CPA 22 SP1AA0X |
| 2W2C | Threaded rear spacer | .130"/3.27 | 47 nF | 2F2CPA 22 SP2AA0X |
| 2W2C | Threaded rear spacer | .120"/3.22 | 47 nF | 2F2CPA 22 SP4AA0X |
| 2W2C | Rear press-fit spacer | .120"/3.13 | 47 nF | 2F2CPA 22 SP1W40X |
| 2W2C | Rear press-fit spacer | .120"/3.27 | 47 nF | 2F2CPA 22 SP2W40X |
| 2W2C | Rear press-fit spacer | .120"/3.22 | 47 nF | 2F2CPA 22 SP4W40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness.
For other capacitance values refer to the part number creator.

| Capacitance value | Code |
|---|---|
| 100 nF | 28 |
| 47 nF | 22 |
| 12 nF | 14 |
| 10 nF | 12 |
| 5 nF | 08 |
| 1.3 nF | 05 |

# C-FILTER COMBINATION D-SUB 3W3

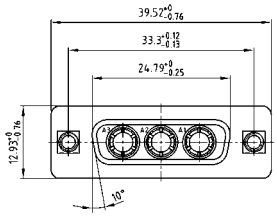
## Press-fit contact – Straight – Precision machined contacts

RoHS compliant – UL listed, File No.: E228329

### DESCRIPTION

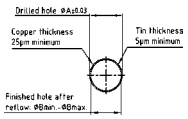
- 707 VDC (other DWV on request)
- Mounting styles:
  - with threaded rear spacer and 4-40 UNC threaded insert
  - with rear press-fit spacer and 4-40 UNC threaded insert
- Mounting styles with M3 thread on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

### SOCKET CONNECTOR

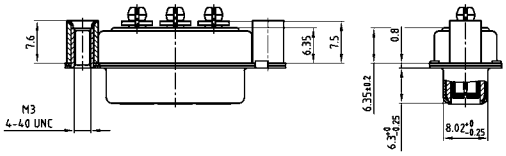


| Termination Code | Current Rating | A ± 0.03 | B min. | B max. |
|---|---|---|---|---|
| P1 | 30A | 3.13 | 2.96 | 3.11 |
| P2 | 30A | 3.27 | 3.10 | 3.25 |
| P4 | 30A | 3.22 | 3.02 | 3.20 |

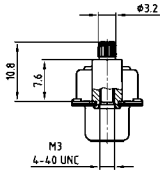
PCB hole drilling for high power press fit contact.



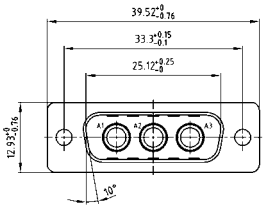
Mounting style: 4-40 UNC threaded rear spacer



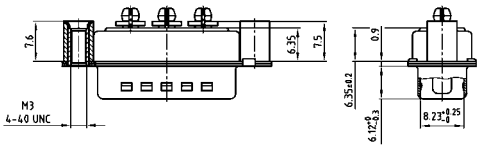
Mounting style: Rear press-fit spacer



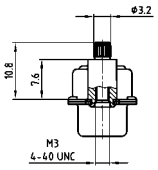
### PLUG CONNECTOR



Mounting style: 4-40 UNC threaded rear spacer



Mounting style: Rear press-fit spacer



### ORDER DATA

**SOCKET CONNECTOR**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3 | Threaded rear spacer | .120"/3.13 | 47 nF | 3F3SSA 22 SP1AA0X |
| 3W3 | Threaded rear spacer | .130"/3.27 | 47 nF | 3F3SSA 22 SP2AA0X |
| 3W3 | Threaded rear spacer | .120"/3.22 | 47 nF | 3F3SSA 22 SP4AA0X |
| 3W3 | Rear press-fit spacer | .120"/3.13 | 47 nF | 3F3SSA 22 SP1W40X |
| 3W3 | Rear press-fit spacer | .120"/3.27 | 47 nF | 3F3SSA 22 SP2W40X |
| 3W3 | Rear press-fit spacer | .120"/3.22 | 47 nF | 3F3SSA 22 SP4W40X |

**PLUG CONNECTOR**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3 | Threaded rear spacer | .120"/3.13 | 47 nF | 3F3SPA 22 SP1AA0X |
| 3W3 | Threaded rear spacer | .130"/3.27 | 47 nF | 3F3SPA 22 SP2AA0X |
| 3W3 | Threaded rear spacer | .120"/3.22 | 47 nF | 3F3SPA 22 SP4AA0X |
| 3W3 | Rear press-fit spacer | .120"/3.13 | 47 nF | 3F3SPA 22 SP1W40X |
| 3W3 | Rear press-fit spacer | .120"/3.27 | 47 nF | 3F3SPA 22 SP2W40X |
| 3W3 | Rear press-fit spacer | .120"/3.22 | 47 nF | 3F3SPA 22 SP4W40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness.
For other capacitance values refer to the part number creator.

| Capacitance value | Code |
|---|---|
| 100 nF | 28 |
| 47 nF | 22 |
| 12 nF | 14 |
| 10 nF | 12 |
| 5 nF | 08 |
| 1.3 nF | 05 |

# C-FILTER COMBINATION D-SUB 3W3C

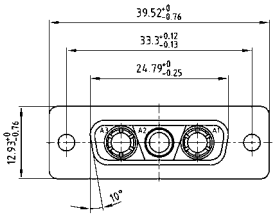
## Press-fit contact – Straight – Precision machined contacts

RoHS compliant – UL listed, File No.: E228329

### DESCRIPTION

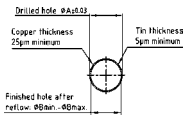
- Coded socket connector = 1 plug and 2 socket contacts
- Coded plug connector = 2 plugs and 1 socket contact
- 707 VDC (other DWV on request)
- Mounting styles:
  - with threaded rear spacer and 4-40 UNC threaded insert
  - with rear press-fit spacer and 4-40 UNC threaded insert
- Mounting styles with M3 thread on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

### SOCKET CONNECTOR

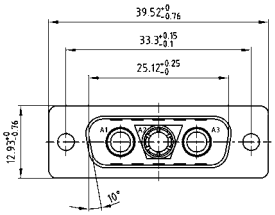


| Termination Code | Current Rating | A ± 0.03 | B min. | B max. |
|---|---|---|---|---|
| P1 | 30A | 3.13 | 2.96 | 3.11 |
| P2 | 30A | 3.27 | 3.10 | 3.25 |
| P4 | 30A | 3.22 | 3.02 | 3.20 |

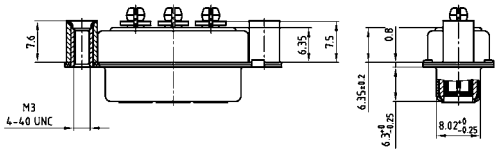
PCB hole drilling for high power press fit contact.



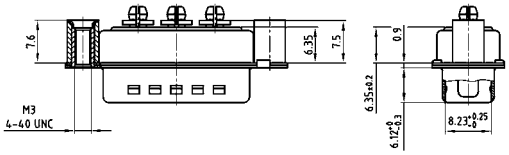

### PLUG CONNECTOR



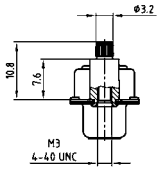
Mounting style: 4-40 UNC threaded rear spacer



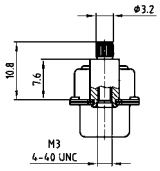
Mounting style: 4-40 UNC threaded rear spacer



Mounting style: 4-40 UNC rear press-fit spacer



Mounting style: 4-40 UNC rear press-fit spacer



### ORDER DATA

**SOCKET CONNECTOR**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3C | Threaded rear spacer | .120"/3.13 | 47 nF | 3F3CSA 22 SP1AA0X |
| 3W3C | Threaded rear spacer | .130"/3.27 | 47 nF | 3F3CSA 22 SP2AA0X |
| 3W3C | Threaded rear spacer | .120"/3.22 | 47 nF | 3F3CSA 22 SP4AA0X |
| 3W3C | Rear press-fit spacer | .120"/3.13 | 47 nF | 3F3CSA 22 SP1W40X |
| 3W3C | Rear press-fit spacer | .120"/3.27 | 47 nF | 3F3CSA 22 SP2W40X |
| 3W3C | Rear press-fit spacer | .120"/3.22 | 47 nF | 3F3CSA 22 SP4W40X |

**PLUG CONNECTOR**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 3W3C | Threaded rear spacer | .120"/3.13 | 47 nF | 3F3CPA 22 SP1AA0X |
| 3W3C | Threaded rear spacer | .130"/3.27 | 47 nF | 3F3CPA 22 SP2AA0X |
| 3W3C | Threaded rear spacer | .120"/3.22 | 47 nF | 3F3CPA 22 SP4AA0X |
| 3W3C | Rear press-fit spacer | .120"/3.13 | 47 nF | 3F3CPA 22 SP1W40X |
| 3W3C | Rear press-fit spacer | .120"/3.27 | 47 nF | 3F3CPA 22 SP2W40X |
| 3W3C | Rear press-fit spacer | .120"/3.22 | 47 nF | 3F3CPA 22 SP4W40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness.
For other capacitance values refer to the part number creator.

| Capacitance value | Code |
|---|---|
| 100 nF | 28 |
| 47 nF | 22 |
| 12 nF | 14 |
| 10 nF | 12 |
| 5 nF | 08 |
| 1.3 nF | 05 |

# C-FILTER COMBINATION D-SUB 5W5

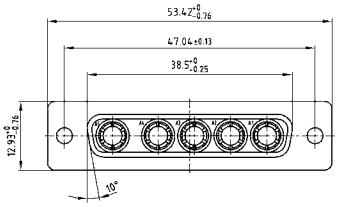
## Press-fit contact – Straight – Precision machined contacts

RoHS compliant – UL listed, File No.: E228329

### DESCRIPTION

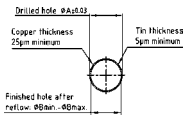
- 707 VDC (other DWV on request)
- Mounting styles:
  - with threaded rear spacer and 4-40 UNC threaded insert
  - with rear press-fit spacer and 4-40 UNC threaded insert
- Mounting styles with M3 thread on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

### SOCKET CONNECTOR

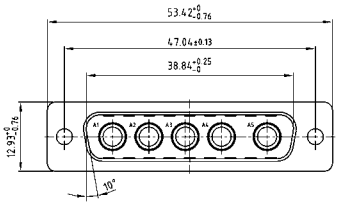


| Termination Code | Current Rating | A ± 0.03 | B min. | B max. |
|---|---|---|---|---|
| P1 | 30A | 3.13 | 2.96 | 3.11 |
| P2 | 30A | 3.27 | 3.10 | 3.25 |
| P4 | 30A | 3.22 | 3.02 | 3.20 |

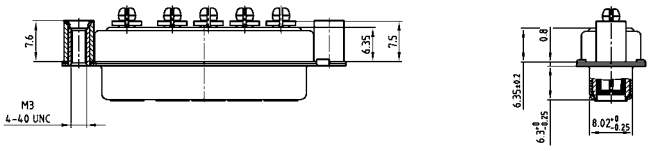
PCB hole drilling for high power press fit contact.



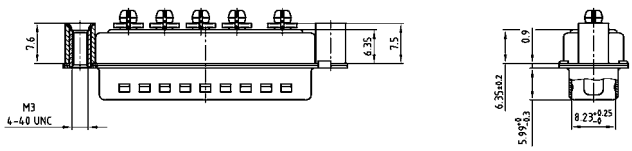

### PLUG CONNECTOR



Mounting style: 4-40 UNC threaded rear spacer

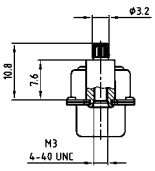



Mounting style: 4-40 UNC threaded rear spacer




Mounting style: Rear press-fit spacer

Mounting style: Rear press-fit spacer




### ORDER DATA

**SOCKET CONNECTOR**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 5W5 | Threaded rear spacer | .120"/3.13 | 47 nF | 5F5SSA 22 SP1AA0X |
| 5W5 | Threaded rear spacer | .130"/3.27 | 47 nF | 5F5SSA 22 SP2AA0X |
| 5W5 | Threaded rear spacer | .120"/3.22 | 47 nF | 5F5SSA 22 SP4AA0X |
| 5W5 | Rear press-fit spacer | .120"/3.13 | 47 nF | 5F5SSA 22 SP1W40X |
| 5W5 | Rear press-fit spacer | .120"/3.27 | 47 nF | 5F5SSA 22 SP2W40X |
| 5W5 | Rear press-fit spacer | .120"/3.22 | 47 nF | 5F5SSA 22 SP4W40X |

**PLUG CONNECTOR**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 5W5 | Threaded rear spacer | .120"/3.13 | 47 nF | 5F5SPA 22 SP1AA0X |
| 5W5 | Threaded rear spacer | .130"/3.27 | 47 nF | 5F5SPA 22 SP2AA0X |
| 5W5 | Threaded rear spacer | .120"/3.22 | 47 nF | 5F5SPA 22 SP4AA0X |
| 5W5 | Rear press-fit spacer | .120"/3.13 | 47 nF | 5F5SPA 22 SP1W40X |
| 5W5 | Rear press-fit spacer | .120"/3.27 | 47 nF | 5F5SPA 22 SP2W40X |
| 5W5 | Rear press-fit spacer | .120"/3.22 | 47 nF | 5F5SPA 22 SP4W40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness.
For other capacitance values refer to the part number creator.

| Capacitance value | Code |
|---|---|
| 100 nF | 28 |
| 47 nF | 22 |
| 12 nF | 14 |
| 10 nF | 12 |
| 5 nF | 08 |
| 1.3 nF | 05 |

# C-Filter Combination D-SUB 8W8

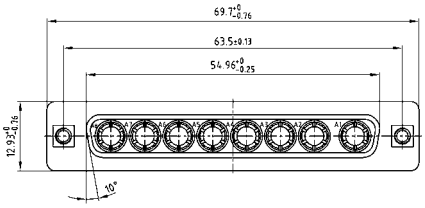
## Press-fit contact – Straight – Precision machined contacts

RoHS compliant – UL listed, File No.: E228329

### Description

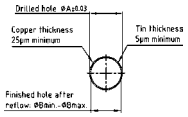
- 707 VDC (other DWV on request)
- Mounting styles:
  - with threaded rear spacer and 4-40 UNC threaded insert
  - with rear press-fit spacer and 4-40 UNC threaded insert
- Mounting styles with M3 thread on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

### Socket connector

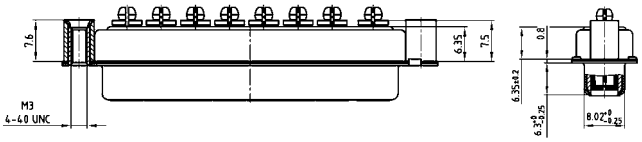


| Termination Code | Current Rating | A ± 0.03 | B min. | B max. |
|---|---|---|---|---|
| P1 | 30A | 3.13 | 2.96 | 3.11 |
| P2 | 30A | 3.27 | 3.10 | 3.25 |
| P4 | 30A | 3.22 | 3.02 | 3.20 |

PCB hole drilling for high power press fit contact.

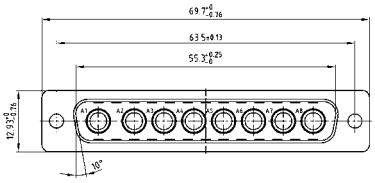


Mounting style: 4-40 UNC threaded rear spacer

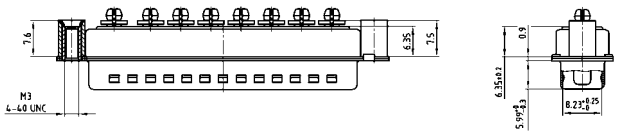


Mounting style: 4-40 UNC rear press-fit spacer

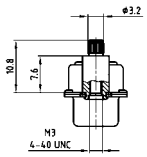
### Plug connector



Mounting style: 4-40 UNC threaded rear spacer



Mounting style: 4-40 UNC rear press-fit spacer



### Order data

**Socket connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 8W8 | Threaded rear spacer | .120"/3.13 | 47 nF | 8F8SSA 22 SP1AA0X |
| 8W8 | Threaded rear spacer | .130"/3.27 | 47 nF | 8F8SSA 22 SP2AA0X |
| 8W8 | Threaded rear spacer | .120"/3.22 | 47 nF | 8F8SSA 22 SP4AA0X |
| 8W8 | Rear press-fit spacer | .120"/3.13 | 47 nF | 8F8SSA 22 SP1W40X |
| 8W8 | Rear press-fit spacer | .120"/3.27 | 47 nF | 8F8SSA 22 SP2W40X |
| 8W8 | Rear press-fit spacer | .120"/3.22 | 47 nF | 8F8SSA 22 SP4W40X |

**Plug connector**

| Type | Mounting style 4-40 UNC | Ø A | Capacitance | Part Number |
|---|---|---|---|---|
| 8W8 | Threaded rear spacer | .120"/3.13 | 47 nF | 8F8SPA 22 SP1AA0X |
| 8W8 | Threaded rear spacer | .130"/3.27 | 47 nF | 8F8SPA 22 SP2AA0X |
| 8W8 | Threaded rear spacer | .120"/3.22 | 47 nF | 8F8SPA 22 SP4AA0X |
| 8W8 | Rear press-fit spacer | .120"/3.13 | 47 nF | 8F8SPA 22 SP1W40X |
| 8W8 | Rear press-fit spacer | .120"/3.27 | 47 nF | 8F8SPA 22 SP2W40X |
| 8W8 | Rear press-fit spacer | .120"/3.22 | 47 nF | 8F8SPA 22 SP4W40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness.
For other capacitance values refer to the part number creator.

| Capacitance value | Code |
|---|---|
| 100 nF | 28 |
| 47 nF | 22 |
| 12 nF | 14 |
| 10 nF | 12 |
| 5 nF | 08 |
| 1.3 nF | 05 |

Section 5

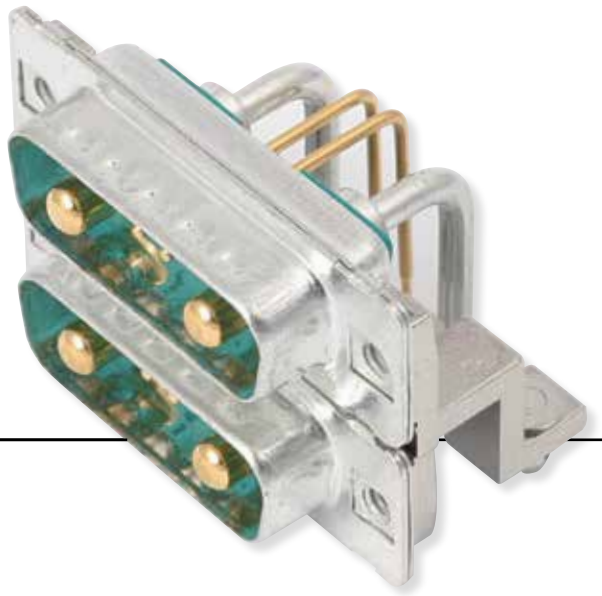
# µTCA™ Power module Connectors

The MicroTCA standard now provides a specification that permits the design of small, economical and flexible systems from standardized modules.

Power modules, which ensure a secure power supply for the system, are also a part of MicroTCA system design criteria.

The power feed from an external source is accomplished by way of a cable connected to the external source and ending locally in a power input connector mounted on the front side of the power module.
The MicroTCA .0 specification defines appropriate interfaces for this. An interface has been chosen for the input side of MicroTCA direct current power modules which is based on the dual port Combination D-SUB connector.

Form factor 7W2 modules are used for power supplies of -48V and -60V.
Form factor 9W4 is used for +24V power supplies to provide coding and differentiation.
The specified connectors consist of two power contacts and two signal contacts.
The signal contacts are used for hot-swap control purposes and, according to specification, should be shorted with a jumper on the cable side of the connector.



A 24 amp rating per contact is required for the 7W2 version and a 49 amp rating per contact for the 9W4 version.

The contact may not have an operational temperature rise in excess of 30° C.
The machined precision contacts used in CONEC MicroTCA power module input connectors offer considerable power reserves and are specified for 250 insertion cycles.

The CONEC product line encompasses connectors for installation on the PC board in dual and single port designs for throught hole soldering and SMT. Filtered version available on request.
Socket connectors are available for use with cable. These connectors are offered with signal contacts which are bridged and unbridged versions.

Included in the product offering are slim line, low profile hoods and suitable connectors.

Member of

PICMG®

# Technical Data

| Materials | | |
|---|---|---|
| Insulator | PBT (UL 94-VO) | |
| Power Contacts | Copper alloy, Precision machined contacts | Mating side Au over Ni |
| | | Soldering side Sn over Ni |
| Signal contacts | Copper alloy, Precision machined contacts | Mating side Au over Ni |
| | | Soldering side Au over Ni |
| Shell | Steel | Tin plated |
| Mounting bracket | Zink die-cast | Tin plated |
| 4-40 UNC threaded insert | Copper alloy | Tin plated |
| Hex bolt<br>with 4-40 UNC threaded insert and washers | Steel | Nickel plated |
| PCB clip for .063" / 1.6 mm PCB | Copper alloy | Tin plated |
| **Mechanical and electrical characteristics** | | |
| Current rating | Power contacts | 24 A at max. 30°C temperature rise |
| | Signal contacts | 7.5 A nominal |
| Clearance- and creepage distance | Power contacts | .059" / 1.5 mm min. |
| | Signal contacts | .016" / 0.4 mm min. |
| | Signal and power contacts | .059" / 1.5 mm min. |
| | Power contacts and shell | .059" / 1.5 mm min. |
| | Signal contact and shell | .059" / 1.5 mm min. |
| Insulation resistance | Power contact | 5000 mΩ min. |
| | Signal contact | 5000 mΩ min. |
| | Signal and power contacts | 5000 mΩ min. |
| | Power contacts and Shell | 5000 mΩ min. |
| | Signal contact and Shell | 5000 mΩ min. |
| Dielectric with standing voltage | 1000 V r.m.s. | |
| Mating cycles | 250 cycles | |
| Mating force | 100 N max. | |
| Unmating force | 65 N max. | |

Technical specifications are subject to change without notice.

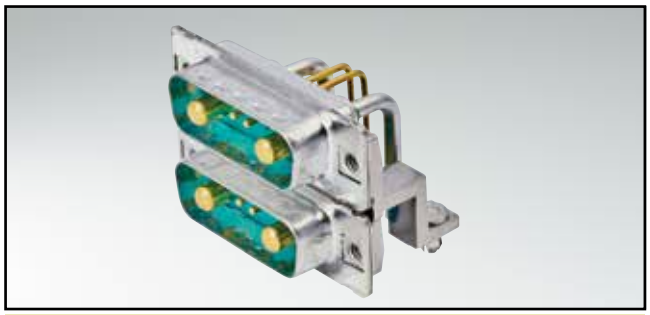
# Solder Profile

| Connector Type | Preheating | | Solder terminal dipping parameters | |
|---|---|---|---|---|
| | max. Temperature | Duration | max. Solder bath Temperature | max. Terminal Immersion Time |
| Filter D-SUB | 100°C | 30s | 260°C | 5s |
| Combo D-SUB Filter | 120°C | 120s | 260°C | 5s |
| Filter D-SUB Water Resistant | 100°C | 30s | 240°C | 5s |
| Combo D-SUB Water Resistant | 120°C | 120s | 240°C | 5s |
| D-SUB Water Resistant | 120°C | 120s | 240°C | 5s |
| D-SUB Solid Body Type Water Resistant | 150°C | 180s | 265°C | 8s |
| RJ45 Modular Jack Filtered | 150°C | 180s | 265°C | 8s |
| Filter Plates | 150°C | 180s | 265°C | 8s |

Recommended wave-solder parameters for CONEC connectors.

# MicroTCA Power modul input connectors

## Plug connector – Solder pin angled – Dual port style – Through hole

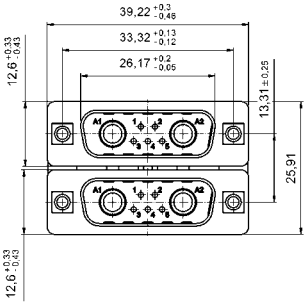


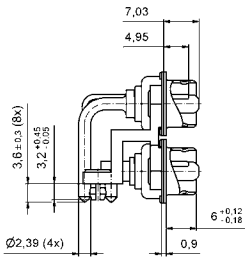
RoHS compliant

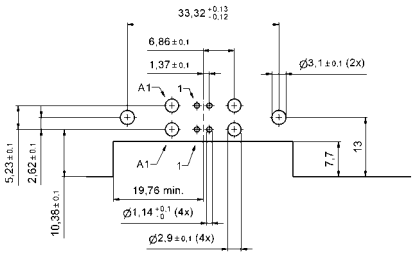
### Description

- Standard version according to MTCA.0 specification
- Design 7W2 for -48/-60 V Power modul
- Design: 2 power contacts 24 A / 2 signal contacts per port
- Mounting styles:
  - Mounting bracket with PCB clip, 4-40 UNC threaded insert
  - Mounting bracket with PCB clip, 4-40 UNC hex bolt
- Note for 9W4 product please contact factory
- Precision machined contacts

### Product drawing

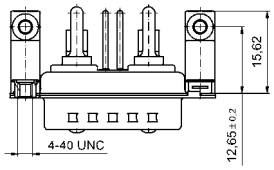


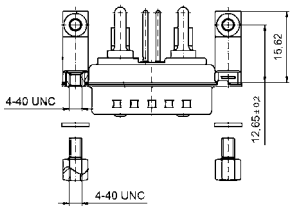




Mounting style:
Mounting bracket with PCB clip,
4-40 UNC threaded insert

Mounting style:
Mounting bracket with PCB clip,
threaded insert and 4-40 UNC hex bolt




### Order data

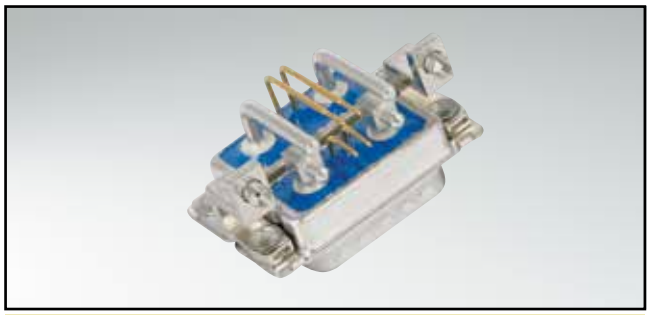
**Plug connector**

| Design | Mounting style | Part Number |
|---|---|---|
| 7W2 | Mounting bracket with PCB clip / Threaded insert and 4-40 UNC Hex bolt | 13-000011 |
| 7W2 | Mounting bracket with PCB clip / 4-40 UNC Threaded insert | 13-000021 |

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness

# MicroTCA Power modul input connectors

## Plug connector – Solder pin angled – Dual port style – Filter version – Through hole

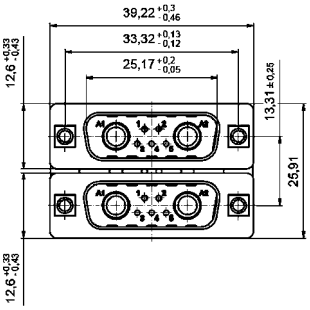


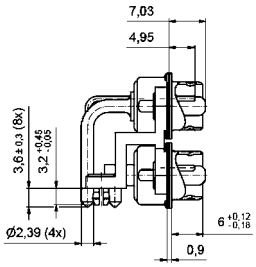
RoHS compliant

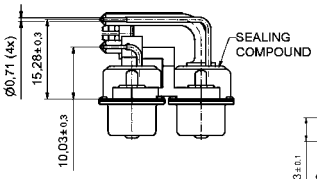
### Description

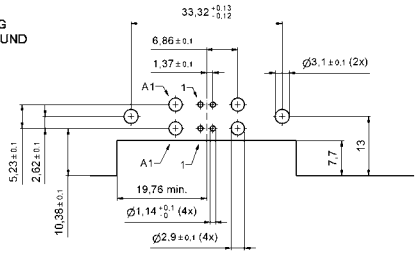
- Standard version according to MTCA.0 specification
- Filtered power contacts with 54 nF or 10 nF Capacitance
- Signal contacts are not filtered
- Design 7W2 for -48/-60 V Power modul
- Design: 2 power contacts 24 A / 2 signal contacts per port
- Mounting styles:
  - Mounting bracket with PCB clip, 4-40 UNC threaded insert
  - Mounting bracket with PCB clip, 4-40 UNC hex bolt
- Note for 9W4 product please contact factory
- Precision machined contacts

### Product drawing



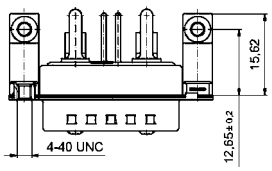



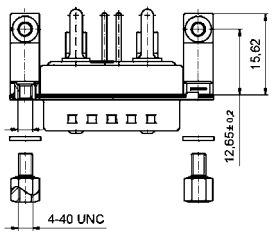




Mounting style:
Mounting bracket with PCB clip,
4-40 UNC threaded insert

Mounting style:
Mounting bracket with PCB clip,
threaded insert and 4-40 UNC hex bolt




### Order data

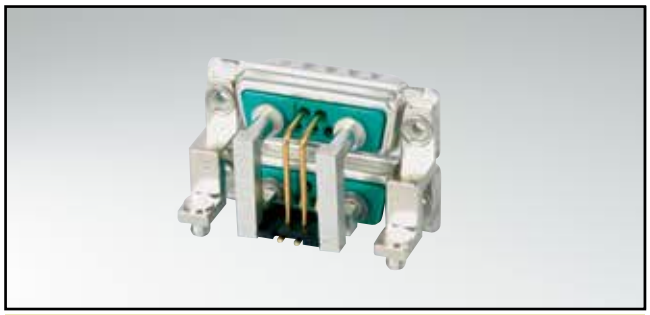
**Plug connector**

| Design | Mounting style | Filter capacitance for power contact | Part Number |
|---|---|---|---|
| 7W2 | Mounting bracket with PCB clip / 4-40 UNC Hex bolt | 54 nF | 24-000031 |
| 7W2 | Mounting bracket with PCB clip / 4-40 UNC Threaded insert | 54 nF | 24-000011 |
| 7W2 | Mounting bracket with PCB clip / 4-40 UNC Hex bolt | 10 nF | 24-000041 |
| 7W2 | Mounting bracket with PCB clip / 4-40 UNC Threaded insert | 10 nF | 24-000051 |

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness

# MicroTCA Power modul input connectors

## Plug connector – SMT version – Suitable for reflow – Angled – Dual port style

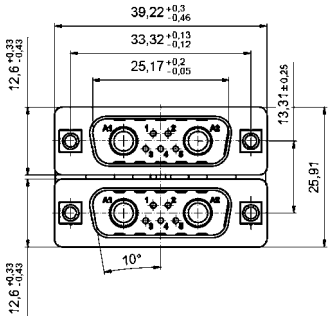


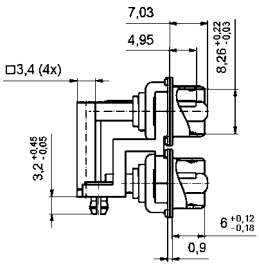
RoHS compliant

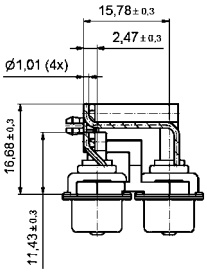
### Description

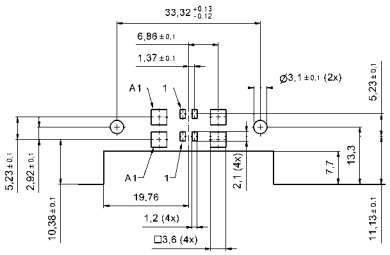
- SMT Version with contact spacer plate
- Design 7W2 for -48/-60V power modul
- Design: 2 power contacts 35 A / 2 signal contacts per port
- Mounting styles:
  - Mounting bracket with PCB clip, 4-40 UNC threaded insert
  - Mounting bracket with PCB clip, 4-40 UNC hex bolt
- Note for 9W4 product please contact factory
- Precision machined contacts

### Product drawing

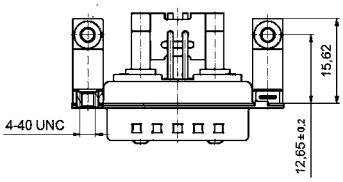


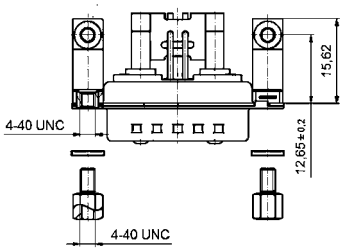




Mounting style:
Mounting bracket with PCB clip,
4-40 UNC threaded insert




Mounting style:
Mounting bracket with PCB clip,
threaded insert and 4-40 UNC hex bolt




### Order data

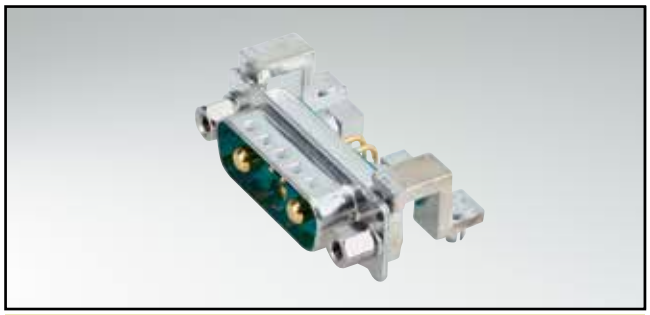
**Plug connector**

| Design | Mounting style | Part Number |
|---|---|---|
| 7W2 | Mounting bracket with PCB clip / Threaded insert and 4-40 UNC Hex bolt | 13-000031 |
| 7W2 | Mounting bracket with PCB clip / 4-40 UNC Threaded insert | 13-000041 |

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness

# MicroTCA Power modul input connectors

## Plug connector – Solder pin angled – Through hole

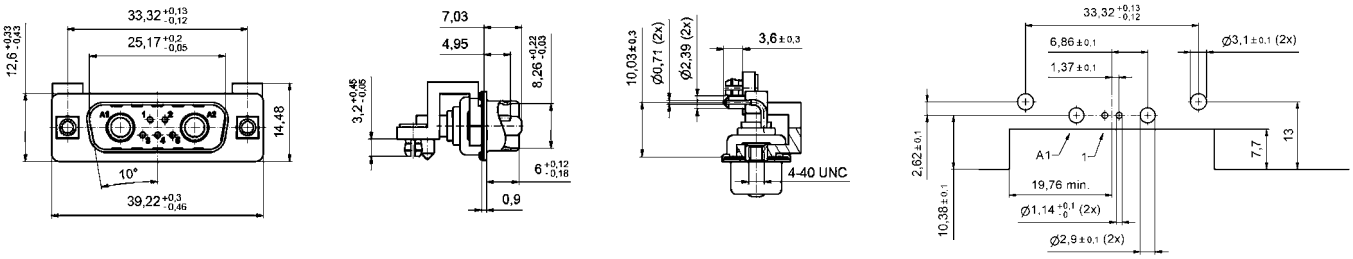


RoHS compliant

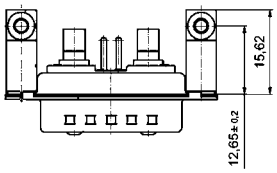
### Description

- Single port version for MicroTCA PCB layout
- Design 7W2 for -48/-60 V power modul
- Design: 2 power contacts 24 A / 2 signal contacts
- Mounting styles:
  - Mounting bracket with PCB clip, 4-40 UNC threaded insert
  - Mounting bracket with PCB clip, 4-40 UNC hex bolt
- Note for 9W4 product please contact factory
- Precision machined contacts

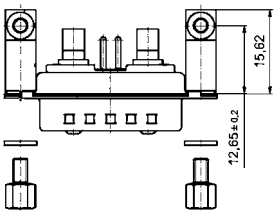
### Product drawing




Mounting style:
Mounting bracket with PCB clip,
4-40 UNC threaded insert




Mounting style:
Mounting bracket with PCB clip,
threaded insert and 4-40 UNC hex bolt




### Order data

**Plug connector**

| Design | Mounting style | Part Number |
|---|---|---|
| 7W2 | Mounting bracket with PCB clip / Threaded insert and 4-40 UNC Hex bolt | 13-000051 |
| 7W2 | Mounting bracket with PCB clip / 4-40 UNC Threaded insert | 13-000061 |

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness

# MicroTCA Power modul input connectors

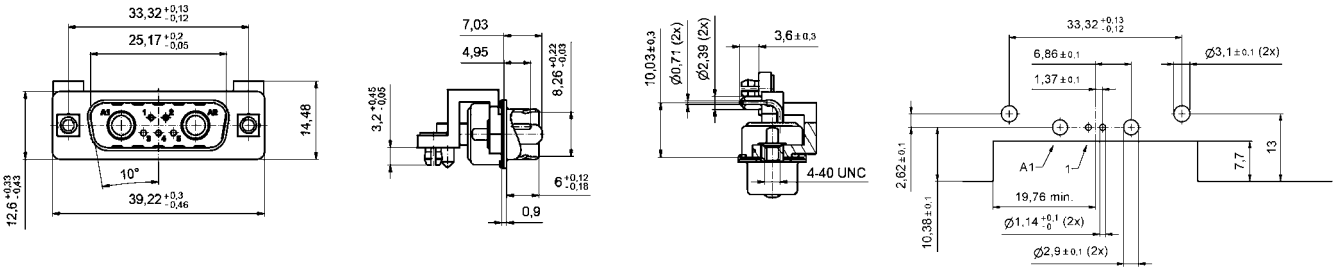
## Plug connector – Solder pin angled – Filter version – Through hole

RoHS compliant

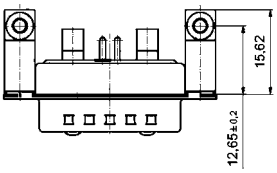
### Description

- Single port version for MicroTCA PCB layout
- Design 7W2 for -48/-60 V power modul
- Design: 2 power contacts 24 A / 2 signal contacts
- Mounting styles:
  - Mounting bracket with PCB clip, 4-40 UNC threaded insert
  - Mounting bracket with PCB clip, 4-40 UNC hex bolt
- Note for 9W4 product please contact factory
- Precision machined contacts

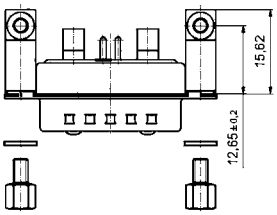
### Product drawing




Mounting style:
Mounting bracket with PCB clip,
4-40 UNC threaded insert




Mounting style:
Mounting bracket with PCB clip,
threaded insert and 4-40 UNC hex bolt




### Order data

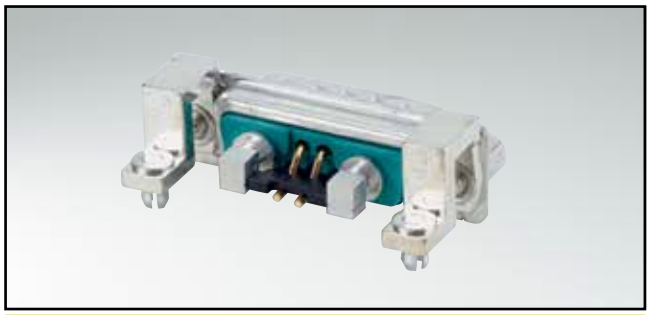
**Plug connector**

| Design | Mounting style | Filter capacitance for power contact | Part Number |
|---|---|---|---|
| 7W2 | Mounting bracket with PCB clip / 4-40 UNC Hex bolt | 54 nF | 24-000061 |
| 7W2 | Mounting bracket with PCB clip / 4-40 UNC Threaded insert | 54 nF | 24-000071 |
| 7W2 | Mounting bracket with PCB clip / 4-40 UNC Hex bolt | 10 nF | 24-000081 |
| 7W2 | Mounting bracket with PCB clip / 4-40 UNC Threaded insert | 10 nF | 24-000091 |

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness

# MicroTCA Power modul input connectors

## Plug connector – SMT version – Suitable for reflow – Angled

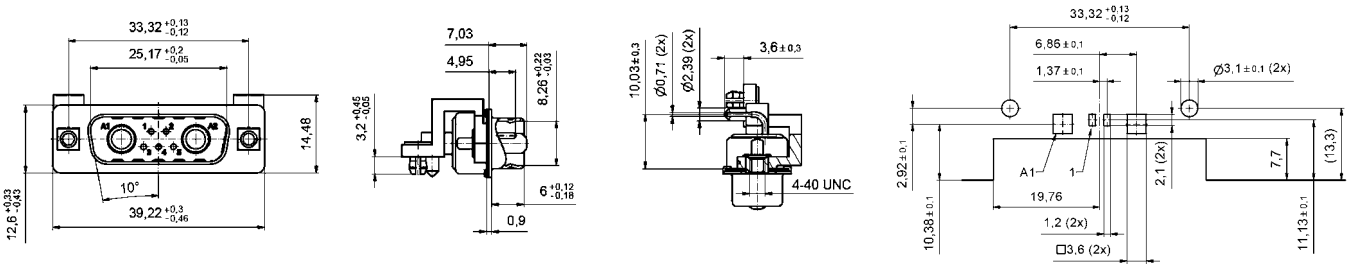


RoHS compliant

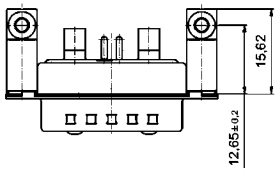
### Description

- SMT Version with contact spacer plate
- Design 7W2 for -48/-60V power modul
- Design: 2 power contacts 35 A / 2 signal contacts
- Mounting styles:
  - Mounting bracket with PCB clip, 4-40 UNC threaded insert
  - Mounting bracket with PCB clip, 4-40 UNC hex bolt
- Note for 9W4 product please contact factory
- Precision machined contacts

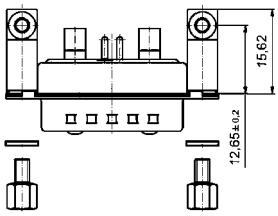
### Product drawing




Mounting style:
Mounting bracket with PCB clip,
4-40 UNC threaded insert




Mounting style:
Mounting bracket with PCB clip,
threaded insert and 4-40 UNC hex bolt




### Order data

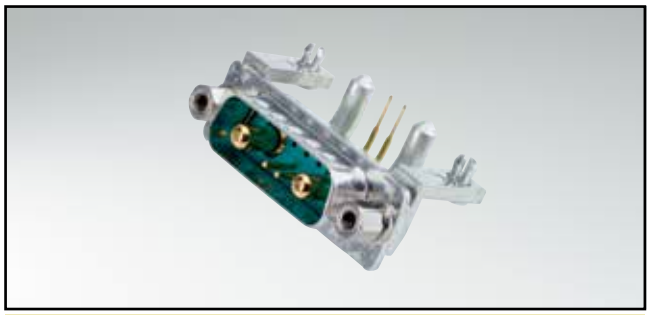
**Plug connector**

| Design | Mounting style | Part Number |
|---|---|---|
| 7W2 | Mounting bracket with PCB clip / Threaded insert and 4-40 UNC Hex bolt | 13-000071 |
| 7W2 | Mounting bracket with PCB clip / 4-40 UNC Threaded insert | 13-000081 |

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness

# Power modul input connector

## Plug connector – Solder pin – Angled – Through hole

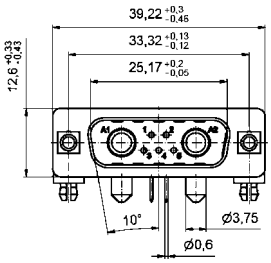


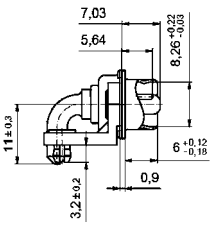
RoHS compliant

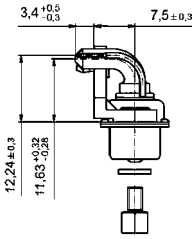
### Description

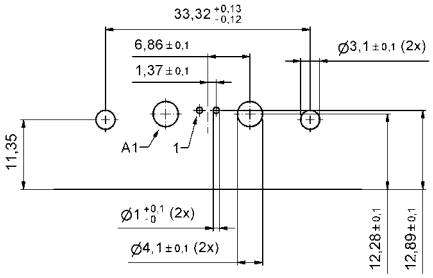
- 7W2 Combination D-SUB Connector
- Design: 2 power contacts 40 A / 2 signal contacts
- Mounting styles:
  - Mounting bracket with PCB clip, 4-40 UNC threaded insert
  - Mounting bracket with PCB clip, 4-40 UNC hex bolt
- Note for 9W4 product please contact factory
- Precision machined contacts

### Product drawing

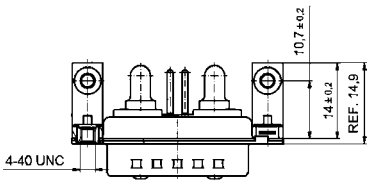


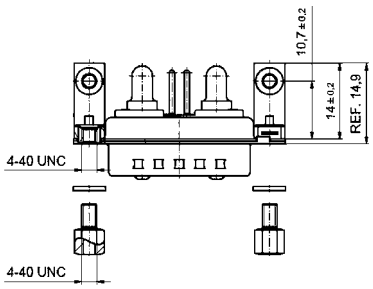




Mounting style:
Mounting bracket with PCB clip,
4-40 UNC threaded insert




Mounting style:
Mounting bracket with PCB clip,
threaded insert and 4-40 UNC hex bolt




### Order data

**Plug connector**

| Design | Mounting style | Part Number |
|---|---|---|
| 7W2 | Mounting bracket with PCB clip / Threaded insert and 4-40 UNC Hex bolt | 13-000091 |
| 7W2 | Mounting bracket with PCB clip / 4-40 UNC Threaded insert | 13-000101 |

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness

# Power modul input connector

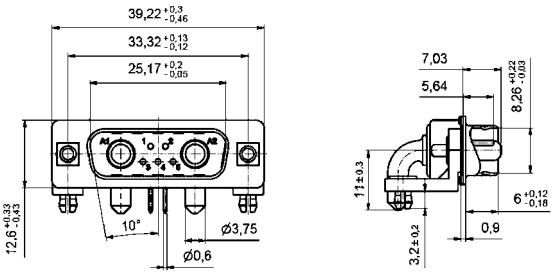
## Plug connector – Solder pin – Angled – Filter version – Through hole

RoHS compliant

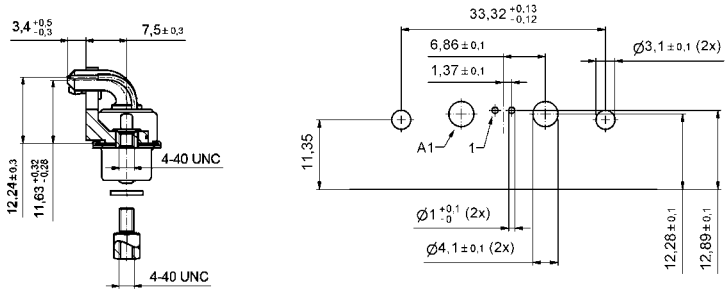
### Description

- 7W2 Combination D-SUB Connectors
- Design: 2 power contacts 40 A / 2 signal contacts
- Filtered power contacts with 54 nF or 10 nF Capacitance
- Signal contacts are not filtered
- Mounting styles:
  - Mounting bracket with PCB clip, 4-40 UNC threaded insert
  - Mounting bracket with PCB clip, 4-40 UNC hex bolt
- Note for 9W4 product please contact factory
- Precision machined contacts

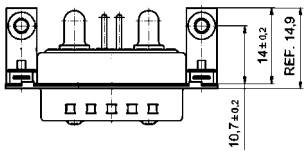
### Product drawing

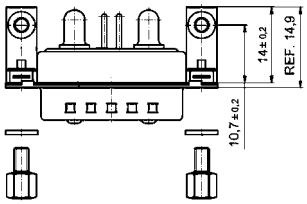



Mounting style:
Mounting bracket with PCB clip,
4-40 UNC threaded insert




Mounting style:
Mounting bracket with PCB clip,
threaded insert and 4-40 UNC hex bolt




### Order data

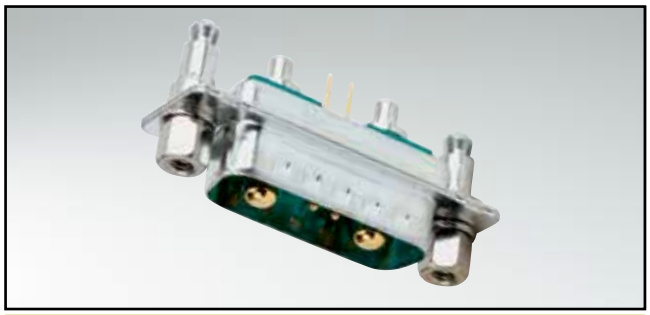
**Plug connector**

| Design | Mounting style | Filter capacitance for power contact | Part Number |
|---|---|---|---|
| 7W2 | Mounting bracket with PCB clip / 4-40 UNC Hex bolt | 54 nF | 24-000101 |
| 7W2 | Mounting bracket with PCB clip / 4-40 UNC Threaded insert | 54 nF | 24-000111 |
| 7W2 | Mounting bracket with PCB clip / 4-40 UNC Hex bolt | 10 nF | 24-000121 |
| 7W2 | Mounting bracket with PCB clip / 4-40 UNC Threaded insert | 10 nF | 24-000131 |

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness

# Power modul input connector

## Plug connector – Solder pin – Straight – Through hole

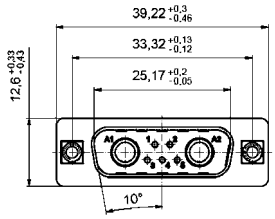


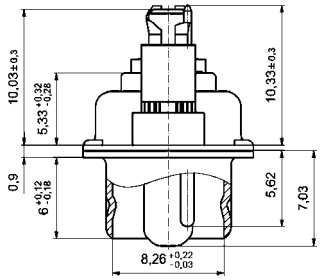
RoHS compliant

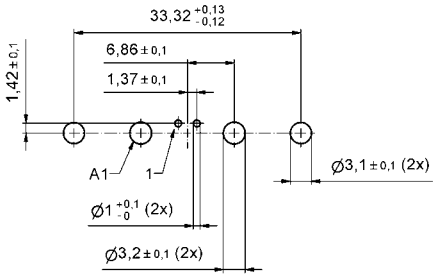
### Description

- 7W2 Combination D-SUB Connectors
- Design: 2 power contacts 24 A / 2 signal contacts
- Mounting styles:
  - 4-40 UNC threaded rear spacer with PCB clip, 4-40 UNC threaded insert
  - 4-40 UNC threaded rear spacer with PCB clip, 4-40 UNC hex bolt
- Note for 9W4 product please contact factory
- Precision machined contacts

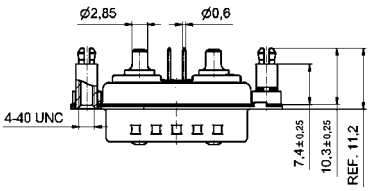
### Product drawing



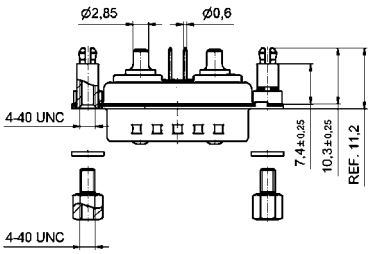




Mounting style:
4-40 UNC threaded rear spacer with PCB clip,
4-40 UNC threaded insert




Mounting style:
4-40 UNC threaded rear spacer with PCB clip,
4-40 UNC hex bolt




### Order data

**Plug connector**

| Design | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 7W2 | Threaded rear spacer with PCB clip / Hex bolt | 13-000111 |
| 7W2 | Threaded rear spacer with PCB clip / Threaded insert | 13-000121 |

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter

# Power modul input connector

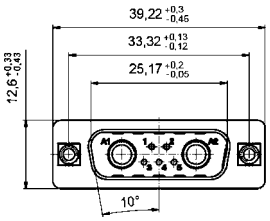
## Plug connector – Solder pin – Straight – Filter version – Through hole

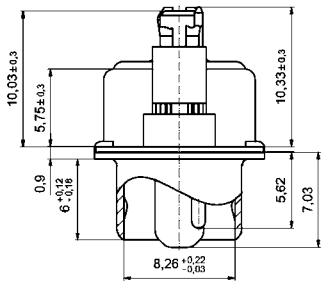
RoHS compliant

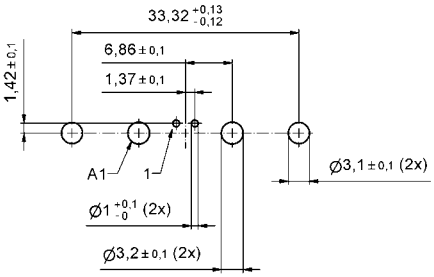
### Description

- 7W2 Combination D-SUB Connectors
- Design: 2 power contacts 24 A / 2 signal contacts
- Filtered power contacts with 54 nF oder 10 nF capacitance
- Mounting styles:
  - 4-40 UNC threaded rear spacer with PCB clip, 4-40 UNC threaded insert
  - 4-40 UNC threaded rear spacer with PCB clip, 4-40 UNC hex bolt
- Note for 9W4 product please contact factory
- Precision machined contacts

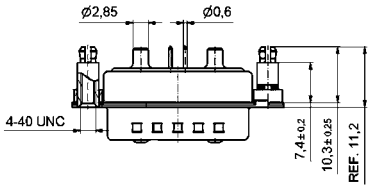
### Product drawing



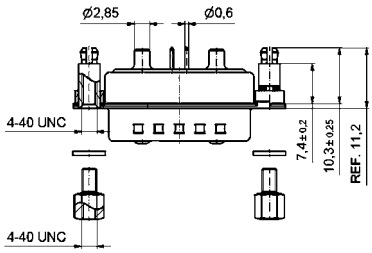




Mounting style:
4-40 UNC threaded rear spacer with PCB clip,
4-40 UNC threaded insert




Mounting style:
4-40 UNC threaded rear spacer with PCB clip,
4-40 UNC hex bolt




### Order data

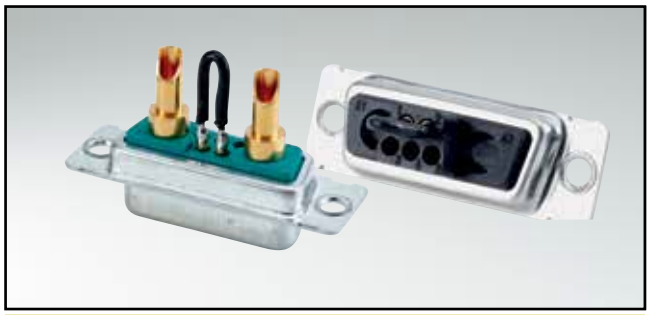
**Plug connector**

| Design | Mounting style 4-40 UNC | Filter capacitance for power contact | Part Number |
|---|---|---|---|
| 7W2 | Threaded rear spacer with PCB clip / Hex bolt | 54 nF | 24-000141 |
| 7W2 | Threaded rear spacer with PCB clip / Threaded insert | 54 nF | 24-000151 |
| 7W2 | Threaded rear spacer with PCB clip / Hex bolt | 10 nF | 24-000161 |
| 7W2 | Threaded rear spacer with PCB clip / Threaded insert | 10 nF | 24-000171 |

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter

# MicroTCA Power input connector

## Socket connector – Solder cup or crimp body



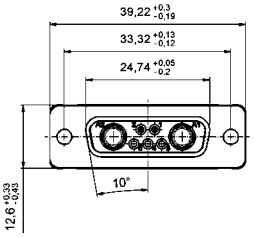
RoHS compliant

### Description

- 7W2 MicroTCA Design: 2 Power / 2 signal contacts
- Available with bridged and unbridged signal contacts
- Mounting style: with Through-hole .118"/3.0 mm
- Power contacts solder cup or crimp type wire size
- Note for 9W4 product please contact factory

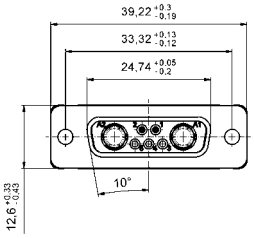
### Product drawing

Solder cup

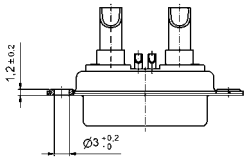



| AWG | X | Current Rating |
|---|---|---|
| 10-12 | 3.5 | max. 30 A |
| 12-14 | 2.7 | max. 20 A |
| 16-20 | 1.8 | max. 10 A |

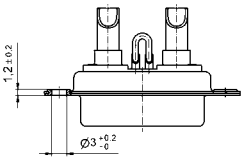
Crimp version

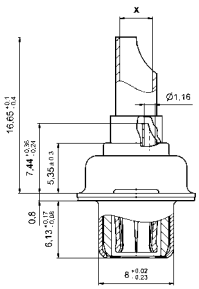



With signal contacts

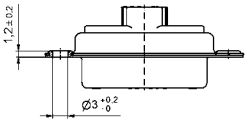


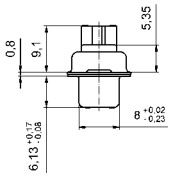

With bridged signal contact



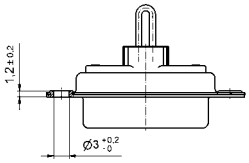



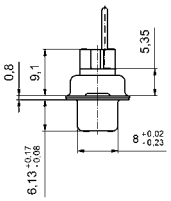

Without signal contacts




with bridged signal contacts




### Order data

**Socket connector version solder cup**

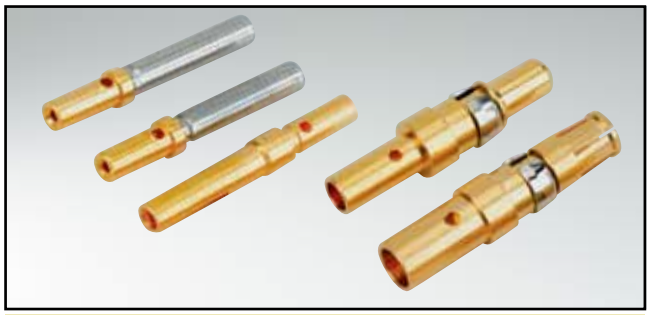
| Design | Wire size | Current rating | Mounting style | Signal contacts | Part Number |
|---|---|---|---|---|---|
| 7W2 | AWG 10...12 | 30 A | Through-hole .118"/3.0 mm | Unbridged | 13-000131 |
| 7W2 | AWG 12...14 | 20 A | Through-hole .118"/3.0 mm | Unbridged | 13-000141 |
| 7W2 | AWG 16...20 | 10 A | Through-hole .118"/3.0 mm | Unbridged | 13-000151 |
| 7W2 | AWG 10...12 | 30 A | Through-hole .118"/3.0 mm | Bridged | 13-000161 |
| 7W2 | AWG 12...14 | 20 A | Through-hole .118"/3.0 mm | Bridged | 13-000171 |
| 7W2 | AWG 16...20 | 10 A | Through-hole .118"/3.0 mm | Bridged | 13-000181 |

**Socket connector Crimp body**

| Design | Design | Mounting style | Crimp signal contacts | Part Number |
|---|---|---|---|---|
| 7W2 | Crimp body | Through-hole .118"/3.0 mm | Without signal contacts | 13-000190 |
| 7W2 | Crimp body | Through-hole .118"/3.0 mm | Bridged | 13-000201 |

# MicroTCA Power input contacts

## Socket contact – Crimp body – Precision machined



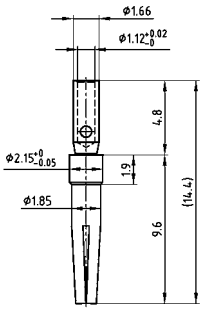
RoHS compliant

### Description

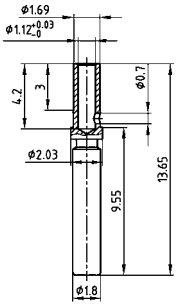
- Standard packaging
- Precision machined contacts
- Quality class 1 is standard
- Other quality classes on request
- Short power contacts, offered for use in MicroTCA specific hood

### Product drawing

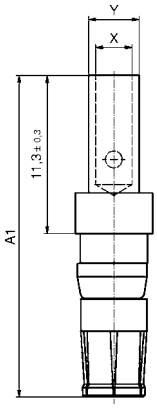
Signal crimp contact (Standard version)



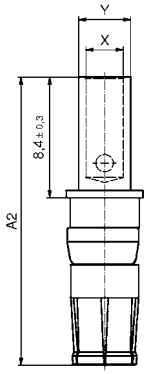

Signal crimp contact (closed entry version)




Power crimp contact (standard version)




Power crimp contact (short version)




| AWG | $A_1$ | $A_2$ | X | Y | Current Rating |
|---|---|---|---|---|---|
| 8-10 | | 20.08 | 4.6 | 5.35 | 40A |
| 10-12 | 22.98 | 20.08 | 3.7 | 4.7 | 30 A |
| 12-14 | 22.98 | 20.08 | 2.6 | 3.6 | 20 A |
| 16-20 | 22.98 | 20.08 | 1.7 | 2.6 | 10 A |

### Order data

**Socket contact**

| Version | Wire cross section | Current rating | Part Number |
|---|---|---|---|
| Signal crimp (standard version) | AWG 20...24 | 7.5 A | 162C18709X |
| Power crimp (standard version) | AWG 10...12 / A = 22.98 | 30 A | 132C11039X |
| Power crimp (standard version) | AWG 12...14 / A = 22.98 | 20 A | 132C11029X |
| Power crimp (standard version) | AWG 16...20 / A = 22.98 | 10 A | 132C11019X |
| Signal crimp (closed entry version) | AWG 20...24 | 7.5 A | 132C15019X |
| Power crimp (for MicroTCA) (short version) | AWG 8...10 / A = 20.08 | 40 A | 13-000321 |
| Power crimp (for MicroTCA) (short version) | AWG 10...12 / A = 20.08 | 30 A | 13-000311 |
| Power crimp (for MicroTCA) (short version) | AWG 12...14 / A = 20.08 | 20 A | 13-000301 |
| Power crimp (for MicroTCA) (short version) | AWG 16...20 / A = 20.08 | 10 A | 13-000291 |

# MicroTCA Cable hood and connector set

## Plastic hood with crimp connector body – Straight cable entry

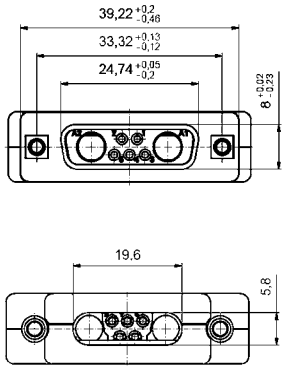
RoHS compliant

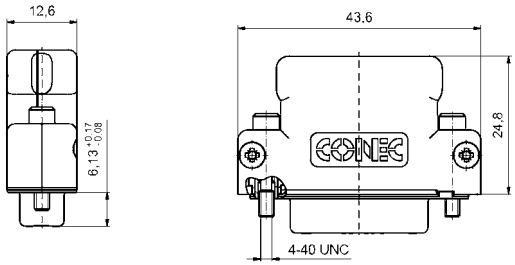
### Description

- Compact 7W2 shell inclusive crimp-socket connector
- Available with bridged signal contacts
- Short 4-40 UNC screws with Phillips or Allen key
- Material Housing: PBT GF; UL 94 V0, black
- Integrated strain relief
- Power contacts for wire size AWG 8 up to AWG 20
- This hood only fits this included connector, sold together as a set
- Choose short power contacts from previous page, sold separately

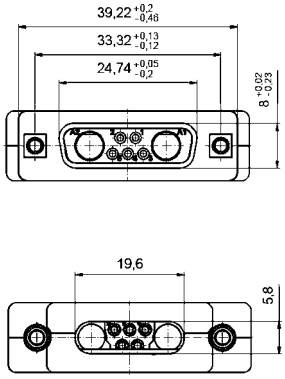
### Product drawing

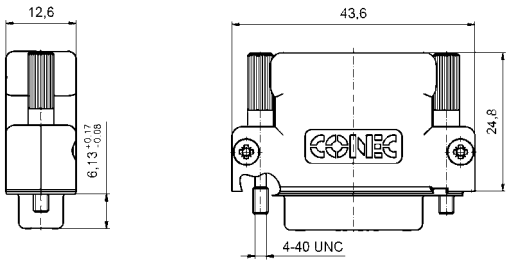
Hood with short screw
(Socket connector included)




Hood with jack screw
(Socket connector included)




### Order data

**Socket connector**

| Design | Signal contacts | Screw design | Part Number |
|---|---|---|---|
| Hood / Crimp socket connector 7W2 | Without signal contacts | Short / Allen key | 13-000210 |
| Hood / Crimp socket connector 7W2 | Without signal contacts | Short / Phillips head | 13-000220 |
| Hood / Crimp socket connector 7W2 | Bridged | Short / Allen key | 13-000231 |
| Hood / Crimp socket connector 7W2 | Bridged | Short / Phillips head | 13-000241 |
| Hood / Crimp socket connector 7W2 | Without signal contacts | Jack screw / Allen key | 13-000370 |
| Hood / Crimp socket connector 7W2 | Without signal contacts | Jack screw / Phillips head | 13-000380 |
| Hood / Crimp socket connector 7W2 | Bridged | Jack screw / Allen key | 13-000391 |
| Hood / Crimp socket connector 7W2 | Bridged | Jack screw / Phillips head | 13-000401 |

# MicroTCA Cable hood

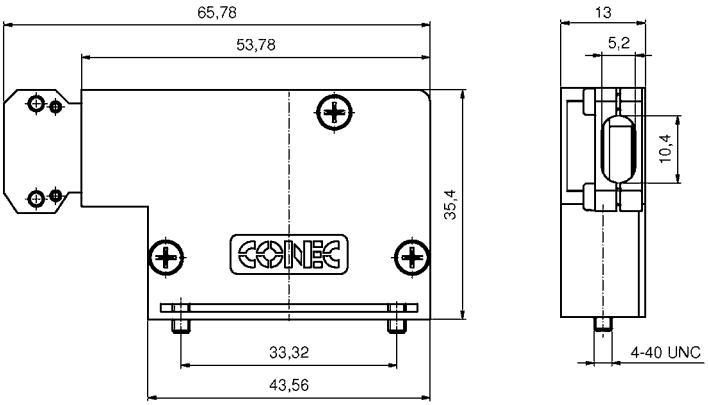
## Metal design – Side cable entry

RoHS compliant

### Description

- Cable hood for 7W2 MicroTCA Standard socket connector
- Suitable for other D-SUB Connectors
- Material: Zink die-cast
- Fastening with 4-40 UNC thread and jack screws
- Solide zink die-cast strain relief
- Plastic cable run integrated in shell
- Bulk or single packaged units

### Product drawing




### Order data

| D-SUB MicroTCA Hood 7W2 | | |
|---|---|---|
| **Type** | **Design** | **Part Number** |
| 7W2 | Metal hood | 16-000010 |

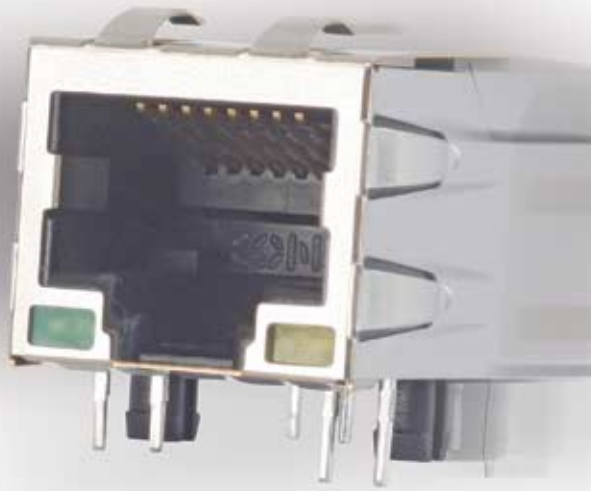
Section 6

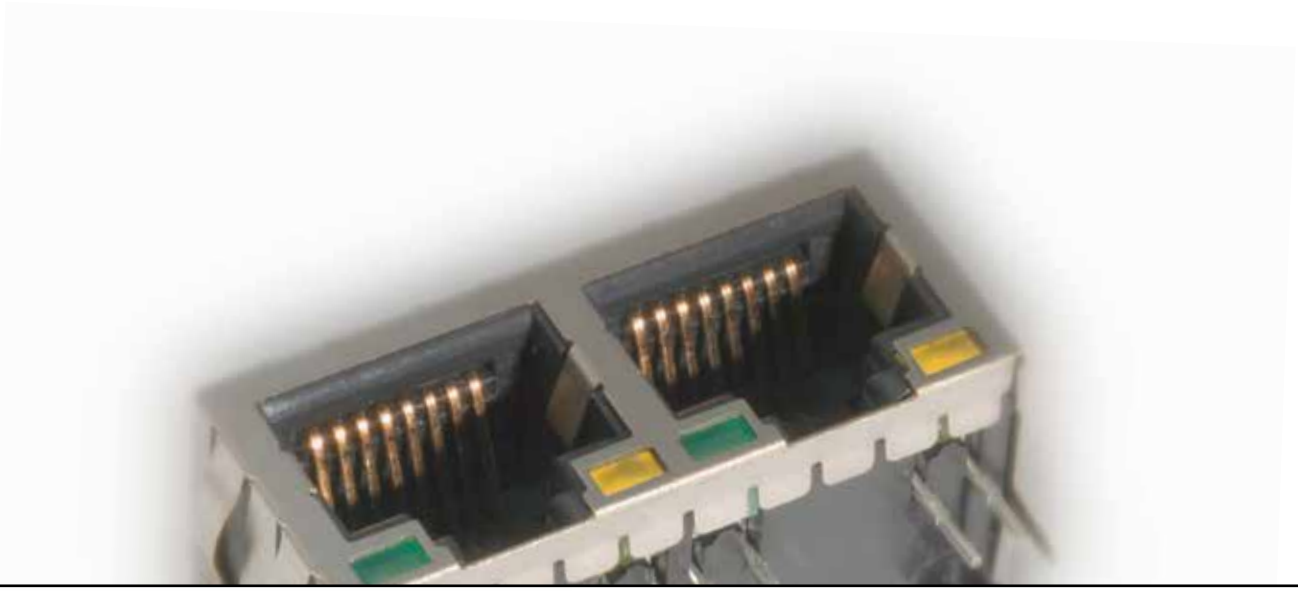
# RJ45 Modular Jack with Magnetic Filter

The CONEC RJ45 Magnetic Filtered Modular Jack has been especially developed for 10Base-T and 100Base-Tx LAN Ethernet applications.
The requirements for signal transfer over Ethernet are specified in the IEEE 802.3u standard.
This series offers ideal protection against electromagnetic interference and common mode interference in Ethernet applications. Furthermore, the RJ45 MM jack offers space saving advantages because the passive components for IC adaptation are implemented.

The areas of application for this connector include networking cards, hubs, motherboards, bridges, routers, switches and point-to-point connections for telecommunications and industry.

This series is available in single and multiple ports (2, 4, 6, 8) designs with straight solder pins for through hole mounting SMT versions are also available.





**Special features:**

- Conformant with IEEE 802.3 and the ANSI X3.263 standard
- Including the required measurements for min.350 µH OCL with 8 mA DC biasing current and 1500 $V_{rms}$ isolation voltage
- Offers outstanding EMC characteristics and suppresses common mode interference
- Perfect, reliable filter performance
- Helps the system achieve requirements for low emissions
- Telcordia test report available (on request)

The CONEC RJ45 Magnetic Modular Jack series is UL / cUL (E 202784) tested.

# Part Number Creator

RJ45 T J S 1 1 A C 0 N 0 X

**Product Line**

**PCB-Termination**
T = Solder pin, straight
S = SMT

**Contact finish**
J = Min. 50 **micro inch, 1.27**µ gold plated over nickel
Other plating options are avaible.

**Shielding**
S =Fully shielded

**Number of port**
1 = 1 Port
2 = 2 Port
4 = 4 Port
6 = 6 Port
8 = 8 Port

**Number of rows**
1 = 1 row

**Turns ratio of transformer**
A = 1:1/1:1 (Tx/Rx)
B = 1:1.414/1:1 (Tx/Rx)
Other turns ratio of transformer are avaible, please contact factory.

**Shunt choke option**
C = With shunt choke in transmit channel
N = Without shunt choke in transmit channel

**Impedance matching resistors**
0 = Without impedance matching resistors

**LED Color options**
N = Without LED
1 = Green LED (left), yellow LED (right)
Other LED combinations are avaible, please contact factory.

**Standard**
0X = Standard

# Technical Data

| Specifications | |
|---|---|
| Housing, solder pin, straight | Polyester glass filled, black, UL94 V-O |
| Housing, SMT-Termination | Nylon 46 glass filled, black, UL94 V-O |
| Shielding | .008"/0.20 mm thick copper alloy |
| Contact material | .014"/0.35 mm thick copper alloy |
| Mating area plating | 50µ"/1.27 µm gold min. over 30µ"/0.76 µm min. nickel |
| Solder tails plating | Tin plated |
| OCL (Open Circuit Inductance) | Min. 350 µH at 8mA DC bias |
| Leakage inductance | Max. 0.35 µH |
| Inter-winding capacitance | Max. 25 pF |
| DC-Resistance | Max. 1.0 Ω |
| Turns ratio | 1:1/1:1 ± 3% or Tx/Rx = 1:1.414/1:1 ± 3% |
| Rise time and fall time | 3.0 ns (typical) |
| Mating force | Max. 22 N |
| Retention force | Min. 89 N |
| Mating cycles | Min. 1 000 |
| Contact resistance | Max. 20 mΩ |
| Insulation resistance | Min. 1000 mΩ |
| Dielectric with standing voltage | 1 500V ms (Signal to Shield) |
| Current rating | Max. 0,05A |

| Spezification at 25°C (Operating temperature -40°C to +85°C) | | |
|---|---|---|
| Insertion loss | 0.1-100 MHZ | 1.0 dB max |
| Return loss | 0.1-30 MHZ | 20.0 dB Type |
| | 60 MHZ | 15.0 dB Type |
| | 80 MHZ | 12.0 dB Type |
| Next near and cross talk | 0.1-30 MHZ | 50.0 dB Type |
| | 60 MHZ | 45.0 dB Type |
| | 100 MHZ | 40.0 dB Type |
| Differential to common mode rejection | 60 MHZ | 40.0 dB Type |
| | 100 MHZ | 35.0 dB Type |
| Common mode rejection ration | 60 MHZ | 35.0 dB Type |
| | 100 MHZ | 30.0 dB Type |
| Hi-Pot | 1500 Vrms | 60 sec. |

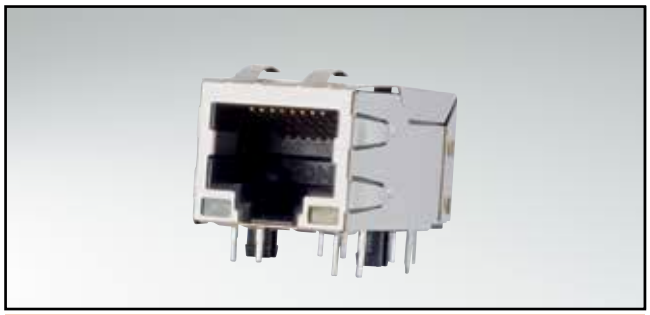
| Standard-LED | | |
|---|---|---|
| Color | Green | Yellow |
| Wave length | 565 nm | 585 nm |
| Forward voltage with $I_F$=20 mA | 2.6 V (max)<br>2.1 V (Type) | 2.6 V (max)<br>2.0 V (Type) |
| Reserve voltage with $I_R$=10 µA | 5.0 V (Type) | 5.0 V (Type) |
| Luminous intensity with $I_F$=20 mA | 15 mcd (min)<br>25 mcd (Type) | 20 mcd (min)<br>30 mcd (Type) |

| Solder parameter | Preheating | | Solder terminal dipping parameters | |
|---|---|---|---|---|
| | max. Temperature | Duration | max. Solder bath temperature | max. Terminal Immersion Time |
| Recommended wave-solder parameters | 150°C | 180s | 265°C | 8s |

Technical specifications are subject to change without notice.

# RJ45 Modular Jack with Magnetic Filter

## 1 Port – Solder pin straight – Shielded

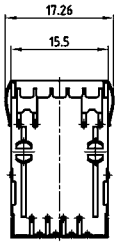


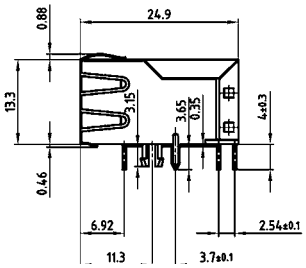
RoHS compliant – UL / cUL listed, File No.: E202784

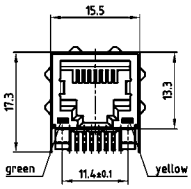
### Description

- According to specifications IEEE 802.3 and ANSI X3.263
- With and without LED
- Turns Ratio
  - 1:1 / 1:1 (Tx / Rx) or
  - 1:1.414 / 1:1 (Tx / Rx)
  - Further Turns Ratio on request
- Available with and without shunt choke option in transmission channel

### Product drawing



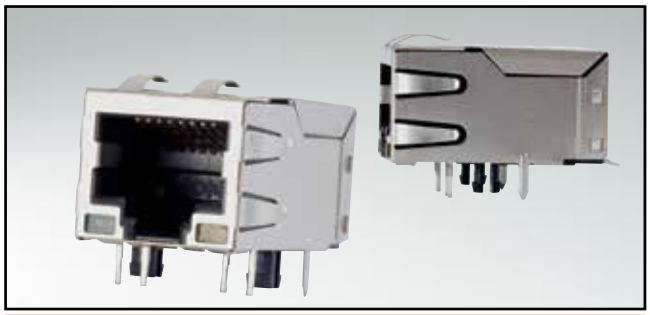

### Order data

RJ45 Magnetic modular Jack – 1 Port

| Design | Turns ratio | Shunt choke | LED | Part Number |
|---|---|---|---|---|
| Solder pin, straight | 1:1 / 1:1 (Tx / Rx) | In transmit channel | Without LED | RJ45TJS11AC0N0X |
| Solder pin, straight | 1:1 / 1:1 (Tx / Rx) | In transmit channel | Green (left) / Yellow (right) | RJ45TJS11AC010X |
| Solder pin, straight | 1:1 / 1:1 (Tx / Rx) | Without | Without LED | RJ45TJS11AN0N0X |
| Solder pin, straight | 1:1 / 1:1 (Tx / Rx) | Without | Green (left) / Yellow (right) | RJ45TJS11AN010X |
| Solder pin, straight | 1:1414 / 1:1 (Tx / Rx) | In transmit channel | Without LED | RJ45TJS11BC0N0X |
| Solder pin, straight | 1:1414 / 1:1 (Tx / Rx) | In transmit channel | Green (left) / Yellow (right) | RJ45TJS11BC010X |
| Solder pin, straight | 1:1414 / 1:1 (Tx / Rx) | Without | Without LED | RJ45TJS11BN0N0X |
| Solder pin, straight | 1:1414 / 1:1 (Tx / Rx) | Without | Green (left) / Yellow (right) | RJ45TJS11BN010X |

# RJ45 Modular Jack with Magnetic Filter

## 1 Port – SMT-Termination – Shielded

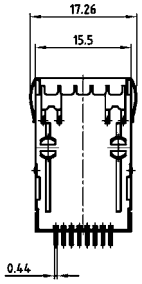


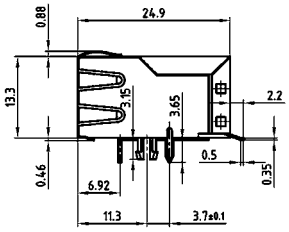
RoHS compliant – UL / cUL listed, File No.: E202784

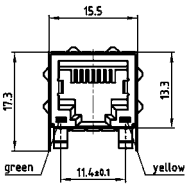
### Description

- According to specifications IEEE 802.3 and ANSI X3.263
- With and without LED
- Turns Ratio
  - 1:1 / 1:1 (Tx / Rx) or
  - 1:1.414 / 1:1 (Tx / Rx)
  - Further Turns Ratio on request
- Available with and without shunt choke option in transmission channel

### Product drawing



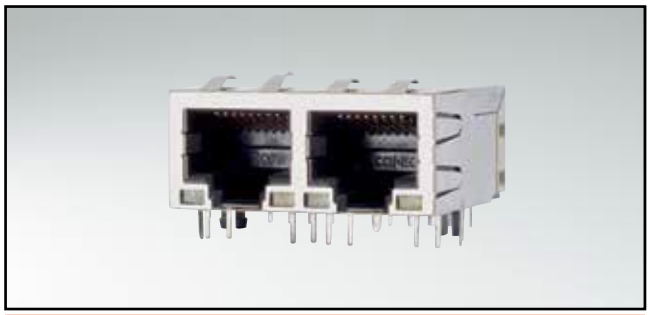

### Order data

RJ45 Magnetic modular Jack – 1 Port

| Design | Turns ratio | Shunt choke | LED | Part Number |
|---|---|---|---|---|
| SMT-Termination | 1:1 / 1:1 (Tx / Rx) | In transmit channel | Without LED | RJ45SJS11AC0N0X |
| SMT-Termination | 1:1 / 1:1 (Tx / Rx) | In transmit channel | Green (left) / Yellow (right) | RJ45SJS11AC010X |
| SMT-Termination | 1:1 / 1:1 (Tx / Rx) | Without | Without LED | RJ45SJS11AN0N0X |
| SMT-Termination | 1:1 / 1:1 (Tx / Rx) | Without | Green (left) / Yellow (right) | RJ45SJS11AN010X |
| SMT-Termination | 1:1414 / 1:1 (Tx / Rx) | In transmit channel | Without LED | RJ45SJS11BC0N0X |
| SMT-Termination | 1:1414 / 1:1 (Tx / Rx) | In transmit channel | Green (left) / Yellow (right) | RJ45SJS11BC010X |
| SMT-Termination | 1:1414 / 1:1 (Tx / Rx) | Without | Without LED | RJ45SJS11BN0N0X |
| SMT-Termination | 1:1414 / 1:1 (Tx / Rx) | Without | Green (left) / Yellow (right) | RJ45SJS11BN010X |

# RJ45 Modular Jack with Magnetic Filter

## 2 Port – Solder pin, straight – Shielded

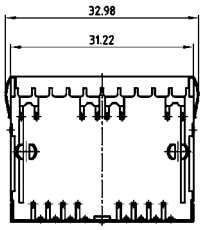


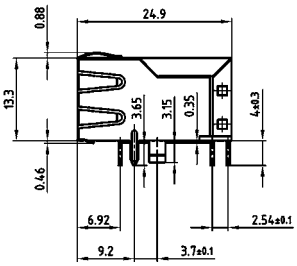
RoHS compliant – UL / cUL listed, File No.: E202784

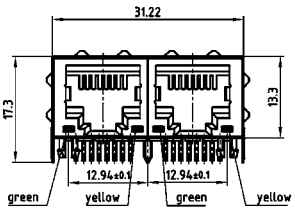
### Description

- According to specifications IEEE 802.3 and ANSI X3.263
- With and without LED
- Turns Ratio
  - 1:1 / 1:1 (Tx / Rx) or
  - 1:1.414 / 1:1 (Tx / Rx)
  - Further Turns Ratio on request
- Available with and without shunt choke option in transmission channel

### Product drawing



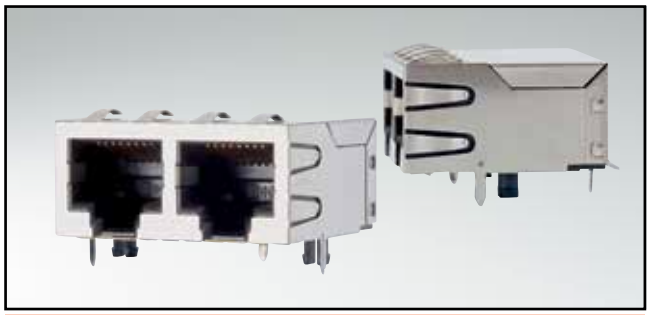

### Order data

RJ45 Magnetic modular Jack – 2 Port

| Design | Turns ratio | Shunt choke | LED | Part Number |
|---|---|---|---|---|
| Solder pin, straight | 1:1 / 1:1 (Tx / Rx) | In transmit channel | Without LED | RJ45TJS21AC0N0X |
| Solder pin, straight | 1:1 / 1:1 (Tx / Rx) | In transmit channel | Green (left) / Yellow (right) | RJ45TJS21AC010X |
| Solder pin, straight | 1:1 / 1:1 (Tx / Rx) | Without | Without LED | RJ45TJS21AN0N0X |
| Solder pin, straight | 1:1 / 1:1 (Tx / Rx) | Without | Green (left) / Yellow (right) | RJ45TJS21AN010X |
| Solder pin, straight | 1:1414 / 1:1 (Tx / Rx) | In transmit channel | Without LED | RJ45TJS21BC0N0X |
| Solder pin, straight | 1:1414 / 1:1 (Tx / Rx) | In transmit channel | Green (left) / Yellow (right) | RJ45TJS21BC010X |
| Solder pin, straight | 1:1414 / 1:1 (Tx / Rx) | Without | Without LED | RJ45TJS21BN0N0X |
| Solder pin, straight | 1:1414 / 1:1 (Tx / Rx) | Without | Green (left) / Yellow (right) | RJ45TJS21BN010X |

# RJ45 Modular Jack with Magnetic Filter

## 2 Port – SMT-Termination – Shielded

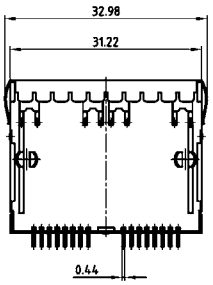


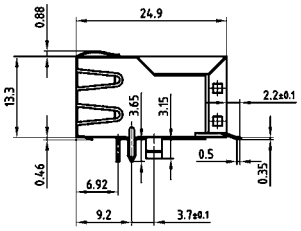
RoHS compliant – UL / cUL listed, File No.: E202784

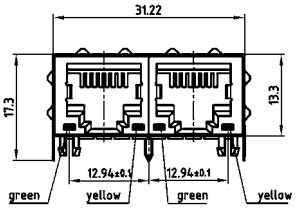
### Description

- According to specifications IEEE 802.3 and ANSI X3.263
- With and without LED
- Turns Ratio
  - 1:1 / 1:1 (Tx / Rx) or
  - 1:1.414 / 1:1 (Tx / Rx)
  - Further Turns Ratio on request
- Available with and without shunt choke option in transmission channel

### Product drawing



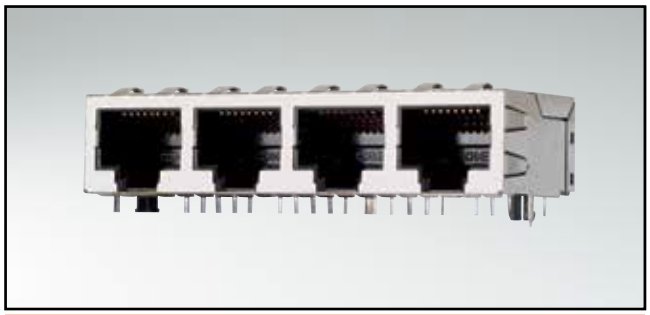

### Order data

RJ45 Magnetic modular Jack – 2 Port

| Design | Turns ratio | Shunt choke | LED | Part Number |
|---|---|---|---|---|
| SMT-Termination | 1:1 / 1:1 (Tx / Rx) | In transmit channel | Without LED | RJ45SJS21AC0N0X |
| SMT-Termination | 1:1 / 1:1 (Tx / Rx) | In transmit channel | Green (left) / Yellow (right) | RJ45SJS21AC010X |
| SMT-Termination | 1:1 / 1:1 (Tx / Rx) | Without | Without LED | RJ45SJS21AN0N0X |
| SMT-Termination | 1:1 / 1:1 (Tx / Rx) | Without | Green (left) / Yellow (right) | RJ45SJS21AN010X |
| SMT-Termination | 1:1414 / 1:1 (Tx / Rx) | In transmit channel | Without LED | RJ45SJS21BC0N0X |
| SMT-Termination | 1:1414 / 1:1 (Tx / Rx) | In transmit channel | Green (left) / Yellow (right) | RJ45SJS21BC010X |
| SMT-Termination | 1:1414 / 1:1 (Tx / Rx) | Without | Without LED | RJ45SJS21BN0N0X |
| SMT-Termination | 1:1414 / 1:1 (Tx / Rx) | Without | Green (left) / Yellow (right) | RJ45SJS21BN010X |

# RJ45 Modular Jack with Magnetic Filter

## 4 Port – Solder pin, straight – Shielded

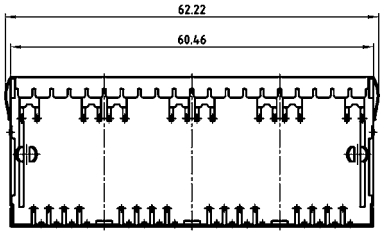


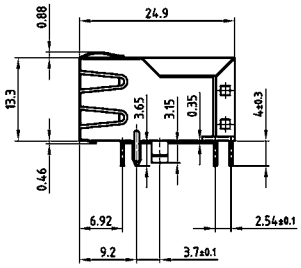
RoHS compliant – UL / cUL listed, File No.: E202784

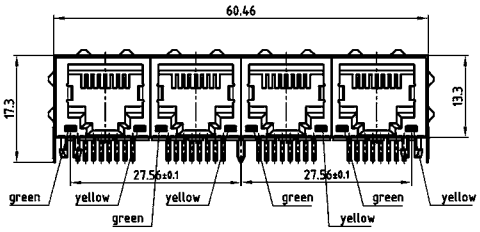
### Description

- According to specifications IEEE 802.3 and ANSI X3.263
- With and without LED
- Turns Ratio
  - 1:1 / 1:1 (Tx / Rx) or
  - 1:1.414 / 1:1 (Tx / Rx)
  - Further Turns Ratio on request
- Available with and without shunt choke option in transmission channel

### Product drawing



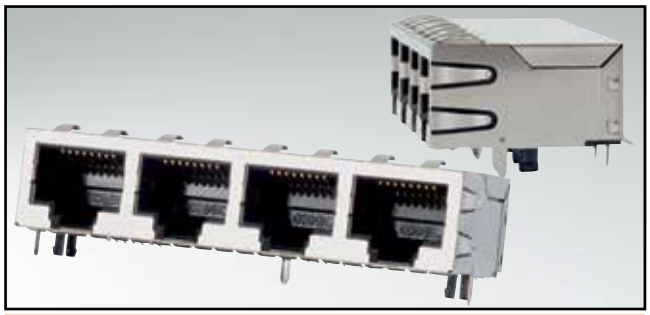

### Order data

RJ45 Magnetic modular Jack – 4 Port

| Design | Turns ratio | Shunt choke | LED | Part Number |
|---|---|---|---|---|
| Solder pin, straight | 1:1 / 1:1 (Tx / Rx) | In transmit channel | Without LED | RJ45TJS41AC0N0X |
| Solder pin, straight | 1:1 / 1:1 (Tx / Rx) | In transmit channel | Green (left) / Yellow (right) | RJ45TJS41AC010X |
| Solder pin, straight | 1:1 / 1:1 (Tx / Rx) | Without | Without LED | RJ45TJS41AN0N0X |
| Solder pin, straight | 1:1 / 1:1 (Tx / Rx) | Without | Green (left) / Yellow (right) | RJ45TJS41AN010X |
| Solder pin, straight | 1:1414 / 1:1 (Tx / Rx) | In transmit channel | Without LED | RJ45TJS41BC0N0X |
| Solder pin, straight | 1:1414 / 1:1 (Tx / Rx) | In transmit channel | Green (left) / Yellow (right) | RJ45TJS41BC010X |
| Solder pin, straight | 1:1414 / 1:1 (Tx / Rx) | Without | Without LED | RJ45TJS41BN0N0X |
| Solder pin, straight | 1:1414 / 1:1 (Tx / Rx) | Without | Green (left) / Yellow (right) | RJ45TJS41BN010X |

# RJ45 Modular Jack with Magnetic Filter

## 4 Port – SMT-Termination – Shielded

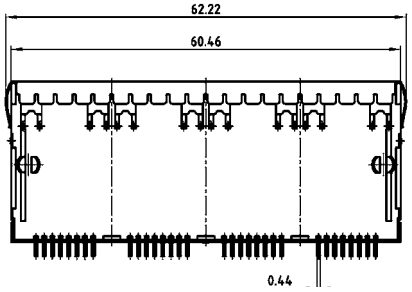


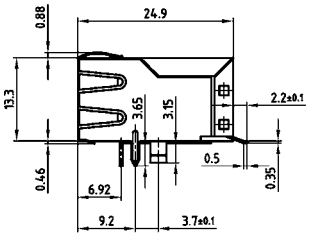
RoHS compliant – UL / cUL listed, File No.: E202784

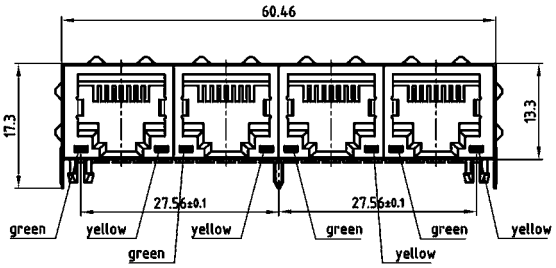
### Description

- According to specifications IEEE 802.3 and ANSI X3.263
- With and without LED
- Turns Ratio
  - 1:1 / 1:1 (Tx / Rx) or
  - 1:1.414 / 1:1 (Tx / Rx)
  - Further Turns Ratio on request
- Available with and without shunt choke option in transmission channel

### Product drawing



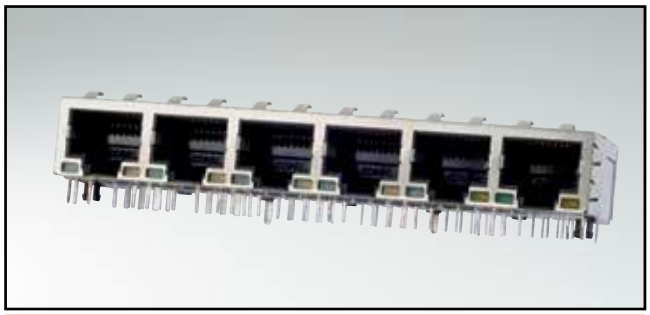

### Order data

RJ45 Magnetic modular Jack – 4 Port

| Design | Turns ratio | Shunt choke | LED | Part Number |
|---|---|---|---|---|
| SMT-Termination | 1:1 / 1:1 (Tx / Rx) | In transmit channel | Without LED | RJ45SJS41AC0N0X |
| SMT-Termination | 1:1 / 1:1 (Tx / Rx) | In transmit channel | Green (left) / Yellow (right) | RJ45SJS41AC010X |
| SMT-Termination | 1:1 / 1:1 (Tx / Rx) | Without | Without LED | RJ45SJS41AN0N0X |
| SMT-Termination | 1:1 / 1:1 (Tx / Rx) | Without | Green (left) / Yellow (right) | RJ45SJS41AN010X |
| SMT-Termination | 1:1414 / 1:1 (Tx / Rx) | In transmit channel | Without LED | RJ45SJS41BC0N0X |
| SMT-Termination | 1:1414 / 1:1 (Tx / Rx) | In transmit channel | Green (left) / Yellow (right) | RJ45SJS41BC010X |
| SMT-Termination | 1:1414 / 1:1 (Tx / Rx) | Without | Without LED | RJ45SJS41BN0N0X |
| SMT-Termination | 1:1414 / 1:1 (Tx / Rx) | Without | Green (left) / Yellow (right) | RJ45SJS41BN010X |

# RJ45 Modular Jack with Magnetic Filter

## 6 Port – Solder pin, straight – Shielded

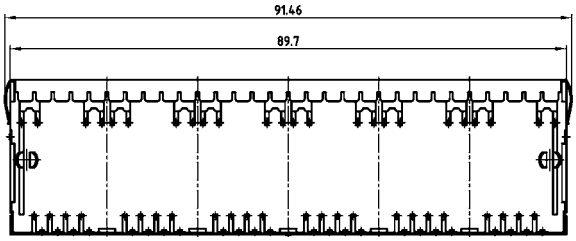


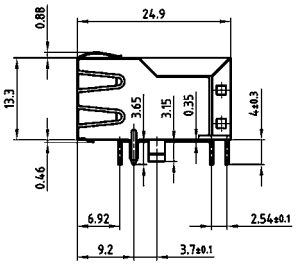
RoHS compliant – UL / cUL listed, File No.: E202784

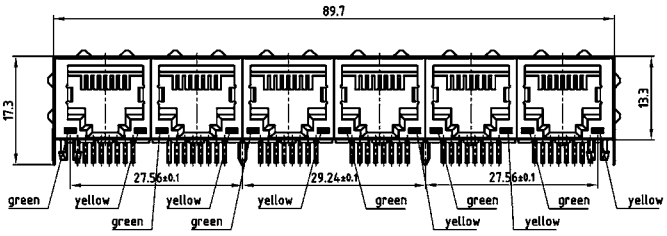
### Description

- According to specifications IEEE 802.3 and ANSI X3.263
- With and without LED
- Turns Ratio
  - 1:1 / 1:1 (Tx / Rx) or
  - 1:1.414 / 1:1 (Tx / Rx)
  - Further Turns Ratio on request
- Available with and without shunt choke option in transmission channel

### Product drawing



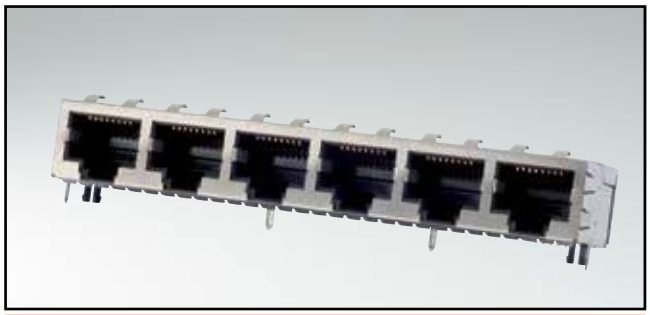

### Order data

RJ45 Magnetic modular Jack – 6 Port

| Design | Turns ratio | Shunt choke | LED | Part Number |
|---|---|---|---|---|
| Solder pin, straight | 1:1 / 1:1 (Tx / Rx) | In transmit channel | Without LED | RJ45TJS61AC0N0X |
| Solder pin, straight | 1:1 / 1:1 (Tx / Rx) | In transmit channel | Green (left) / Yellow (right) | RJ45TJS61AC010X |
| Solder pin, straight | 1:1 / 1:1 (Tx / Rx) | Without | Without LED | RJ45TJS61AN0N0X |
| Solder pin, straight | 1:1 / 1:1 (Tx / Rx) | Without | Green (left) / Yellow (right) | RJ45TJS61AN010X |
| Solder pin, straight | 1:1414 / 1:1 (Tx / Rx) | In transmit channel | Without LED | RJ45TJS61BC0N0X |
| Solder pin, straight | 1:1414 / 1:1 (Tx / Rx) | In transmit channel | Green (left) / Yellow (right) | RJ45TJS61BC010X |
| Solder pin, straight | 1:1414 / 1:1 (Tx / Rx) | Without | Without LED | RJ45TJS61BN0N0X |
| Solder pin, straight | 1:1414 / 1:1 (Tx / Rx) | Without | Green (left) / Yellow (right) | RJ45TJS61BN010X |

# RJ45 Modular Jack with Magnetic Filter

## 6 Port – SMT-Termination – Shielded

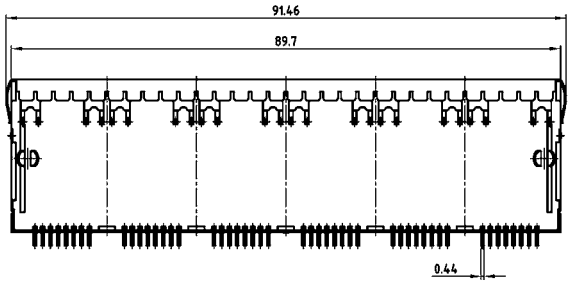


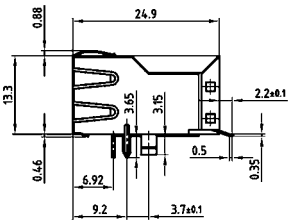
RoHS compliant – UL / cUL listed, File No.: E202784

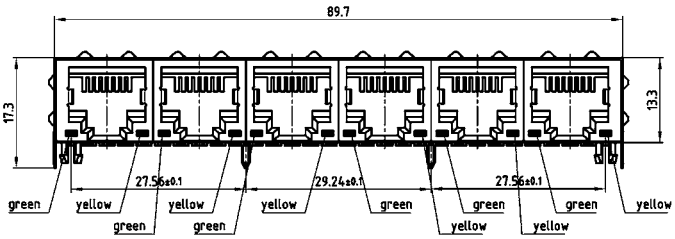
### Description

- According to specifications IEEE 802.3 and ANSI X3.263
- With and without LED
- Turns Ratio
  - 1:1 / 1:1 (Tx / Rx) or
  - 1:1.414 / 1:1 (Tx / Rx)
  - Further Turns Ratio on request
- Available with and without shunt choke option in transmission channel

### Product drawing



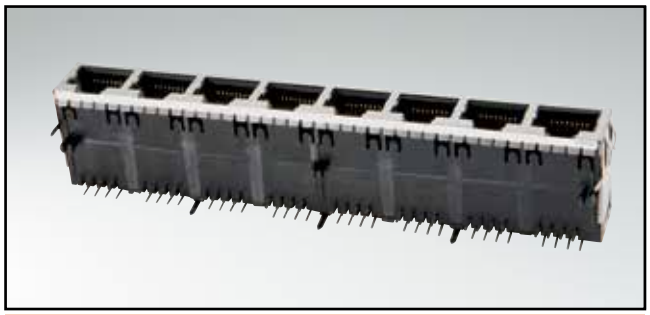

### Order data

RJ45 Magnetic modular Jack – 6 Port

| Design | Turns ratio | Shunt choke | LED | Part Number |
|---|---|---|---|---|
| SMT-Termination | 1:1 / 1:1 (Tx / Rx) | In transmit channel | Without LED | RJ45SJS61AC0N0X |
| SMT-Termination | 1:1 / 1:1 (Tx / Rx) | In transmit channel | Green (left) / Yellow (right) | RJ45SJS61AC010X |
| SMT-Termination | 1:1 / 1:1 (Tx / Rx) | Without | Without LED | RJ45SJS61AN0N0X |
| SMT-Termination | 1:1 / 1:1 (Tx / Rx) | Without | Green (left) / Yellow (right) | RJ45SJS61AN010X |
| SMT-Termination | 1:1414 / 1:1 (Tx / Rx) | In transmit channel | Without LED | RJ45SJS61BC0N0X |
| SMT-Termination | 1:1414 / 1:1 (Tx / Rx) | In transmit channel | Green (left) / Yellow (right) | RJ45SJS61BC010X |
| SMT-Termination | 1:1414 / 1:1 (Tx / Rx) | Without | Without LED | RJ45SJS61BN0N0X |
| SMT-Termination | 1:1414 / 1:1 (Tx / Rx) | Without | Green (left) / Yellow (right) | RJ45SJS61BN010X |

# RJ45 Modular Jack with Magnetic Filter

## 8 Port – Solder pin, straight – Shielded

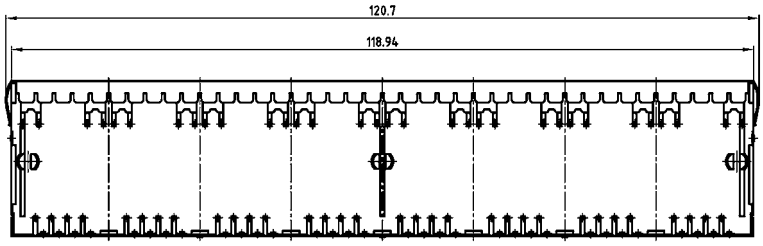


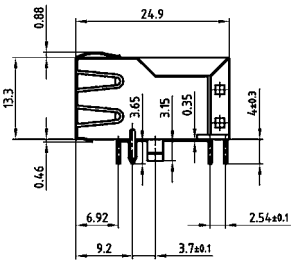
RoHS compliant – UL / cUL listed, File No.: E202784

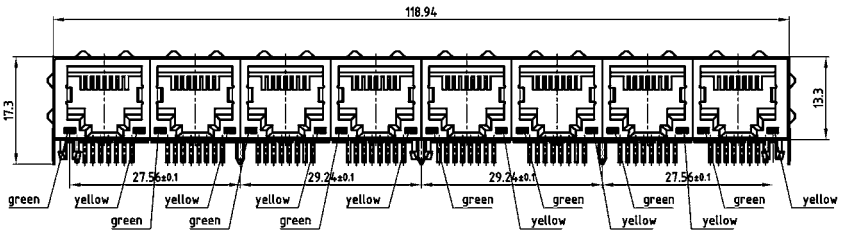
### Description

- According to specifications IEEE 802.3 and ANSI X3.263
- With and without LED
- Turns Ratio
  - 1:1 / 1:1 (Tx / Rx) or
  - 1:1.414 / 1:1 (Tx / Rx)
  - Further Turns Ratio on request
- Available with and without shunt choke option in transmission channel

### Product drawing



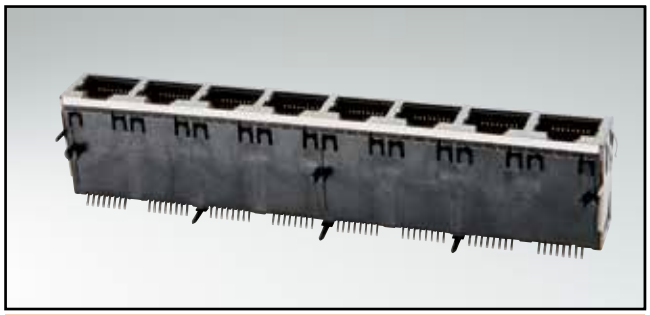

### Order data

RJ45 Magnetic modular Jack – 8 Port

| Design | Turns ratio | Shunt choke | LED | Part Number |
|---|---|---|---|---|
| Solder pin, straight | 1:1 / 1:1 (Tx / Rx) | In transmit channel | Without LED | RJ45TJS81AC0N0X |
| Solder pin, straight | 1:1 / 1:1 (Tx / Rx) | In transmit channel | Green (left) / Yellow (right) | RJ45TJS81AC010X |
| Solder pin, straight | 1:1 / 1:1 (Tx / Rx) | Without | Without LED | RJ45TJS81AN0N0X |
| Solder pin, straight | 1:1 / 1:1 (Tx / Rx) | Without | Green (left) / Yellow (right) | RJ45TJS81AN010X |
| Solder pin, straight | 1:1414 / 1:1 (Tx / Rx) | In transmit channel | Without LED | RJ45TJS81BC0N0X |
| Solder pin, straight | 1:1414 / 1:1 (Tx / Rx) | In transmit channel | Green (left) / Yellow (right) | RJ45TJS81BC010X |
| Solder pin, straight | 1:1414 / 1:1 (Tx / Rx) | Without | Without LED | RJ45TJS81BN0N0X |
| Solder pin, straight | 1:1414 / 1:1 (Tx / Rx) | Without | Green (left) / Yellow (right) | RJ45TJS81BN010X |

# RJ45 Modular Jack with Magnetic Filter

## 8 Port – SMT-Termination – Shielded

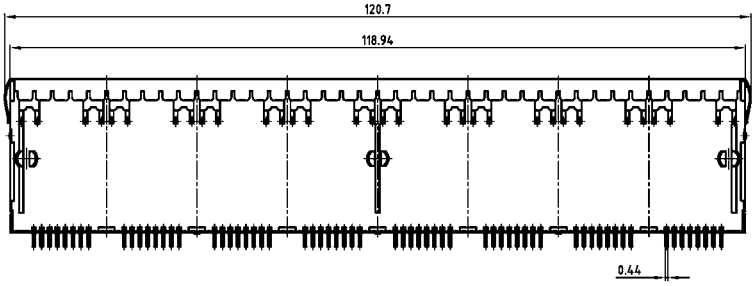


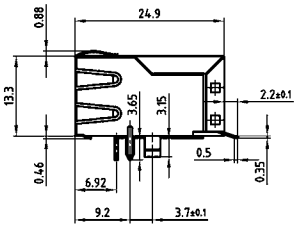
RoHS compliant – UL / cUL listed, File No.: E202784

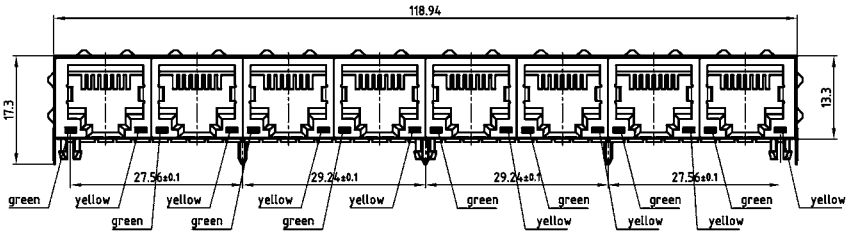
### Description

- According to specifications IEEE 802.3 and ANSI X3.263
- With and without LED
- Turns Ratio
  - 1:1 / 1:1 (Tx / Rx) or
  - 1:1.414 / 1:1 (Tx / Rx)
  - Further Turns Ratio on request
- Available with and without shunt choke option in transmission channel

### Product drawing



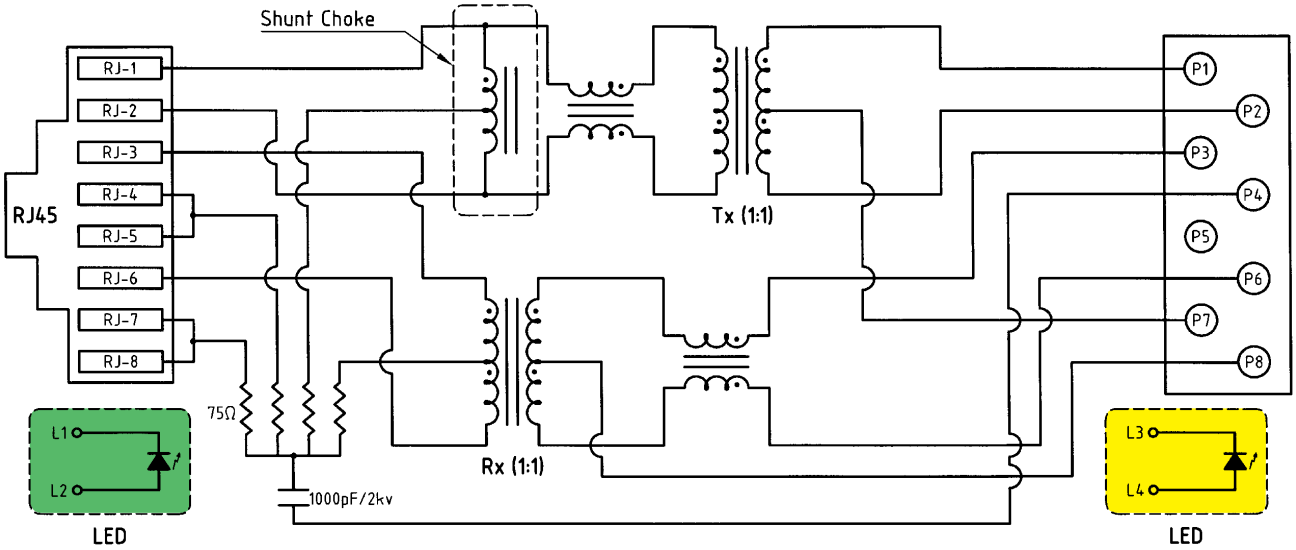

### Order data

RJ45 Magnetic modular Jack – 8 Port

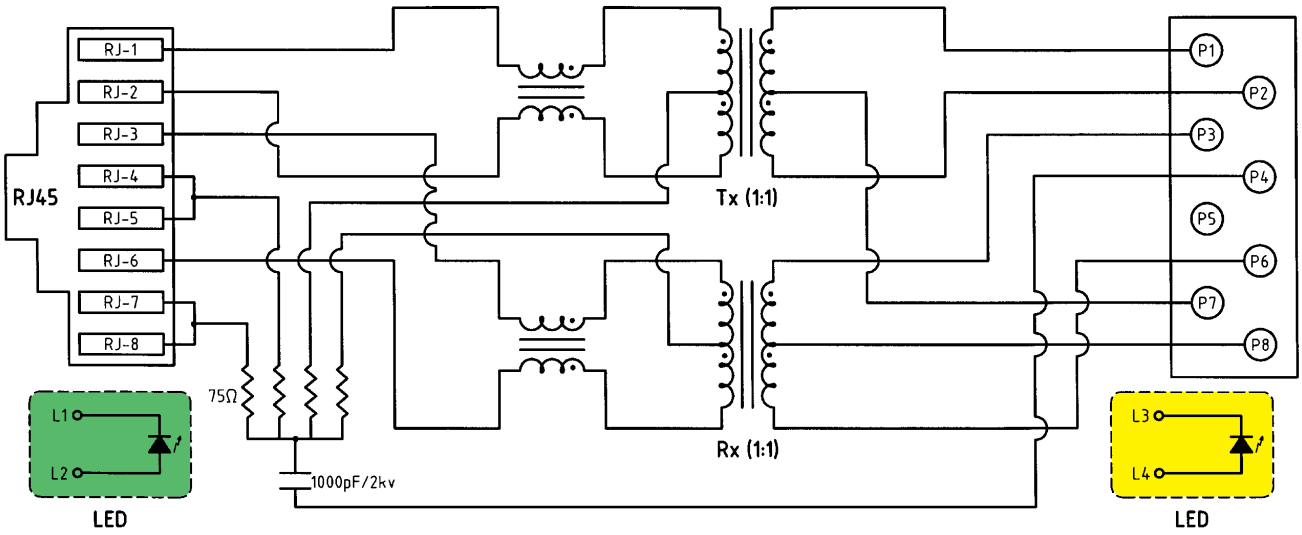
| Design | Turns ratio | Shunt choke | LED | Part Number |
|---|---|---|---|---|
| SMT-Termination | 1:1 / 1:1 (Tx / Rx) | In transmit channel | Without LED | RJ45SJS81AC0N0X |
| SMT-Termination | 1:1 / 1:1 (Tx / Rx) | In transmit channel | Green (left) / Yellow (right) | RJ45SJS81AC010X |
| SMT-Termination | 1:1 / 1:1 (Tx / Rx) | Without | Without LED | RJ45SJS81AN0N0X |
| SMT-Termination | 1:1 / 1:1 (Tx / Rx) | Without | Green (left) / Yellow (right) | RJ45SJS81AN010X |
| SMT-Termination | 1:1414 / 1:1 (Tx / Rx) | In transmit channel | Without LED | RJ45SJS81BC0N0X |
| SMT-Termination | 1:1414 / 1:1 (Tx / Rx) | In transmit channel | Green (left) / Yellow (right) | RJ45SJS81BC010X |
| SMT-Termination | 1:1414 / 1:1 (Tx / Rx) | Without | Without LED | RJ45SJS81BN0N0X |
| SMT-Termination | 1:1414 / 1:1 (Tx / Rx) | Without | Green (left) / Yellow (right) | RJ45SJS81BN010X |

# Schematics

Schematic of magnetic Circuit with Tx/Rx = 1:1/1:1 or Tx/Rx = 1:1.414/1:1 - Turns Ratio, additional shount Chok, 4x0,75Ω Terminal Resistors - 1000pF/2kv Capacitor and LEDs (Optional)

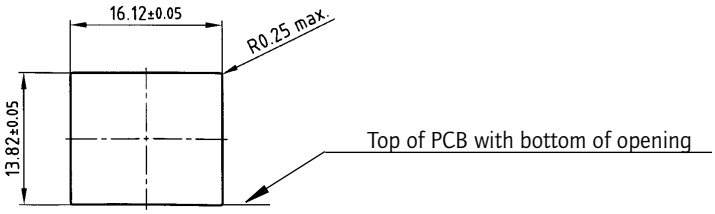



Schematic of magnetic Circuit with Tx/Rx = 1:1/1:1 or Tx/Rx = 1:1.414/1:1 - Turns Ratio, additional 4x0,75Ω Terminal Resistors - 1000pF/2kv Capacitor and LEDs (Optional).

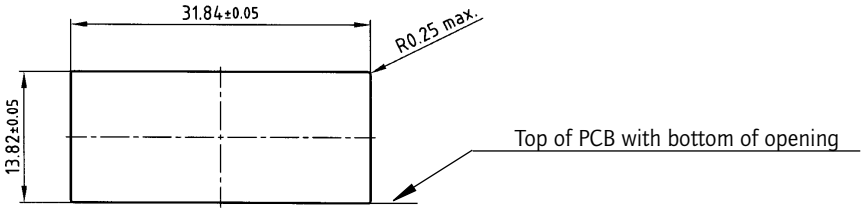


# Recommended Panel cut-out

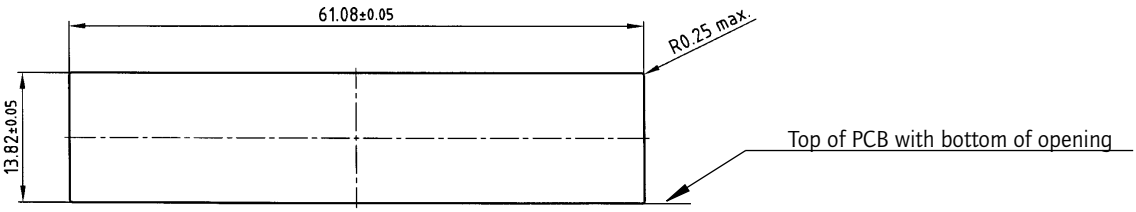
### 1 Port



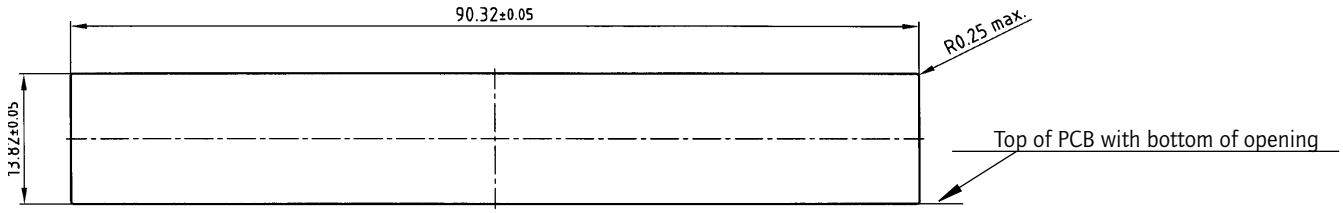

### 2 Port



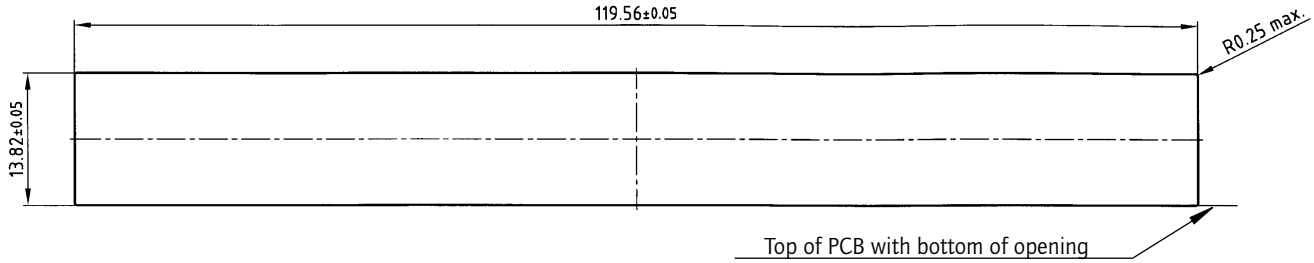

### 4 Port




### 6 Port

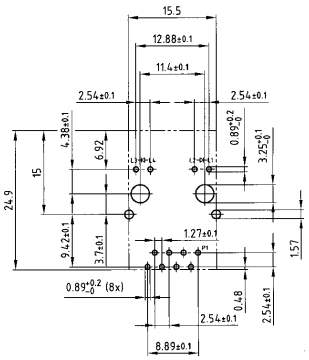



### 8 Port

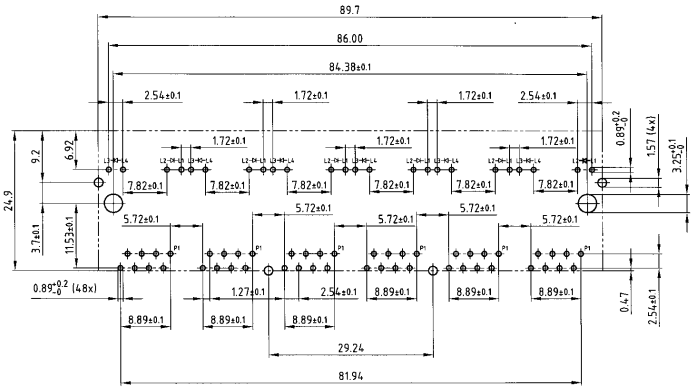


# PCB Layout for Solder pin straight

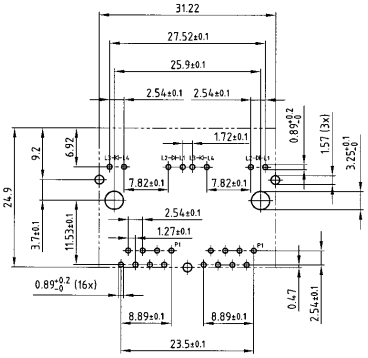
## 1 Port



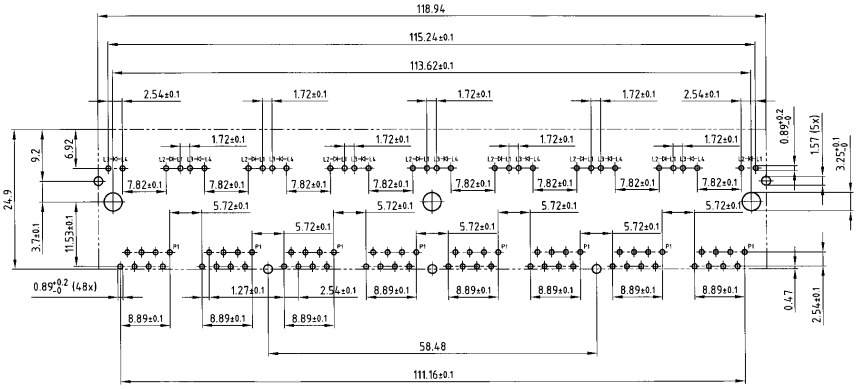

## 6 Port



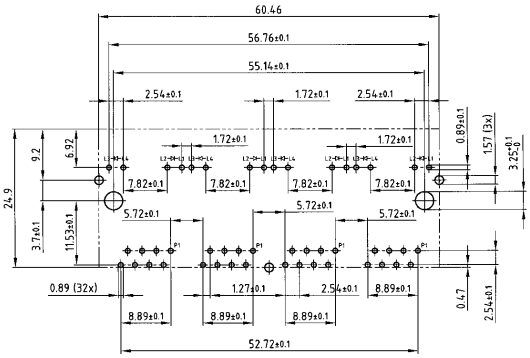

## 2 Port




## 8 Port

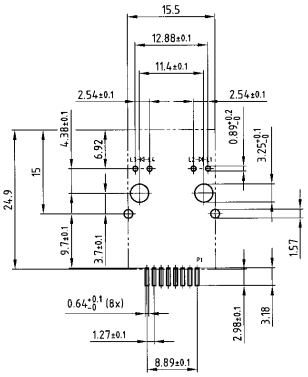



## 4 Port

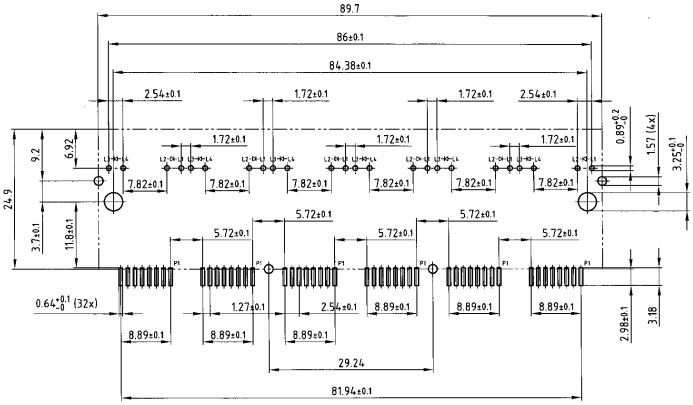


# PCB Layout for SMT-Termination

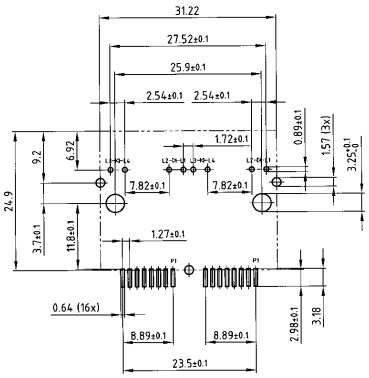
## 1 Port



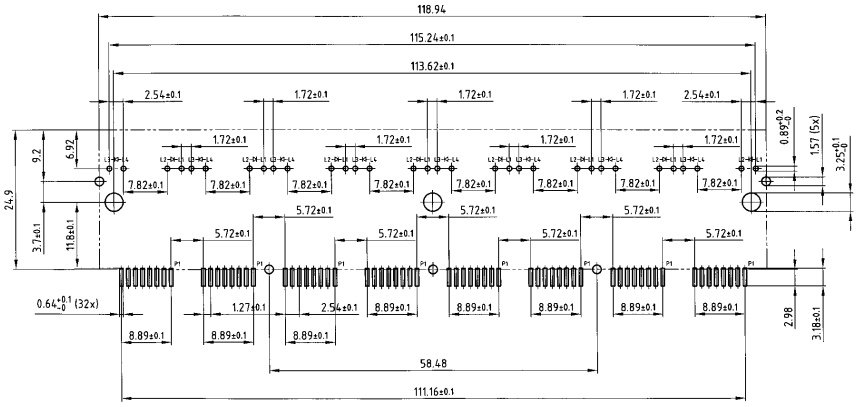

## 6 Port



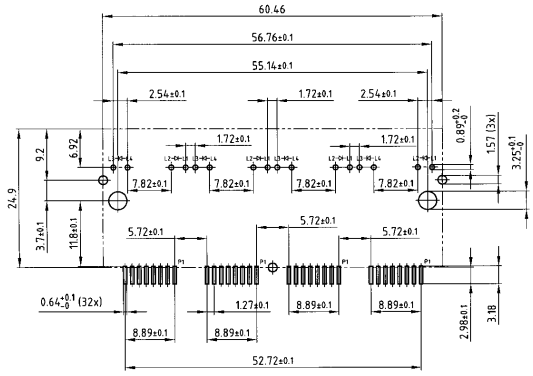

## 2 Port




## 8 Port




## 4 Port



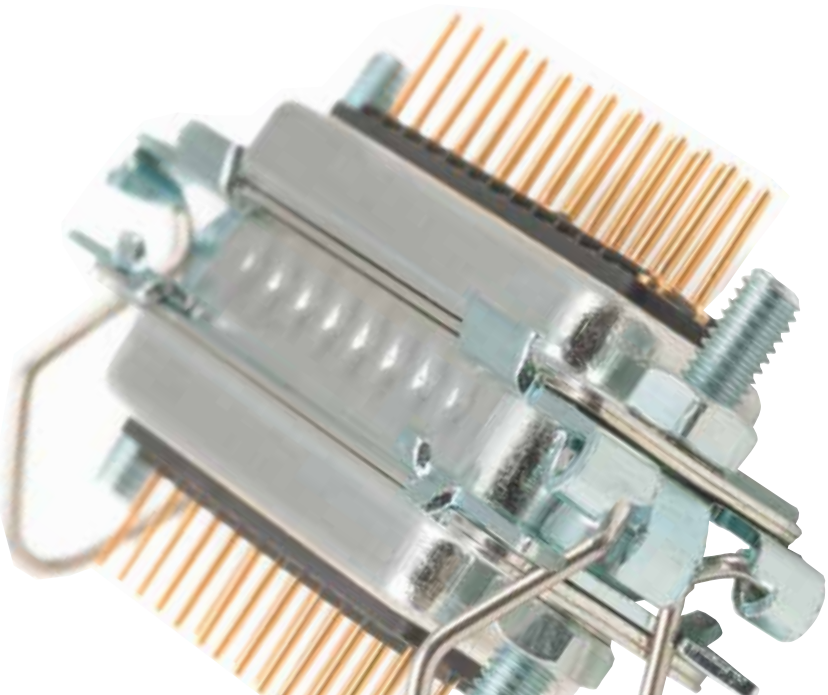
Section 7

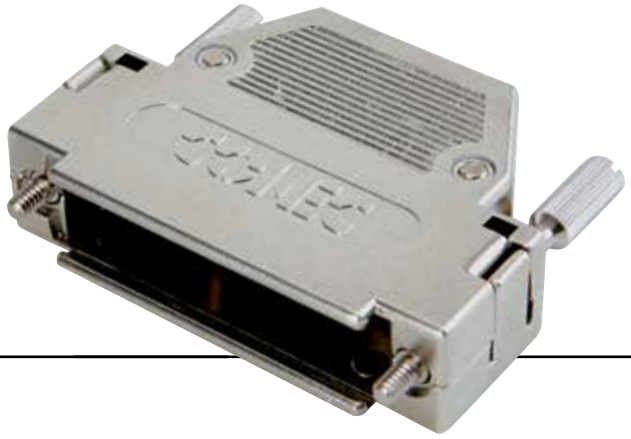
# D-SUB Hoods and Accessories

The diversity of different applications and market requirements makes it necessary to offer a comprehensive line of hoods and backshells. The CONEC product line includes shielded hoods made of metal, plastic, Metallized plastic and plastic with metal inserts.

Connectors with high current or coaxial contacts require special hoods with adapted interiors. In these cases the height of the housing is particularly important to assure faultless seating of the contacts. The cable should exit from the hood or backshell without introducing any strain on the contacts.

A special developed hood with an IP67 rating is available to provide optimal water resistance for D-SUB Connectors.



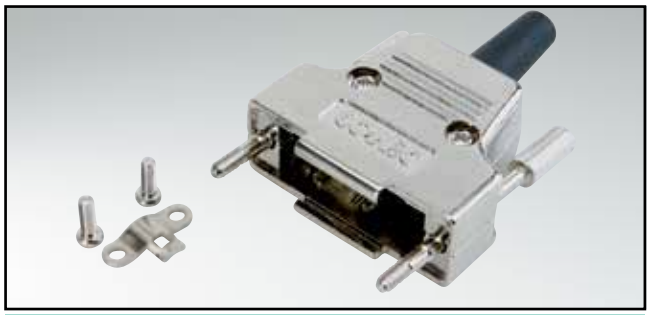


The input/output connector product line is supplemented by a wide array of accessories.
The various caps, hardware and latches are available for use with these D-subminiature connectors, whether standard, high density, combination or filter designs are selected.
Various materials and designs in plastic, steel or stainless steel, as well as M3 or 4-40 UNC thread designs, are deliverable as standard or on request.

For special application please contact the factory.

# D-SUB Metal Hood

## Straight cable entry – 9-50 pos.

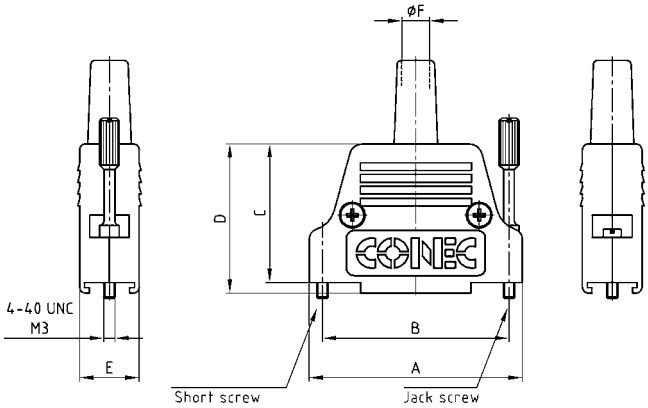


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

- Zinc die-cast hood, EMI/RFI shielding
- Cable sleeve
- Fastening:
  - short screws 4-40 UNC or M3 thread
  - jack screws 4-40 UNC or M3 thread
- Surface nickel plated
- Packaging: in bulk or in pack units as a single package

### Product drawing




| No. of pos. | A | B | C | D | E | Ø F |
|---|---|---|---|---|---|---|
| 09 | 31.70 | 25.00 | 30.00 | 32.70 | 15.00 | 5.00 |
| 15 | 40.00 | 33.30 | 32.00 | 34.70 | 15.00 | 5.00 |
| 25 | 53.70 | 47.00 | 35.00 | 37.70 | 15.00 | 7.00 |
| 37 | 70.20 | 63.50 | 41.00 | 43.70 | 15.00 | 7.00 |
| 50 | 67.80 | 61.10 | 41.00 | 43.70 | 17.70 | 9.30 |

### Order data

**D-SUB Metal hood – Short screw**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | 4-40 UNC Short screw | 165X17409X |
| 15 | 4-40 UNC Short screw | 165X17419X |
| 25 | 4-40 UNC Short screw | 165X17429X |
| 37 | 4-40 UNC Short screw | 165X17439X |
| 50 | 4-40 UNC Short screw | 165X17449X |
| 09 | M3 Short screw | 165X17459X |
| 15 | M3 Short screw | 165X17469X |
| 25 | M3 Short screw | 165X17479X |
| 37 | M3 Short screw | 165X17489X |
| 50 | M3 Short screw | 165X17499X |

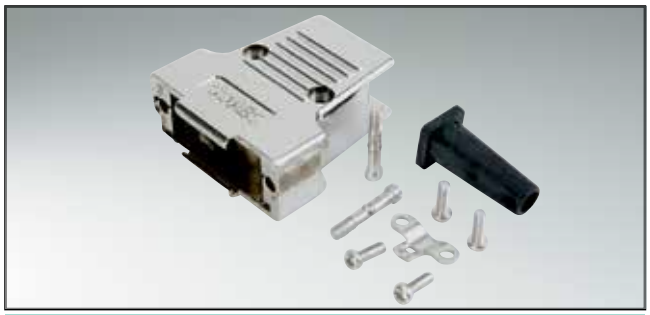
**D-SUB Metal hood – Jack screw**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | 4-40 UNC Jack screw | 165X17309X |
| 15 | 4-40 UNC Jack screw | 165X17319X |
| 25 | 4-40 UNC Jack screw | 165X17329X |
| 37 | 4-40 UNC Jack screw | 165X17339X |
| 50 | 4-40 UNC Jack screw | 165X17349X |
| 09 | M3 Jack screw | 165X17359X |
| 15 | M3 Jack screw | 165X17369X |
| 25 | M3 Jack screw | 165X17379X |
| 37 | M3 Jack screw | 165X17389X |
| 50 | M3 Jack screw | 165X17399X |

**For single packaged add the letter „E" at the end of the part number.**

# D-SUB Metal Hood

## Side cable entry – 9-50 pos.

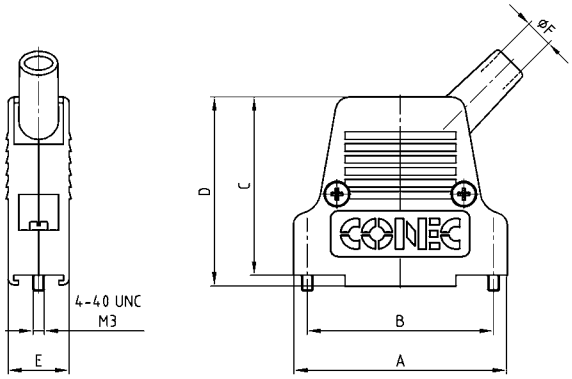


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

- Zinc die-cast hood, EMI/RFI shielding
- Cable sleeve
- Fastening:
  - short screws 4-40 UNC or M3 thread
- Surface nickel plated
- Packaging: in bulk or in pack units as a single package

### Product drawing




| No. of pos. | A | B | C | D | E | Ø F |
|---|---|---|---|---|---|---|
| 09 | 31.80 | 25.00 | 39.50 | 42.40 | 15.40 | 5.00 |
| 15 | 40.30 | 33.30 | 41.00 | 43.50 | 15.40 | 5.00 |
| 25 | 54.00 | 47.00 | 45.00 | 47.70 | 15.40 | 7.00 |
| 37 | 70.20 | 63.50 | 48.00 | 50.40 | 15.40 | 7.00 |
| 50 | 67.80 | 61.10 | 48.00 | 50.40 | 18.50 | 9.30 |

### Order data

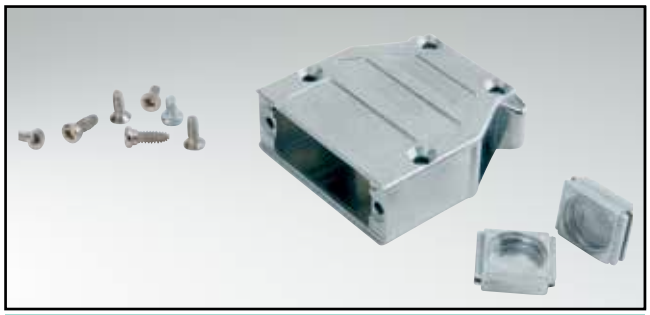
| D-SUB Metal hood – Short screw | | |
|---|---|---|
| No. of pos. | Design 4-40 UNC | Part Number |
| 09 | Short screw | 165X17559X |
| 15 | Short screw | 165X17569X |
| 25 | Short screw | 165X17579X |
| 37 | Short screw | 165X17589X |
| 50 | Short screw | 165X17599X |

| D-SUB Metal hood – Short screw | | |
|---|---|---|
| No. of pos. | Design M3 | Part Number |
| 09 | Short screw | 165X17609X |
| 15 | Short screw | 165X17619X |
| 25 | Short screw | 165X17629X |
| 37 | Short screw | 165X17639X |
| 50 | Short screw | 165X17649X |

For single packaged add the letter „E“ at the end of the part number.

# D-SUB Metal Hood

## Variable cable entries – 9-50 pos. – Without jack screws



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

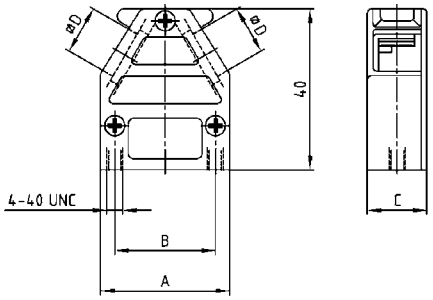
### Description

- Zinc die-cast hood, EMI/RFI shielding
- Two designs:
  - Type 1: 1.575"/40 mm height
  - Type 2: 2.165"/55 mm height
- Delivery includes: Hood with covers, blanking plugs, screws for assembly
- Cable clamp must be ordered separately
- Packaging: in bulk or in pack units as a single package

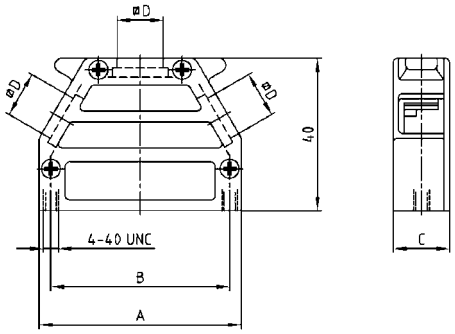
### Product drawing

**Type 1: Installation height 1.575"/40 mm**

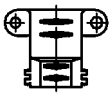
9 pos.




15-50 pos.



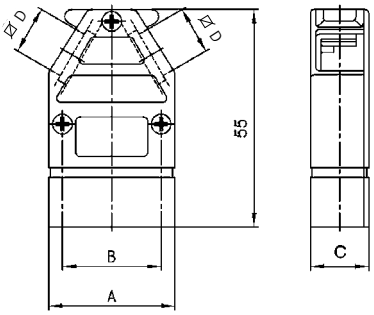

| No. of pos. | A | B | C | Ø D |
|---|---|---|---|---|
| 09 | 32.00 | 25.00 | 14.80 | 12.10 |
| 15 | 39.30 | 33.30 | 14.80 | 12.10 |
| 25 | 53.20 | 47.04 | 14.80 | 12.10 |
| 37 | 69.50 | 63.50 | 14.80 | 12.10 |
| 50 | 67.00 | 61.10 | 17.80 | 14.60 |



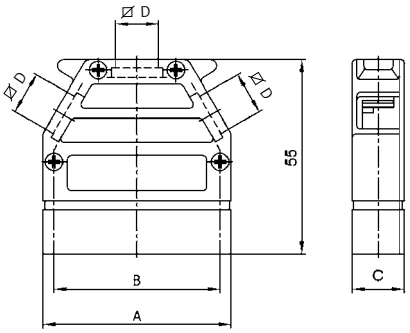
Cable clamp

**Type 2: Installation height 2.165"/55 mm**

9 pos.




15-50 pos.




### Order data

**D-SUB Metal hood – Variable cable entries – Type 1**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Housing/Two side cable entries | 165X10819X |
| 15 | Housing/Two side cable entries | 165X10829X |
| 25 | Housing/Three cable entries | 165X10839X |
| 37 | Housing/Three cable entries | 165X10849X |
| 50 | Housing/Three cable entries | 165X10859X |
| 09-37 | Cable clamp, accept cable diameter from 3 to 12 mm | 160X11189X |
| 50 | Cable clamp, accept cable diameter from 5 to 14 mm | 160X11199X |

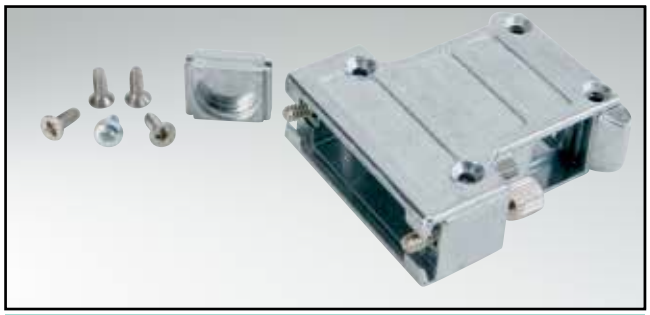
**D-SUB Metal hood – Variable cable entries – Type 2**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Housing/Two side cable entries | 165X11159X |
| 15 | Housing/Two side cable entries | 165X10869X |
| 25 | Housing/Three cable entries | 165X10879X |
| 37 | Housing/Three cable entries | 165X10889X |
| 50 | Housing/Three cable entries | 165X10899X |
| 09-37 | Cable clamp, accept cable diameter from 3 to 12 mm | 160X11189X |
| 50 | Cable clamp, accept cable diameter from 5 to 14 mm | 160X11199X |

**For single packaged add the letter „E" at the end of the part number.**

# D-SUB Metal Hood

## Variable cable entries – 9-50 pos. – Jack screws



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

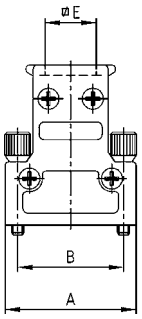
### Description

- Zinc die-cast hood, EMI/RFI shielding
- Two designs:
  - Type 1: 1.575"/40 mm height
  - Type 2: 2.165"/55 mm height
- Delivery includes: Hood, blanking plugs, screws for assembly grounding screws, 4-40 UNC jack screws
- Cable clamp must be ordered separately
- M3 thread design for jack screws available on request
- Packaging: in bulk or in pack units as a single package

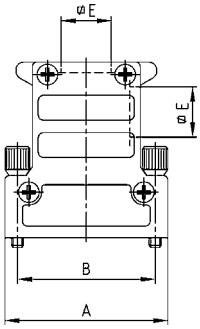
### Product drawing

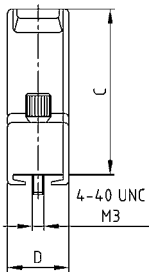
**Type 1: max. installation height 42 mm**

9 pos.

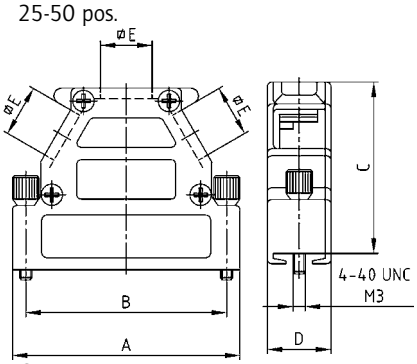



15 pos.



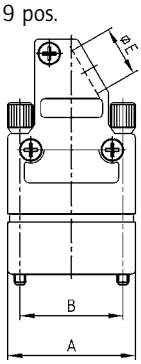




25-50 pos.

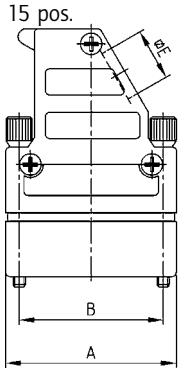


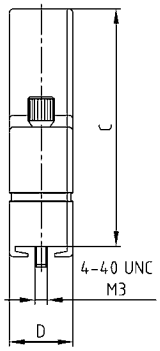

**Type 2: max. Installation height 57 mm**

9 pos.

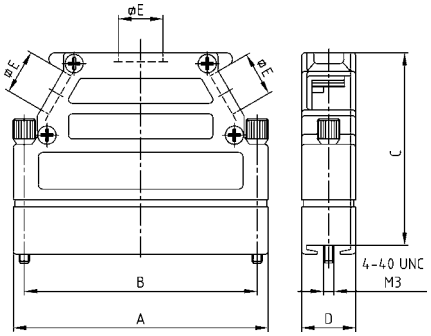



15 pos.

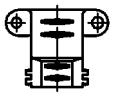



25-50 pos.




| No. of pos. | A | B | Dim. C (Type 1) | Dim. C (Type 2) | D | ⌀ E |
|---|---|---|---|---|---|---|
| 09 | 31.00 | 25.00 | 35.50 | 50.50 | 14.80 | 12.10 |
| 15 | 39.40 | 33.30 | 40.00 | 55.00 | 14.80 | 12.10 |
| 25 | 53.20 | 47.04 | 40.00 | 55.00 | 14.80 | 12.10 |
| 37 | 69.60 | 63.50 | 40.00 | 55.00 | 14.80 | 12.10 |
| 50 | 67.00 | 61.10 | 42.00 | 57.00 | 17.80 | 14.60 |



Cable clamp

### Order data

**D-SUB Metal hood – Variable cable entries – jack screw – Type 1**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Housing/One straight cable entry | 165X11609X |
| 15 | Housing/One straight/One side cable entry | 165X11619X |
| 25 | Housing/Three cable entries | 165X11629X |
| 37 | Housing/Three cable entries | 165X11639X |
| 50 | Housing/Three cable entries | 165X11649X |
| 09-37 | Cable clamp, accept cable diameter from 3 to 12 mm | 160X11189X |
| 50 | Cable clamp, accept cable diameter from 5 to 14 mm | 160X11199X |

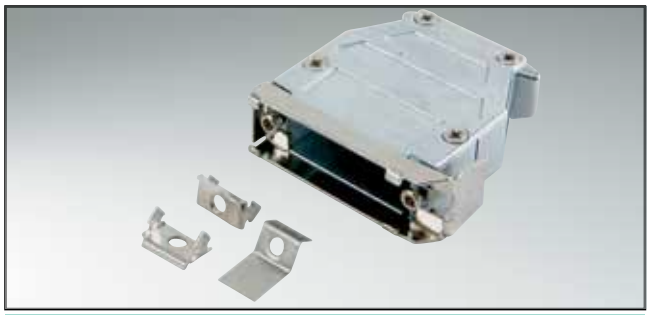
**D-SUB Metal hood – Variable cable entries – jack screw – Type 2**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Housing/One side cable entry | 165X14409X |
| 15 | Housing/One side cable entry | 165X14419X |
| 25 | Housing/Three cable entries | 165X14429X |
| 37 | Housing/Three cable entries | 165X14439X |
| 50 | Housing/Three cable entries | 165X14449X |
| 09-37 | Cable clamp, accept cable diameter from 3 to 12 mm | 160X11189X |
| 50 | Cable clamp, accept cable diameter from 5 to 14 mm | 160X11199X |

**For single packaged add the letter „E" at the end of the part number.**

# D-SUB Metal Hood

## Variable cable entries – 9-50 pos. – Slide lock



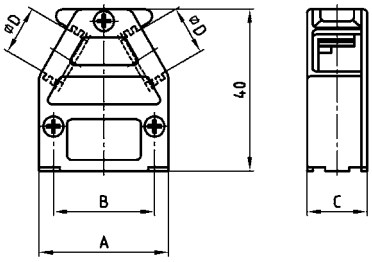
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

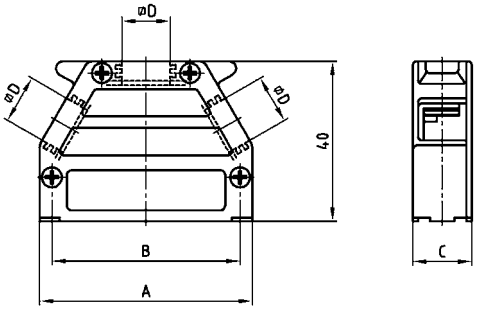
- Zinc die-cast hood, EMI/RFI shielding
- Design:
  9 pos. = two sided cable entries,
  15-50 pos. = three cable entries
- Delivery includes: Hood, blanking plugs, screws for assembly, grounding screw, slide lock, spring
- Cable clamp must be ordered separately
- Packaging: in bulk or in pack units as a single package

### Product drawing

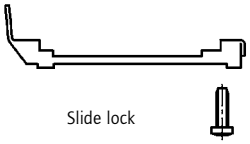
9 pos.




15-50 pos.



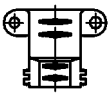
Spring



Slide lock

Locking hooks for slide lock

| No. of pos. | A | B | C | ⌀ D |
|---|---|---|---|---|
| 09 | 32.00 | 25.00 | 14.80 | 12.10 |
| 15 | 39.30 | 33.30 | 14.80 | 12.10 |
| 25 | 53.20 | 47.04 | 14.80 | 12.10 |
| 37 | 69.50 | 63.50 | 14.80 | 12.10 |
| 50 | 67.00 | 61.10 | 17.80 | 14.60 |



Cable clamp

### Order data

| D-SUB Metal hood – Variable cable entries | | |
|---|---|---|
| No. of pos. | Design | Part Number |
| 09 | Hood/Two side cable entries | 165X11659X |
| 15 | Hood/Three cable entries | 165X11669X |
| 25 | Hood/Three cable entries | 165X11679X |
| 37 | Hood/Three cable entries | 165X11689X |
| 50 | Hood/Three cable entries | 165X11699X |

| D-SUB Metal hood – Cable clamp – Slide lock | | |
|---|---|---|
| No. of pos. | Design | Part Number |
| 09-37 | Cable clamp, accept cable diameter from 3 to 12 mm | 160X11189X |
| 50 | Cable clamp, accept cable diameter from 5 to 14 mm | 160X11199X |
| 09-37 | Locking hooks for slide lock | 165X10119X |
| 50 | Locking hooks for slide lock | 165X10129X |

**For single packaged add the letter „E" at the end of the part number.**

# D-SUB Metal Hood

## Variable cable entries – 9-50 pos. – Without jack screws

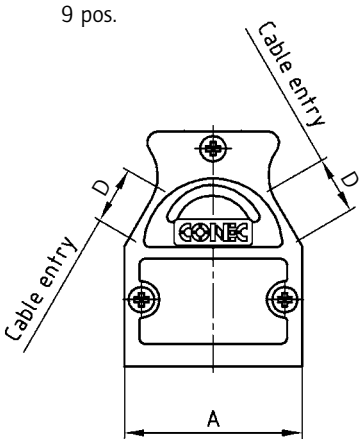
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

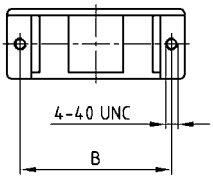
### Description

- Zinc die-cast hood, EMI/RFI shielding
- Design:
  9 pos. = two side cable entries,
  15-50 pos. = three cable entries
- Internal ground
- Cable clamp must be ordered separately
- Packaging: in bulk or in pack units as a single package

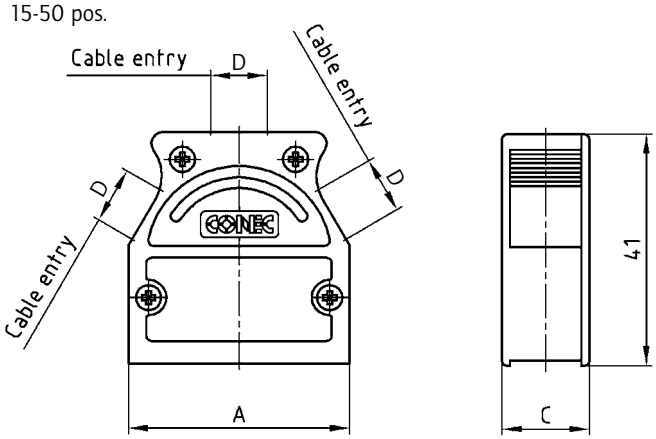
### Product drawing

9 pos.

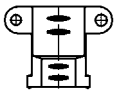



15-50 pos.




| No. of pos. | A | B | C | D |
|---|---|---|---|---|
| 09 | 31.00 | 25.00 | 14.80 | 12 x 9.0 |
| 15 | 39.00 | 33.30 | 14.80 | 12 x 9.0 |
| 25 | 53.00 | 47.00 | 14.80 | 12 x 9.0 |
| 37 | 69.50 | 63.50 | 14.80 | 12 x 9.0 |
| 50 | 67.00 | 61.10 | 17.60 | 14.3 x 11.6 |



Cable clamp

### Order data

| D-SUB Metal hood | | |
|---|---|---|
| **No. of pos.** | **Design** | **Part Number** |
| 09 | Hood / Two side cable entries | 600X51109X |
| 15 | Hood / Three cable entries | 600X51115X |
| 25 | Hood / Three cable entries | 600X51125X |
| 37 | Hood / Three cable entries | 600X51137X |
| 50 | Hood / Three cable entries | 600X51150X |
| 09-37 | Cable clamp, accept cable diameter from 3 to 12 mm | 160X10139X |
| 50 | Cable clamp, accept cable diameter from 5 to 14 mm | 160X10149X |

**For single packaged add the letter „E“ at the end of the part number.**

# D-SUB Metal Hood

## Variable cable entries – 9-25 pos. – Jack screws

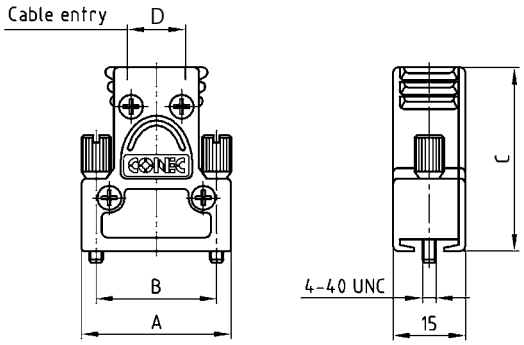
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

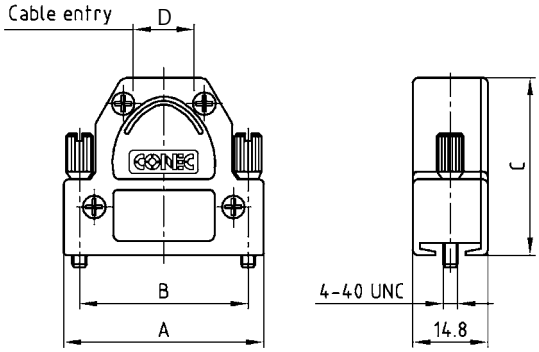
- Zinc die-cast hood, EMI/RFI shielding
- Designs:
  9-15 pos. = one straight cable entry,
  25 pos. = three cable entries
- Internal ground
- 4-40 UNC jack screw
- M3 thread design for jack screws available on request
- Cable clamps must be ordered separately
- Packaging: in bulk or in pack units as a single package

### Product drawing

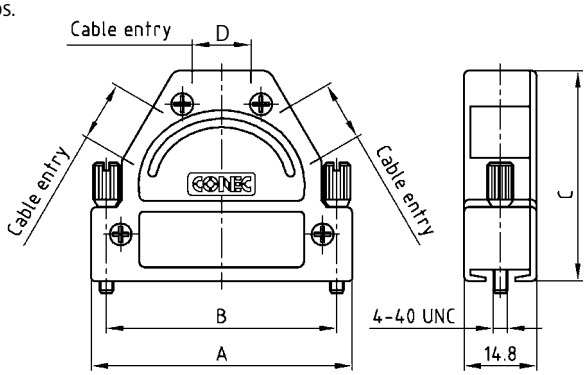
9 pos.



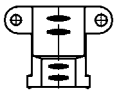

15 pos.




25 pos.




| No. of pos. | A | B | C | D |
|---|---|---|---|---|
| 09 | 31.00 | 25.00 | 37.20 | 8x9.00 |
| 15 | 39.00 | 33.30 | 35.20 | 11x9.00 |
| 25 | 53.00 | 47.00 | 42.70 | 11.5x9.00 |



Cable clamp

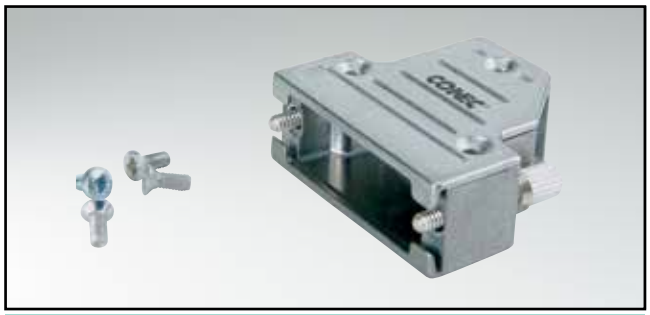
### Order data

| D-SUB Metal hood with long jack screw | | |
|---|---|---|
| **No. of pos.** | **Design** | **Part Number** |
| 09 | Housing / One straight cable entry | 600X51209X |
| 15 | Housing / One straight cable entry | 600X51215X |
| 25 | Housing / Three cable entries | 600X51225X |
| 09-25 | Cable clamp, accept cable diameter from 3 to 12 mm | 160X10139X |

**For single packaged add the letter „E" at the end of the part number.**

# D-SUB Metal Hood

## Side cable entry – 9-25 pos. – Jack screws

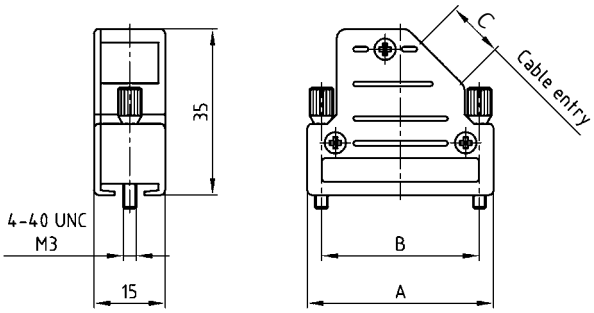


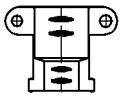
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

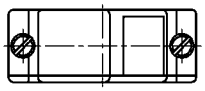
- Zinc die-cast hood, EMI/RFI shielding
- Internal ground
- Fastening:
  jack screws 4-40 UNC or M3 thread
- Cable clamps must be ordered separately
- Packaging: in bulk or in pack units as a single package

### Product drawing

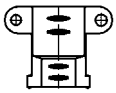


Cable clamp



| No. of pos. | A | B | C |
|---|---|---|---|
| 09 | 31.00 | 25.00 | 10x9.2 |
| 15 | 39.00 | 33.30 | 12x9.2 |
| 25 | 53.00 | 47.00 | 12x9.2 |



Cable clamp

### Order data

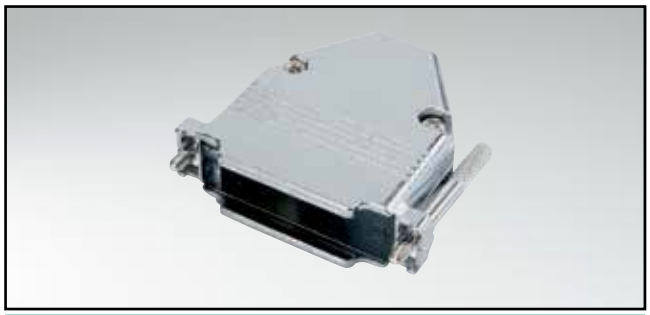
| D-SUB Metal hood – Side cable entry | | |
|---|---|---|
| No. of pos. | Design | Part Number |
| 09 | 4-40 UNC Jack screw | 600X51309X |
| 15 | 4-40 UNC Jack screw | 600X51315X |
| 25 | 4-40 UNC Jack screw | 600X51325X |
| 09-25 | Cable clamp, accept cable diameter from 3 to 12 mm | 160X10139X |

| D-SUB Metal hood – Side cable entry | | |
|---|---|---|
| No. of pos. | Design | Part Number |
| 09 | M3 Jack screw | 600X51609X |
| 15 | M3 Jack screw | 600X51615X |
| 25 | M3 Jack screw | 600X51625X |
| 09-25 | Cable clamp, accept cable diameter from 3 to 12 mm | 160X10139X |

**For single packaged add the letter „E" at the end of the part number.**

# D-SUB Metal Hood

## Straight cable entry – 9-50 pos. – With jack screws

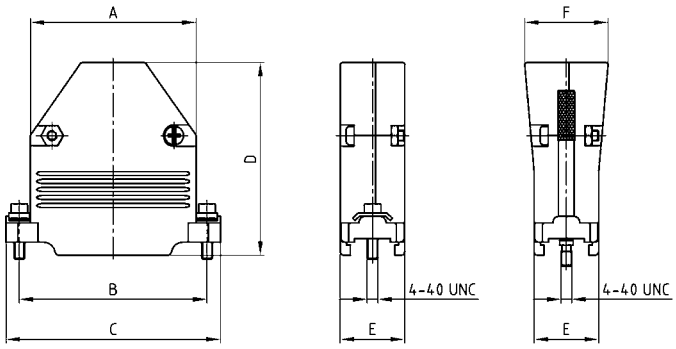


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

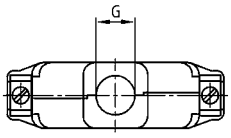
- Zinc die-cast hood, EMI/RFI shielding
- Simple assembly
- Fastening:
  - Short screw Thread 4-40 UNC
  - Jack screw Thread 4-40 UNC
- Packaging: in bulk or in pack units as a single package

### Product drawing




short screw long jack screw

| No. of pos. | A | B | C | D | E | F | Ø G |
|---|---|---|---|---|---|---|---|
| 09 | 19.80 | 25.00 | 31.00 | 47.00 | 15.60 | – | 8.50 |
| 15 | 27.90 | 33.30 | 40.20 | 48.30 | 16.20 | – | 10.00 |
| 25 | 41.50 | 47.00 | 53.70 | 48.80 | 16.20 | – | 11.00 |
| 37 | 57.80 | 63.50 | 69.00 | 48.50 | 16.20 | 20.80 | 14.00 |
| 50 | 55.00 | 61.10 | 67.00 | 48.50 | 18.70 | 23.20 | 12.30 |



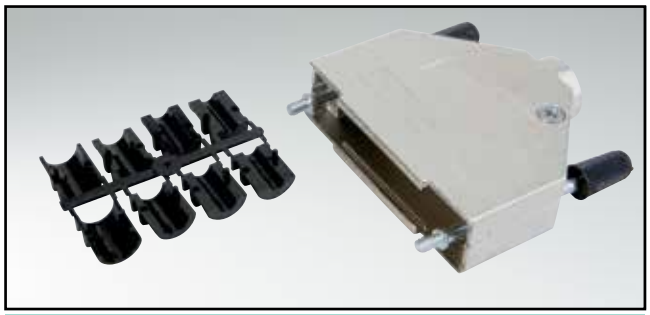

### Order data

| D-SUB Metal hood – Straight cable entry | | |
|---|---|---|
| No. of pos. | Design 4-40 UNC | Part Number |
| 09 | Short screw | 300X11129X |
| 15 | Short screw | 300X11139X |
| 25 | Short screw | 300X11149X |
| 37 | Short screw | 300X11159X |
| 50 | Short screw | 300X11169X |

| D-SUB Metal hood – Straight cable entry | | |
|---|---|---|
| No. of pos. | Design 4-40 UNC | Part Number |
| 09 | Jack screw | 300X11179X |
| 15 | Jack screw | 300X11189X |
| 25 | Jack screw | 300X11199X |
| 37 | Jack screw | 300X11209X |
| 50 | Jack screw | 300X11219X |

# D-SUB Metal Hood

## Straight cable entry – 9-37 pos. – Jack screws

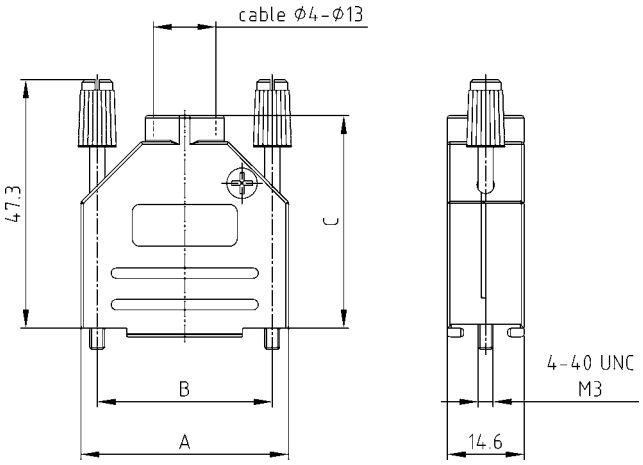


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

- Zinc die-cast hood, EMI/RFI shielding
- Plastic strain relief
- Fastening:
  jack screws 4-40 UNC or M3 thread
- Housing nickel plated
- Attentuation factor: > 40dB between 30 Mhz and 1 GHz
- Packaging: in bulk or in pack units as a single package

### Product drawing




| No. of pos. | A | B | C |
|---|---|---|---|
| 09 | 31.20 | 25.00 | 38.30 |
| 15 | 39.30 | 33.30 | 40.50 |
| 25 | 53.40 | 47.00 | 47.80 |
| 37 | 69.90 | 63.50 | 52.20 |

### Order data

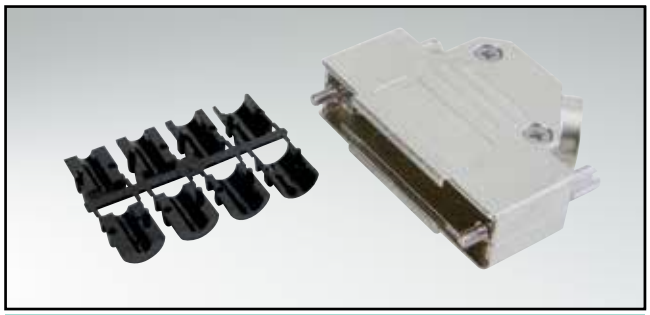
| D-SUB Metal hood – Straight cable entry | | |
|---|---|---|
| No. of pos. | Design 4-40 UNC | Part Number |
| 09 | Jack screw | 165X02609X |
| 15 | Jack screw | 165X02619X |
| 25 | Jack screw | 165X02629X |
| 37 | Jack screw | 165X02639X |

| D-SUB Metal hood – Straight cable entry | | |
|---|---|---|
| No. of pos. | Design M3 | Part Number |
| 09 | Jack screw | 165X02649X |
| 15 | Jack screw | 165X02659X |
| 25 | Jack screw | 165X02669X |
| 37 | Jack screw | 165X02679X |

For single packaged add the letter „E“ at the end of the part number.

# D-SUB Metal Hood

## Side cable entry – 9-37 pos. – Jack screws



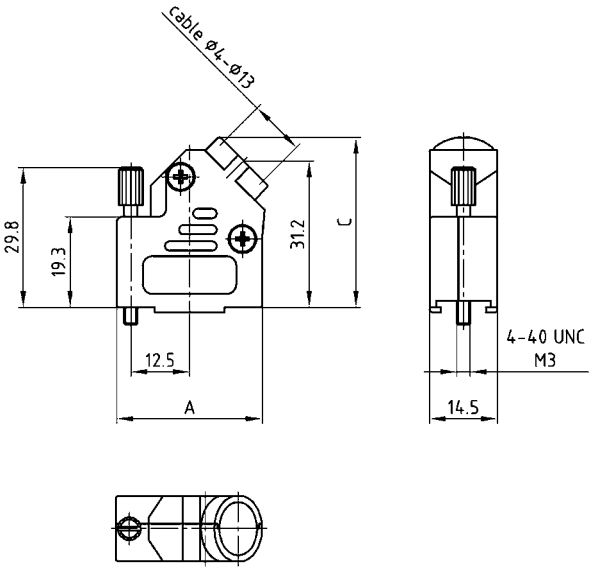
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

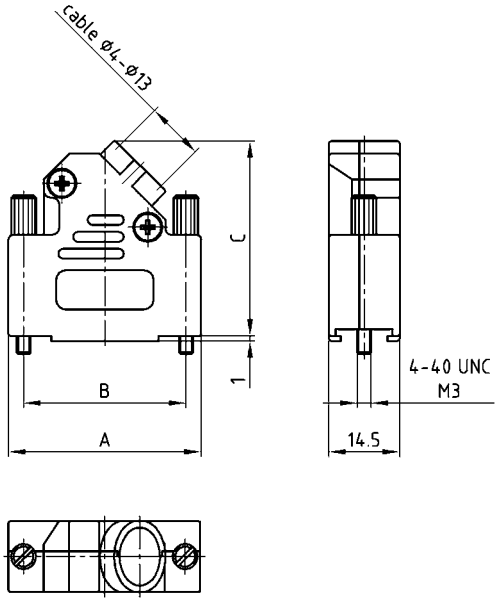
- Zinc die-cast hood, EMI/RFI shielding
- Plastic strain relief
- Fastening:
  jack screws 4-40 UNC or M3 thread
- Housing nickel plated
- Attentuation factor: > 40dB between 30 Mhz and 1 GHz
- Packaging: in bulk or in pack units as a single package

### Product drawing

9 pos.




15-37 pos.




| No. of pos. | A | B | C |
|---|---|---|---|
| 09 | 31.00 | | 36.20 |
| 15 | 39.50 | 33.30 | 40.20 |
| 25 | 53.20 | 47.00 | 40.20 |
| 37 | 69.70 | 63.50 | 40.20 |

### Order data

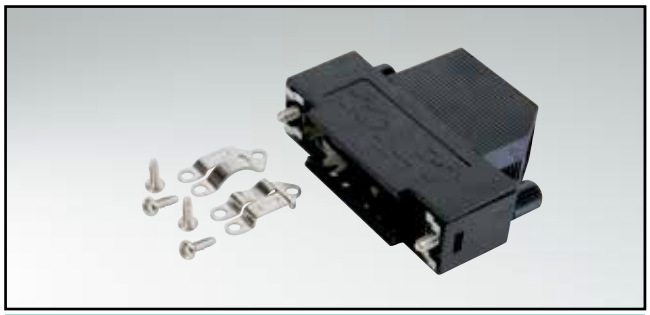
| D-SUB Metal hood – Side cable entry | | |
|---|---|---|
| No. of pos. | Design 4-40 UNC | Part Number |
| 09 | Jack screw | 165X02689X |
| 15 | Jack screw | 165X02699X |
| 25 | Jack screw | 165X02709X |
| 37 | Jack screw | 165X02719X |

| D-SUB Metal hood – Side cable entry | | |
|---|---|---|
| No. of pos. | Design M3 | Part Number |
| 09 | Jack screw | 165X02729X |
| 15 | Jack screw | 165X02739X |
| 25 | Jack screw | 165X02749X |
| 37 | Jack screw | 165X02759X |

For single packaged add the letter „E" at the end of the part number.

# D-SUB Plastic Hood

## Side cable entry – 9-50 pos. – With and without internal shielding



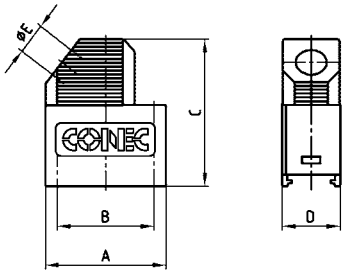
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

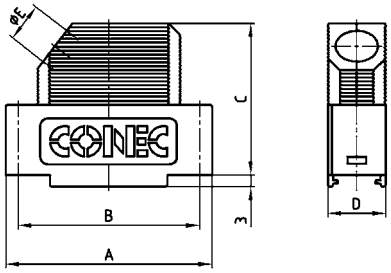
- Material: Poylcarbonate Black or Grey + Glas filled
- Design:
  - without shielding
  - with internal shielding
- Fastening:
  Metal jack screw with plastic head or metal jack screws
- Press-fit housing assembly
- Attentuation factor at 10 MHz > 60dB (shielded version)
- Packaging: in bulk or in pack units as a single package

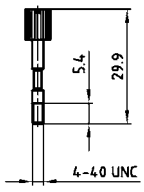
### Product drawing

9 pos.

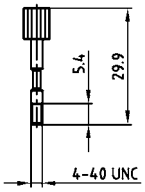



15-50 pos.




Metal screw




Metal screw with plastic head

| No. of pos. | A | B | C | D | Ø E |
|---|---|---|---|---|---|
| 09 | 31.30 | 25.00 | 39.15 | 15.00 | 8.00 |
| 15 | 39.62 | 33.30 | 39.15 | 15.00 | 9.00 |
| 25 | 53.52 | 47.00 | 39.15 | 15.00 | 11.00 |
| 37 | 69.80 | 63.50 | 39.15 | 15.00 | 11.00 |
| 50 | 67.41 | 61.10 | 39.15 | 19.00 | 14.50 |

### Order data

**D-SUB Plastic hood – Side cable entry - Unshielded**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Black / Metal jack screw / Plastic head | 165X11709X |
| 15 | Black / Metal jack screw / Plastic head | 165X11719X |
| 25 | Black / Metal jack screw / Plastic head | 165X11729X |
| 37 | Black / Metal jack screw / Plastic head | 165X11739X |
| 50 | Black / Metal jack screw / Plastic head | 165X11749X |
| 09 | Black / Metal jack screw | 165X00829A |
| 15 | Black / Metal jack screw | 165X00839A |
| 25 | Black / Metal jack screw | 165X00849A |
| 37 | Black / Metal jack screw | 165X00859A |
| 50 | Black / Metal jack screw | 165X00869A |
| 09 | Grey / Metal jack screw / Plastic head | 165X16019X |
| 15 | Grey / Metal jack screw / Plastic head | 165X16029X |
| 25 | Grey / Metal jack screw / Plastic head | 165X16039X |
| 37 | Grey / Metal jack screw / Plastic head | 165X16049X |
| 50 | Grey / Metal jack screw / Plastic head | 165X16059X |
| 09 | Grey / Metal jack screw | 165X16069X |
| 15 | Grey / Metal jack screw | 165X16079X |
| 25 | Grey / Metal jack screw | 165X16089X |
| 37 | Grey / Metal jack screw | 165X16099X |
| 50 | Grey / Metal jack screw | 165X16109X |

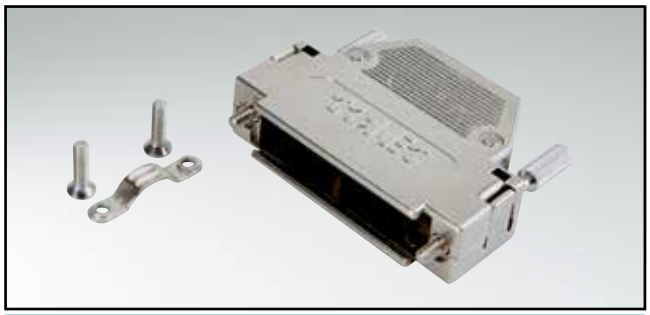
**D-SUB Plastic hood – Side cable entry - Shielded**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Black / Metal jack screw / Plastic head | 165X11759X |
| 15 | Black / Metal jack screw / Plastic head | 165X11769X |
| 25 | Black / Metal jack screw / Plastic head | 165X11779X |
| 37 | Black / Metal jack screw / Plastic head | 165X11789X |
| 50 | Black / Metal jack screw / Plastic head | 165X11799X |
| 09 | Black / Metal jack screw | 165X00779A |
| 15 | Black / Metal jack screw | 165X00789A |
| 25 | Black / Metal jack screw | 165X00799A |
| 37 | Black / Metal jack screw | 165X00809A |
| 50 | Black / Metal jack screw | 165X00819A |
| 09 | Grey / Metal jack screw / Plastic head | 165X16119X |
| 15 | Grey / Metal jack screw / Plastic head | 165X16129X |
| 25 | Grey / Metal jack screw / Plastic head | 165X16139X |
| 37 | Grey / Metal jack screw / Plastic head | 165X16149X |
| 50 | Grey / Metal jack screw / Plastic head | 165X16159X |
| 09 | Grey / Metal jack screw | 165X16169X |
| 15 | Grey / Metal jack screw | 165X16179X |
| 25 | Grey / Metal jack screw | 165X16189X |
| 37 | Grey / Metal jack screw | 165X16199X |
| 50 | Grey / Metal jack screw | 165X16209X |

**For single packaged add the letter „E" at the end of the part number.**

# D-SUB Plastic Hood

## Straight cable entry – 9-50 pos. – With jack screws



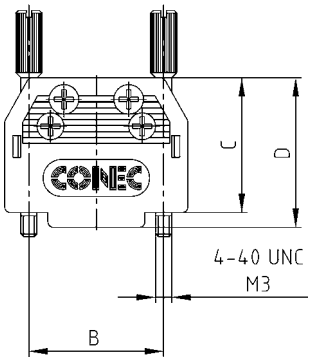
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

- Two-part plastic hood
- Integrated cable clamping
- Material:
  - Plastic hood grey/black: Polyamide + Glas filled, UL 94 V-0
  - Plastic hood metallized: ABS, UL 94 V-0
- Fastening:
  - 4-40 UNC jack screw
  - M3 jack screw
- Packaging: in bulk or in pack units as a single package

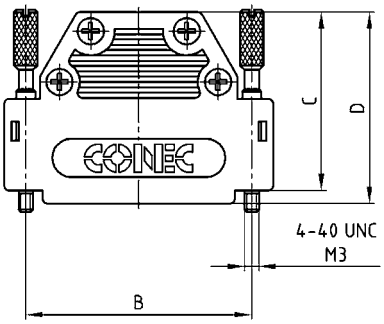
### Product drawing

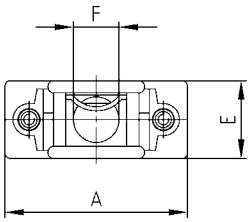
9 pos

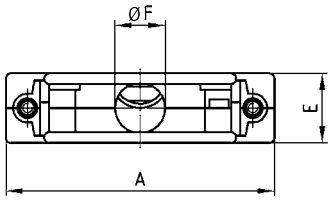



| No. of pos. | A | B | C | D | E | Ø F |
|---|---|---|---|---|---|---|
| 09 | 34.00 | 25.00 | 25.00 | 27.75 | 14.50 | 8.50 |
| 15 | 42.30 | 33.30 | 37.00 | 39.75 | 14.50 | 10.00 |
| 25 | 56.00 | 47.00 | 37.00 | 39.75 | 14.50 | 10.50 |
| 37 | 72.50 | 63.50 | 37.00 | 39.75 | 14.50 | 10.50 |
| 50 | 67.00 | 61.10 | 49.10 | 51.40 | 19.80 | 14.00 |

15-50 pos




### Order data

**D-SUB Plastic hood – Straight cable entry**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Black /4-40 UNC Jack screw | 165X10139X |
| 15 | Black /4-40 UNC Jack screw | 165X10149X |
| 25 | Black /4-40 UNC Jack screw | 165X10159X |
| 37 | Black /4-40 UNC Jack screw | 165X10169X |
| 50 | Black /4-40 UNC Jack screw | 165X10179X |
| 09 | Black /M3 Jack screw | 165X10189X |
| 15 | Black /M3 Jack screw | 165X10199X |
| 25 | Black /M3 Jack screw | 165X10209X |
| 37 | Black /M3 Jack screw | 165X10219X |
| 50 | Black /M3 Jack screw | 165X10229X |
| 09 | Grey /4-40-UNC Jack screw | 165X14109X |
| 15 | Grey /4-40-UNC Jack screw | 165X14119X |
| 25 | Grey /4-40-UNC Jack screw | 165X14129X |
| 37 | Grey /4-40-UNC Jack screw | 165X14139X |
| 50 | Grey /4-40-UNC Jack screw | 165X14149X |
| 09 | Grey /M3 Jack screw | 165X14159X |
| 15 | Grey /M3 Jack screw | 165X14169X |
| 25 | Grey /M3 Jack screw | 165X14179X |
| 37 | Grey /M3 Jack screw | 165X14189X |
| 50 | Grey /M3 Jack screw | 165X14199X |

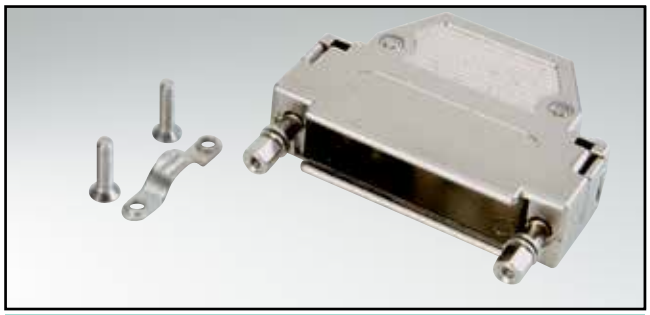
**D-SUB Plastic hood – Straight cable entry - Metallized**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Metallized /4-40 UNC Jack screw | 165X10909X |
| 15 | Metallized /4-40 UNC Jack screw | 165X10919X |
| 25 | Metallized /4-40 UNC Jack screw | 165X10929X |
| 37 | Metallized /4-40 UNC Jack screw | 165X10939X |
| 50 | Metallized /4-40 UNC Jack screw | 165X10949X |
| 09 | Metallized /M3 Jack screw | 165X10959X |
| 15 | Metallized /M3 Jack screw | 165X10969X |
| 25 | Metallized /M3 Jack screw | 165X10979X |
| 37 | Metallized /M3 Jack screw | 165X10989X |
| 50 | Metallized /M3 Jack screw | 165X10999X |

**For single packaged add the letter „E“ at the end of the part number.**

# D-SUB Plastic Hood

## Straight cable entry – 9-50 pos. – Cable-to-cable connection



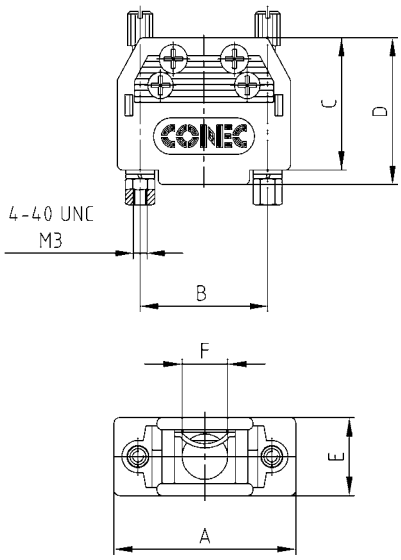
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

- Two-part plastic hood
- Integrated cable clamping
- Material:
  - Plastic hood grey / black: Polyamide + Glas filled, UL 94 V-0
  - Plastic hood metallized: ABS, UL 94 V-0
- Fastening:
  - 4-40 UNC jack screw
  - M3 jack screw
- Packaging: in bulk or in pack units as a single package

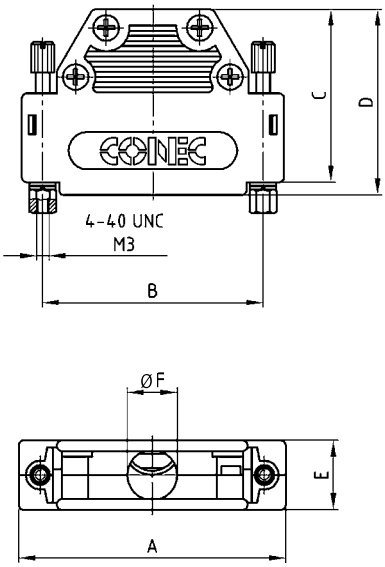
### Product drawing

9-pos




| No. of pos. | A | B | C | D | E | Ø F |
|---|---|---|---|---|---|---|
| 09 | 34.00 | 25.00 | 25.00 | 27.75 | 14.50 | 8.50 |
| 15 | 42.30 | 33.30 | 37.00 | 39.75 | 14.50 | 10.00 |
| 25 | 56.00 | 47.00 | 37.00 | 39.75 | 14.50 | 10.50 |
| 37 | 72.50 | 63.50 | 37.00 | 39.75 | 14.50 | 10.50 |
| 50 | 67.00 | 61.10 | 49.10 | 51.40 | 19.80 | 14.00 |

15-50 pos




### Order data

**D-SUB Plastic hood – Cable-to-cable connection**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Black / Jack screw / 4-40 UNC Hex bolt | 165X10239X |
| 15 | Black / Jack screw / 4-40 UNC Hex bolt | 165X10249X |
| 25 | Black / Jack screw / 4-40 UNC Hex bolt | 165X10259X |
| 37 | Black / Jack screw / 4-40 UNC Hex bolt | 165X10269X |
| 50 | Black / Jack screw / 4-40 UNC Hex bolt | 165X10279X |
| 09 | Black / Jack screw / M3 Hex bolt | 165X10289X |
| 15 | Black / Jack screw / M3 Hex bolt | 165X10299X |
| 25 | Black / Jack screw / M3 Hex bolt | 165X10309X |
| 37 | Black / Jack screw / M3 Hex bolt | 165X10319X |
| 50 | Black / Jack screw / M3 Hex bolt | 165X10329X |
| 09 | Grey / Jack screw / 4-40 UNC Hex bolt | 165X14209X |
| 15 | Grey / Jack screw / 4-40 UNC Hex bolt | 165X14219X |
| 25 | Grey / Jack screw / 4-40 UNC Hex bolt | 165X14229X |
| 37 | Grey / Jack screw / 4-40 UNC Hex bolt | 165X14239X |
| 50 | Grey / Jack screw / 4-40 UNC Hex bolt | 165X14249X |
| 09 | Grey / Jack screw / M3 Hex bolt | 165X14259X |
| 15 | Grey / Jack screw / M3 Hex bolt | 165X14269X |
| 25 | Grey / Jack screw / M3 Hex bolt | 165X14279X |
| 37 | Grey / Jack screw / M3 Hex bolt | 165X14289X |
| 50 | Grey / Jack screw / M3 Hex bolt | 165X14299X |

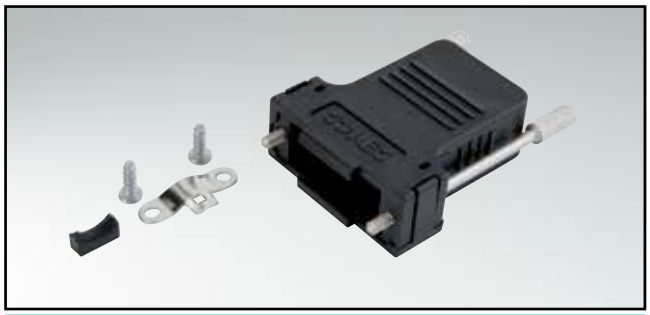
**D-SUB Plastic hood - Cable-to-cable connection – Metallized**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Metallized / Jack screw / 4-40 UNC Hex bolt | 165X11009X |
| 15 | Metallized / Jack screw / 4-40 UNC Hex bolt | 165X11019X |
| 25 | Metallized / Jack screw / 4-40 UNC Hex bolt | 165X11029X |
| 37 | Metallized / Jack screw / 4-40 UNC Hex bolt | 165X11039X |
| 50 | Metallized / Jack screw / 4-40 UNC Hex bolt | 165X11049X |
| 09 | Metallized / Jack screw / M3 Hex bolt | 165X11059X |
| 15 | Metallized / Jack screw / M3 Hex bolt | 165X11069X |
| 25 | Metallized / Jack screw / M3 Hex bolt | 165X11079X |
| 37 | Metallized / Jack screw / M3 Hex bolt | 165X11089X |
| 50 | Metallized / Jack screw / M3 Hex bolt | 165X11099X |

**For single packaged add the letter „E“ at the end of the part number.**

# D-SUB Plastic Hood

## Straight cable entry – 9-50 pos. – large interior



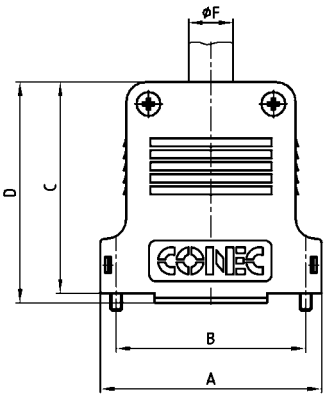
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

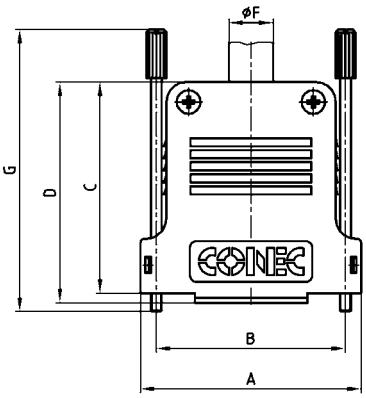
- Suitable for Combination D-SUB Connectors
- Large internal space for crimp, high power and coaxial contacts
- Material:
  - Plastic hood black: Polyester, UL 94 V-0
  - Plastic hood metallized: ABS, UL 94 V-0
- Fastening:
  - 4-40 UNC jack screw or M3
  - 4-40 UNC short screw or M3
- Packaging: in bulk or in pack units as a single package

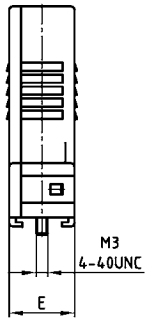
### Product drawing

Short screw

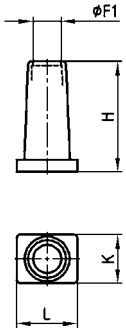



Jack screw




Cable grommet




| No. of pos. | A | B | C | D | E | Ø F | Ø F1 | G | H | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 09 | 32.90 | 25.00 | 39.50 | 41.80 | 16.30 | 11.00 | 5.00 | 60.00 | 24.50 | 11.20 | 11.20 |
| 15 | 41.20 | 33.30 | 45.50 | 47.80 | 16.30 | 11.00 | 5.00 | 60.00 | 24.50 | 11.20 | 11.20 |
| 25 | 54.90 | 47.00 | 52.50 | 54.80 | 16.30 | 12.00 | 7.00 | 70.00 | 27.50 | 12.20 | 15.00 |
| 37 | 71.40 | 63.50 | 55.50 | 57.80 | 18.70 | 15.00 | 7.00 | 70.00 | 27.50 | 12.20 | 15.00 |
| 50 | 69.00 | 61.10 | 55.00 | 57.80 | 19.50 | 14.00 | 9.30 | 70.00 | 29.20 | 15.00 | 20.00 |

### Order data

**D-SUB Plastic hood black**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Black /4-40 UNC Short screw | 165X13369X |
| 15 | Black /4-40 UNC Short screw | 165X13379X |
| 25 | Black /4-40 UNC Short screw | 165X13389X |
| 37 | Black /4-40 UNC Short screw | 165X13399X |
| 50 | Black /4-40 UNC Short screw | 165X13409X |
| 09 | Black /M3 Short screw | 165X14509X |
| 15 | Black /M3 Short screw | 165X14519X |
| 25 | Black /M3 Short screw | 165X14529X |
| 37 | Black /M3 Short screw | 165X14539X |
| 50 | Black /M3 Short screw | 165X14549X |
| 09 | Black /4-40 UNC Jack screw | 165X03309A |
| 15 | Black /4-40 UNC Jack screw | 165X03319A |
| 25 | Black /4-40 UNC Jack screw | 165X03329A |
| 37 | Black /4-40 UNC Jack screw | 165X03339A |
| 50 | Black /4-40 UNC Jack screw | 165X03349A |
| 09 | Black /M3 Jack screw | 165X03359A |
| 15 | Black /M3 Jack screw | 165X03369A |
| 25 | Black /M3 Jack screw | 165X03379A |
| 37 | Black /M3 Jack screw | 165X03389A |
| 50 | Black /M3 Jack screw | 165X03399A |

**D-SUB Plastic hood metallized**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Metallized /4-40 UNC Short screw | 165X13469X |
| 15 | Metallized /4-40 UNC Short screw | 165X13479X |
| 25 | Metallized /4-40 UNC Short screw | 165X13489X |
| 37 | Metallized /4-40 UNC Short screw | 165X13499X |
| 50 | Metallized /4-40 UNC Short screw | 165X13509X |
| 09 | Metallized /M3 Short screw | 165X14609X |
| 15 | Metallized /M3 Short screw | 165X14619X |
| 25 | Metallized /M3 Short screw | 165X14629X |
| 37 | Metallized /M3 Short screw | 165X14639X |
| 50 | Metallized /M3 Short screw | 165X14649X |

**Cable grommet**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09/15 | Cable grommet for 9 and 15 pos. hood | 795-907600 |
| 25/37 | Cable grommet for 25 and 37 pos. hood | 795-907700 |
| 50 | Cable grommet for 50 pos. hood | 795-907800 |

**For single packaged add the letter „E" at the end of the part number.**

# D-SUB Plastic Hood

## Side cable entry – 9-50 pos. – large interior

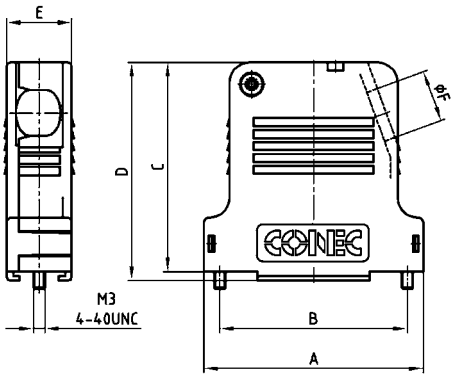
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

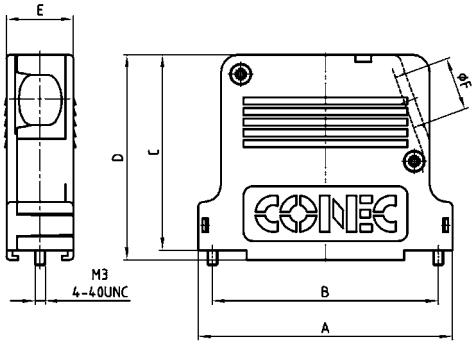
- Suitable for Combination D-SUB Connectors
- Large internal space for crimp, high power and coaxial contacts
- Material:
  - Plastic hood black: Polyester, UL 94 V-0
  - Plastic hood metallized: ABS, UL 94 V-0
- Fastening:
  4-40 UNC or M3 short screw
- Packaging: in bulk or in pack units as a single package

### Product drawing

9-25 pos.




37-50 pos




| No. of pos. | A | B | C | D | E | Ø F |
|---|---|---|---|---|---|---|
| 09 | 32.90 | 25.00 | 39.50 | 41.90 | 16.40 | 8.60 |
| 15 | 41.20 | 33.30 | 45.50 | 47.90 | 16.40 | 9.40 |
| 25 | 54.90 | 47.00 | 52.50 | 54.90 | 16.40 | 13.00 |
| 37 | 71.40 | 63.50 | 55.00 | 57.90 | 18.80 | 15.00 |
| 50 | 69.00 | 61.10 | 55.00 | 57.90 | 19.60 | 14.90 |

### Order data

**D-SUB Plastic hood black**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Black /4-40 UNC Short screw | 165X13419X |
| 15 | Black /4-40 UNC Short screw | 165X13429X |
| 25 | Black /4-40 UNC Short screw | 165X13439X |
| 37 | Black /4-40 UNC Short screw | 165X13449X |
| 50 | Black /4-40 UNC Short screw | 165X13459X |
| 09 | Black /M3 Short screw | 165X14559X |
| 15 | Black /M3 Short screw | 165X14569X |
| 25 | Black /M3 Short screw | 165X14579X |
| 37 | Black /M3 Short screw | 165X14589X |
| 50 | Black /M3 Short screw | 165X14599X |

**D-SUB Plastic hood metallized**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Metallized /4-40 UNC Short screw | 165X13519X |
| 15 | Metallized /4-40 UNC Short screw | 165X13529X |
| 25 | Metallized /4-40 UNC Short screw | 165X13539X |
| 37 | Metallized /4-40 UNC Short screw | 165X13549X |
| 50 | Metallized /4-40 UNC Short screw | 165X13559X |
| 09 | Metallized /M3 Short screw | 165X14659X |
| 15 | Metallized /M3 Short screw | 165X14669X |
| 25 | Metallized /M3 Short screw | 165X14679X |
| 37 | Metallized /M3 Short screw | 165X14689X |
| 50 | Metallized /M3 Short screw | 165X14699X |

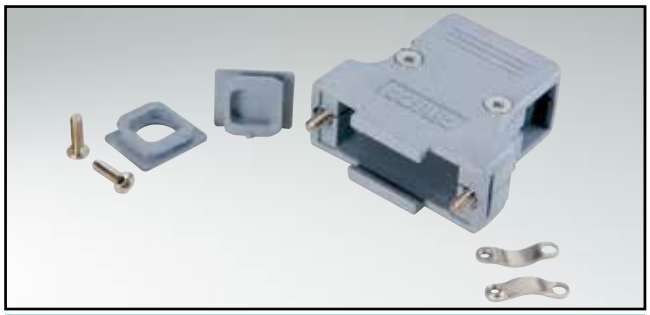
**For single packaged add the letter „E" at the end of the part number.**

**Cable grommet**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09/15 | Cable grommet for 9 and 15 pos. hood | 795-907600 |
| 25/37 | Cable grommet for 25 and 37 pos. hood | 795-907700 |
| 50 | Cable grommet for 50 pos. hood | 795-907800 |

# D-SUB Plastic Hood

## Single or dual cable entry – 9-50 pos. – fixed screws



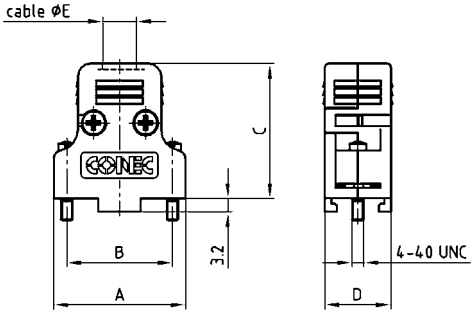
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

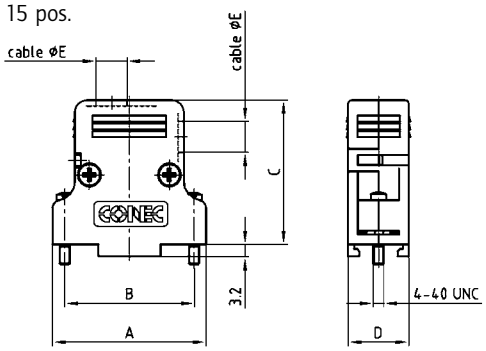
- Integrated cable clamping
- Design:
  9 pos. = one straight cable entry,
  15-50 pos. = one straight and one side cable entry
- Material:
  - Plastic hood grey: Polycarbonate + Glas filled, UL 94 V-0
  - Plastic hood metallized: ABS, UL 94 V-0
- Fastening:
  4-40 UNC short screw
- Packaging: in bulk or in pack units as a single package

### Product drawing

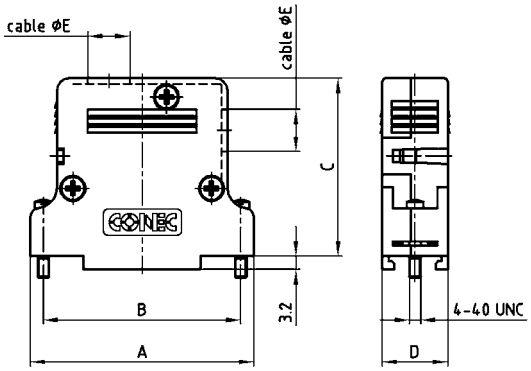
9 pos.




15 pos.




25-50 pos.




| No. of pos. | A | B | C | D | Ø E |
|---|---|---|---|---|---|
| 09 | 31.20 | 25.00 | 31.80 | 15.60 | 8.00 |
| 15 | 39.50 | 33.30 | 37.00 | 15.60 | 8.00 |
| 25 | 53.20 | 47.00 | 42.20 | 15.60 | 10.00 |
| 37 | 69.70 | 63.50 | 42.20 | 15.60 | 10.00 |
| 50 | 67.30 | 61.10 | 42.20 | 18.50 | 12.50 |

### Order data

D-SUB Plastic hood grey

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Grey / Single cable entry / 4-40 UNC Short screw | 165X11869X |
| 15 | Grey / Dual cable entries / 4-40 UNC Short screw | 165X11879X |
| 25 | Grey / Dual cable entries / 4-40 UNC Short screw | 165X11889X |
| 37 | Grey / Dual cable entries / 4-40 UNC Short screw | 165X11899X |
| 50 | Grey / Dual cable entries / 4-40 UNC Short screw | 165X11909X |

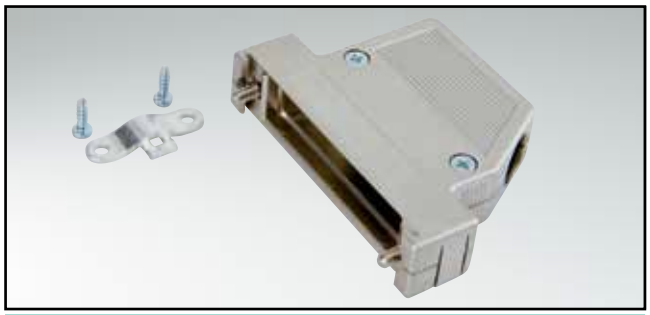
D-SUB Plastic hood metallized

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Metallized / Single cable entry / 4-40 UNC Short screw | 165X11919X |
| 15 | Metallized / Dual cable entries / 4-40 UNC Short screw | 165X11929X |
| 25 | Metallized / Dual cable entries / 4-40 UNC Short screw | 165X11939X |
| 37 | Metallized / Dual cable entries / 4-40 UNC Short screw | 165X11949X |
| 50 | Metallized / Dual cable entries / 4-40 UNC Short screw | 165X11959X |

**For single packaged add the letter „E" at the end of the part number.**

# D-SUB Plastic Hood

## Straight or side cable entry – 9-37 pos. – Low profile



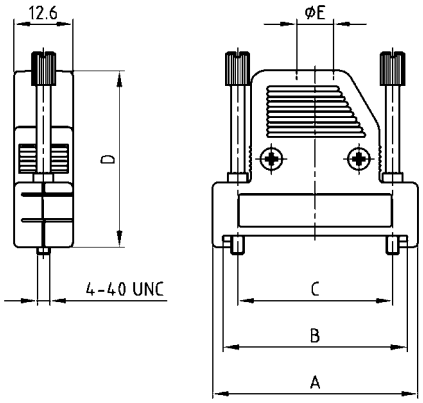
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

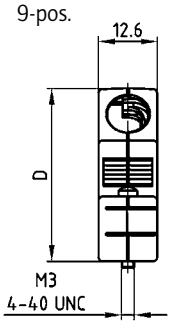
- Space-saving, side-by-side mounting
- Material:
  - Plastic hood black: ABS, UL 94 V-0
  - Plastic hood metallized: ABS, UL 94 V-0
- Fastening:
  - 4-40 UNC jack screw
  - 4-40 UNC short screw
- Packaging: in pack units as a single package

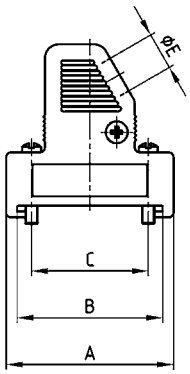
### Product drawing

Straight cable entry 9-37 pos.

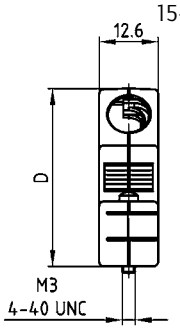


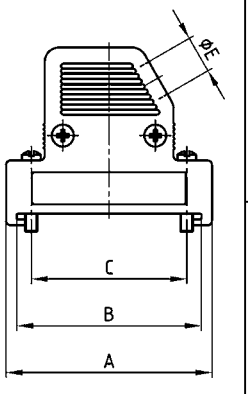

60° cable entry 9-pos.




60° cable entry 15-37-pos.




| No. of pos. | A | B | C | D | Ø E |
|---|---|---|---|---|---|
| 09 | 35.80 | 31.20 | 25.00 | 37.00 | 8.00 |
| 15 | 44.10 | 39.50 | 33.30 | 38.00 | 8.00 |
| 25 | 57.90 | 53.20 | 47.00 | 41.00 | 9.00 |
| 37 | 74.30 | 69.70 | 63.50 | 41.00 | 9.00 |

| No. of pos. | A | B | C | D | Ø E |
|---|---|---|---|---|---|
| 09 | 35.80 | 31.20 | 25.00 | 37.00 | 8.00 |
| 15 | 44.10 | 39.50 | 33.30 | 38.00 | 8.00 |
| 25 | 57.90 | 53.20 | 47.00 | 41.00 | 9.00 |
| 37 | 74.30 | 69.70 | 63.50 | 41.00 | 9.00 |

### Order data

**D-SUB Plastic hood - Straight cable entry**

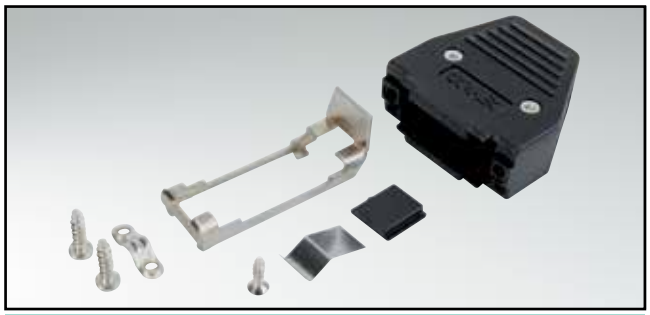
| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Black /4-40 UNC Jack screw | 165X16219X |
| 15 | Black /4-40 UNC Jack screw | 165X16229X |
| 25 | Black /4-40 UNC Jack screw | 165X16239X |
| 37 | Black /4-40 UNC Jack screw | 165X16249X |
| 09 | Metallized /4-40-UNC Jack screw | 165X16299X |
| 15 | Metallized /4-40-UNC Jack screw | 165X16309X |
| 25 | Metallized /4-40-UNC Jack screw | 165X16319X |
| 37 | Metallized /4-40-UNC Jack screw | 165X16329X |

**D-SUB Plastic hood – Side cable entry**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Black /4-40 UNC Short screw | 165X16379X |
| 15 | Black /4-40 UNC Short screw | 165X16389X |
| 25 | Black /4-40 UNC Short screw | 165X16399X |
| 37 | Black /4-40 UNC Short screw | 165X16409X |
| 09 | Metallized /4-40-UNC Short screw | 165X16459X |
| 15 | Metallized /4-40-UNC Short screw | 165X16469X |
| 25 | Metallized /4-40-UNC Short screw | 165X16479X |
| 37 | Metallized /4-40-UNC Short screw | 165X16489X |

# D-SUB Plastic Hood

## Straight or side cable entry – 9-50 pos. – Jack screws or slide lock mounting



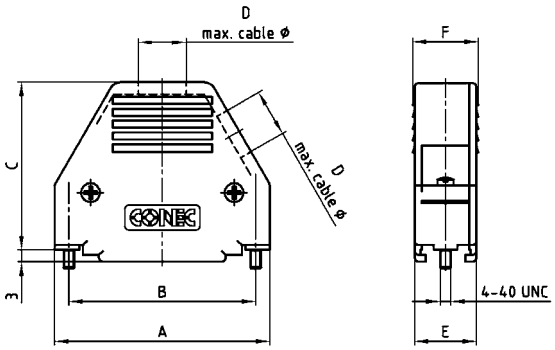
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

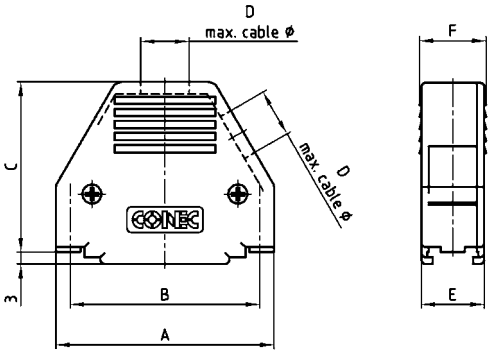
- Integrated strain relief
- Entries not in use are blanked off with blanking plugs
- Material:
  - Plastic hood black: ABS, UL 94 V-0
  - Plastic hood metallized: ABS, UL 94 V-0
- Fastening:
  - 4-40 UNC short screws
  - Slide lock
- Packaging: in bulk or in pack units as a single package

### Product drawing

Housing with short slotted screw

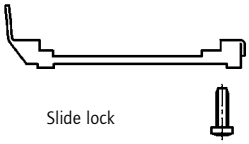



Housing with slide lock




| No. of pos. | A | B | C | Ø D | E | F |
|---|---|---|---|---|---|---|
| 09 | 32.00 | 25.00 | 36.70 | 6.30 | 15.50 | 16.50 |
| 15 | 40.00 | 33.30 | 38.20 | 8.00 | 15.50 | 16.50 |
| 25 | 54.20 | 47.00 | 42.20 | 10.50 | 15.50 | 16.50 |
| 37 | 70.60 | 63.50 | 47.20 | 11.50 | 15.50 | 16.50 |
| 50 | 68.20 | 61.10 | 47.20 | 13.70 | 19.60 | 20.60 |

Spring



Slide lock

Locking hooks for slide lock

### Order data

| D-SUB Plastic hood – Black | | |
|---|---|---|
| **No. of pos.** | **Design** | **Part Number** |
| 09 | 4-40 UNC Short screw | 165X11239X |
| 15 | 4-40 UNC Short screw | 165X11249X |
| 25 | 4-40 UNC Short screw | 165X11259X |
| 37 | 4-40 UNC Short screw | 165X11269X |
| 50 | 4-40 UNC Short screw | 165X16539X |
| 09 | Slide lock version including spring | 165X11279X |
| 15 | Slide lock version including spring | 165X11289X |
| 25 | Slide lock version including spring | 165X11299X |
| 37 | Slide lock version including spring | 165X11309X |
| 50 | Slide lock version including spring | 165X16549X |

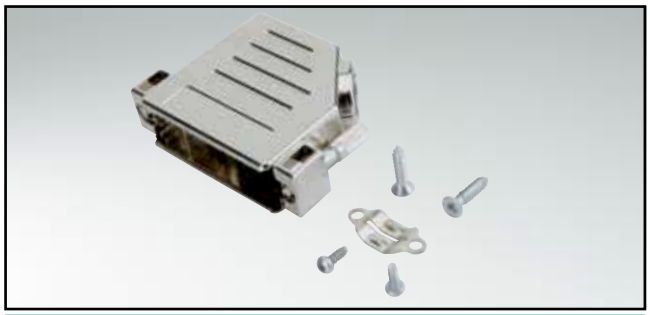
| D-SUB Plastic hood – Metallized | | |
|---|---|---|
| **No. of pos.** | **Design** | **Part Number** |
| 09 | 4-40 UNC Short screw | 165X11319X |
| 15 | 4-40 UNC Short screw | 165X11329X |
| 25 | 4-40 UNC Short screw | 165X11339X |
| 37 | 4-40 UNC Short screw | 165X11349X |
| 50 | 4-40 UNC Short screw | 165X16559X |
| 09 | Slide lock version including spring | 165X11359X |
| 15 | Slide lock version including spring | 165X11369X |
| 25 | Slide lock version including spring | 165X11379X |
| 37 | Slide lock version including spring | 165X11389X |
| 50 | Slide lock version including spring | 165X16569X |

**For single packaged add the letter „E" at the end of the part number.**

| Locking for slide lock (two pieces per connector) | | |
|---|---|---|
| **No. of pos.** | **Design** | **Part Number** |
| 09-37 | Locking hooks for 9-37 pos. hood | 165X10119X |
| 50 | Locking hooks 50 pos. hood | 165X16609X |

# D-SUB Plastic Hood

## Side cable entry – 9-50 pos. – Jack screws or short screws



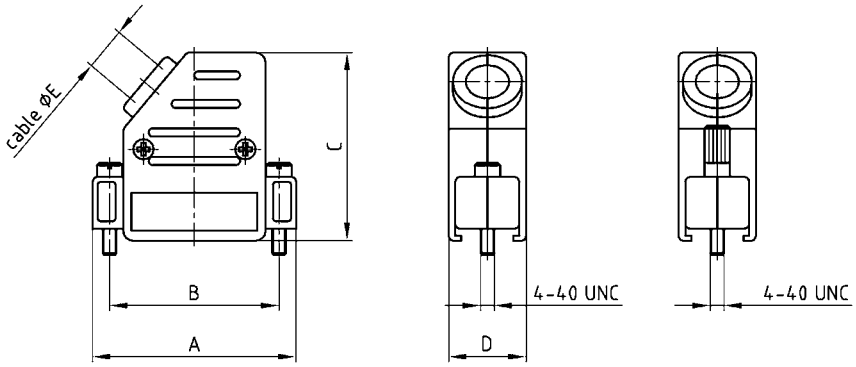
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

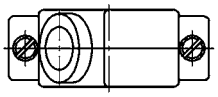
### Description

- Material:
  - Plastic hood black: ABS, UL 94 V-0
  - Plastic hood metallized: ABS, UL 94 V-0
- Fastening:
  - 4-40 UNC short screws
  - 4-40 UNC jack screws
- Packaging: in pack units as a single package

### Product drawing

with short screw  with jack screws



| No. of pos. | A | B | C | D | Ø E |
|---|---|---|---|---|---|
| 09 | 31.50 | 25.00 | 37.00 | 15.20 | 8.50 |
| 15 | 40.00 | 33.30 | 37.00 | 15.20 | 8.50 |
| 25 | 53.50 | 47.00 | 41.00 | 15.20 | 11.00 |
| 37 | 70.00 | 63.50 | 41.00 | 15.20 | 11.00 |
| 50 | 67.80 | 61.10 | 41.00 | 18.20 | 12.00 |

### Order data

D-SUB Plastic hood – Side cable entry

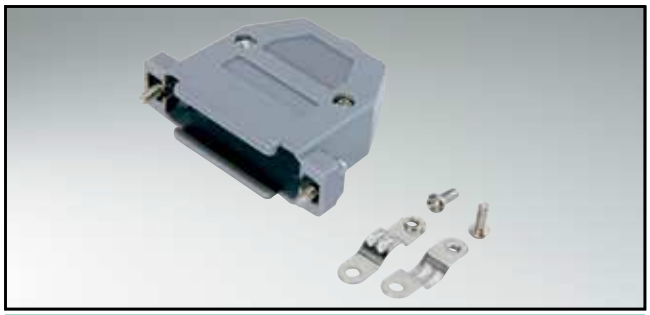
| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Black / 4-40 UNC Short screw | 600X54009X |
| 15 | Black / 4-40 UNC Short screw | 600X54015X |
| 25 | Black / 4-40 UNC Short screw | 600X54025X |
| 37 | Black / 4-40 UNC Short screw | 600X54037X |
| 50 | Black / 4-40 UNC Short screw | 600X54050X |
| 09 | Black / 4-40 UNC Jack screw | 600X55009X |
| 15 | Black / 4-40 UNC Jack screw | 600X55015X |
| 25 | Black / 4-40 UNC Jack screw | 600X55025X |
| 37 | Black / 4-40 UNC Jack screw | 600X55037X |
| 50 | Black / 4-40 UNC Jack screw | 600X55050X |

D-SUB Plastic hood – Side cable entry – Metallized

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Metallized / 4-40 UNC Short screw | 600X56009X |
| 15 | Metallized / 4-40 UNC Short screw | 600X56015X |
| 25 | Metallized / 4-40 UNC Short screw | 600X56025X |
| 37 | Metallized / 4-40 UNC Short screw | 600X56037X |
| 50 | Metallized / 4-40 UNC Short screw | 600X56050X |
| 09 | Metallized / 4-40 UNC Jack screw | 600X57009X |
| 15 | Metallized / 4-40 UNC Jack screw | 600X57015X |
| 25 | Metallized / 4-40 UNC Jack screw | 600X57025X |
| 37 | Metallized / 4-40 UNC Jack screw | 600X57037X |
| 50 | Metallized / 4-40 UNC Jack screw | 600X57050X |

# D-SUB Plastic Hood

## Straight cable entry – 9-37 pos. – Jack screws or short screws



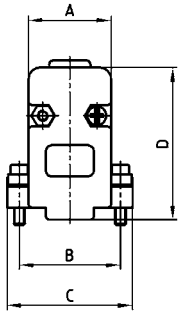
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

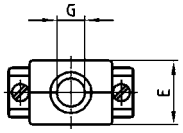
### Description

- Material:
  - Plastic hood grey: ABS, UL 94 V-2
  - Plastic hood metallized: ABS, UL 94 V-2
- Fastening:
  - 4-40 UNC short screw
  - 4-40 UNC jack screw
- Packaging: in pack units as a single package

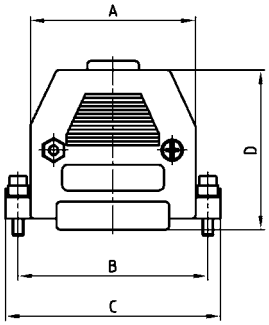
### Product drawing

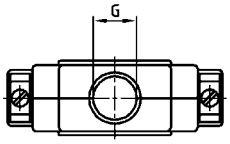
9 pos.



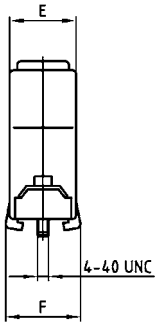




15-50 pos.

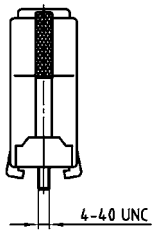



with short screw




with jack screws




| No. of pos. | A | B | C | D | E | F | Ø G |
|---|---|---|---|---|---|---|---|
| 09 | 20.50 | 25.00 | 31.00 | 38.80 | 16.00 | 16.00 | 7.00 |
| 15 | 28.00 | 33.30 | 39.50 | 35.50 | 16.00 | 17.50 | 10.00 |
| 25 | 41.00 | 47.00 | 55.00 | 42.00 | 16.50 | 16.50 | 11.00 |
| 37 | 58.00 | 63.50 | 70.00 | 51.10 | 24.20 | 19.00 | 14.00 |

### Order data

D-SUB Plastic hood – Grey

| No. of pos. | Design 4-40 UNC | Part Number |
|---|---|---|
| 09 | Grey / Short screw | 300X10169X |
| 15 | Grey / Short screw | 300X10179X |
| 25 | Grey / Short screw | 300X10209X |
| 37 | Grey / Short screw | 300X10219X |
| 09 | Grey / Jack screw | 300X10829X |
| 15 | Grey / Jack screw | 300X10839X |
| 25 | Grey / Jack screw | 300X10859X |
| 37 | Grey / Jack screw | 300X10869X |

D-SUB Plastic hood – Metallized

| No. of pos. | Design 4-40 UNC | Part Number |
|---|---|---|
| 09 | Metallized / Short screw | 300X10109X |
| 15 | Metallized / Short screw | 300X10119X |
| 25 | Metallized / Short screw | 300X10149X |
| 37 | Metallized / Short screw | 300X10159X |
| 09 | Metallized / Jack screw | 300X10879X |
| 15 | Metallized / Jack screw | 300X10889X |
| 25 | Metallized / Jack screw | 300X10909X |
| 37 | Metallized / Jack screw | 300X10919X |

# D-SUB Plastic Hood

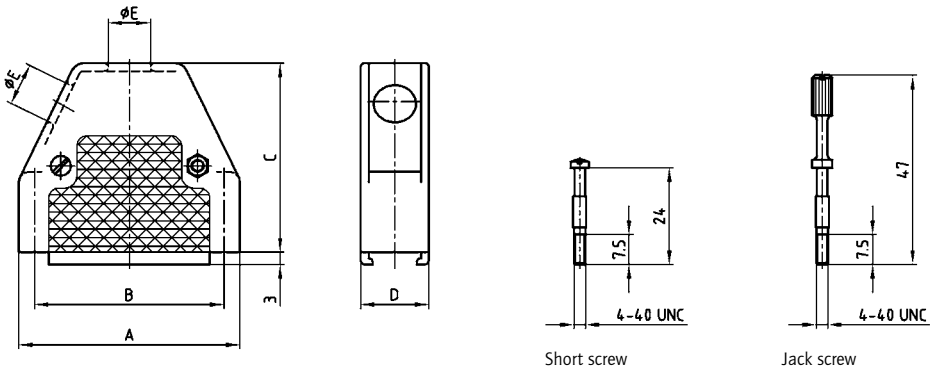
## Straight or side cable entry – 9-50 pos.

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

- Material:
  Plastic hood black: Polyamide 6.6 + Glas filled, UL 94 V-0
- Fastening:
  - 4-40 UNC short screw
  - 4-40 UNC jack screw
- Packaging: in bulk or in pack units as a single package

### Product drawing




| No. of pos. | A | B | C | D | Ø E |
|---|---|---|---|---|---|
| 09 | 33.00 | 25.00 | 45.50 | 17.00 | 7.50 |
| 15 | 41.00 | 33.30 | 45.50 | 17.00 | 8.50 |
| 25 | 55.00 | 47.00 | 47.00 | 17.00 | 10.50 |
| 37 | 71.30 | 63.50 | 51.00 | 17.00 | 11.00 |
| 50 | 69.00 | 61.10 | 50.00 | 20.00 | 12.50 |

### Order data

| D-SUB Plastic hood | | |
|---|---|---|
| No. of pos. | Design 4-40 UNC | Part Number |
| 09 | Black / Short screw | 165X13019X |
| 15 | Black / Short screw | 165X13029X |
| 25 | Black / Short screw | 165X13039X |
| 37 | Black / Short screw | 165X13049X |
| 50 | Black / Short screw | 165X13059X |

| D-SUB Plastic hood | | |
|---|---|---|
| No. of pos. | Design 4-40 UNC | Part Number |
| 09 | Black / Jack screw | 165X13079X |
| 15 | Black / Jack screw | 165X13089X |
| 25 | Black / Jack screw | 165X13099X |
| 37 | Black / Jack screw | 165X13109X |
| 50 | Black / Jack screw | 165X13119X |

**For single packaged add the letter „E" at the end of the part number.**

# D-SUB Plastic Hood

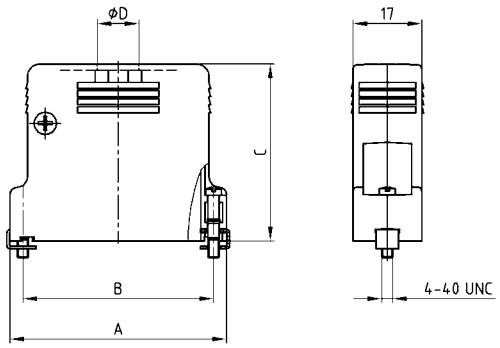
## Straight cable entry – 9, 25 and 37 pos. – Flat mounting style

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

- Strain relief is achieved by using a cable tie
- Material:
  Plastic hood black: Polyamide 6.6 + Glas filled, UL 94 V-0
- Fastening:
  4-40 UNC short screw
- Packaging: in bulk or in pack units as a single package

### Product drawing




| No. of pos. | A | B | C | Ø D |
|---|---|---|---|---|
| 09 | 31.20 | 25.00 | 43.60 | 8.00 |
| 25 | 53.50 | 47.00 | 43.60 | 10.30 |
| 37 | 69.70 | 63.50 | 43.60 | 10.30 |

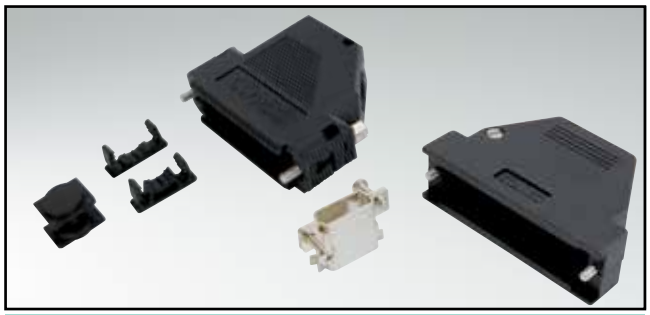
### Order data

| D-SUB Plastic hood | | |
|---|---|---|
| No. of pos. | Design 4-40 UNC | Part Number |
| 09 | Black / Short screw | 165X13179X |
| 25 | Black / Short screw | 165X13199X |
| 37 | Black / Short screw | 165X13209X |

**For single packaged add the letter „E“ at the end of the part number.**

# D-SUB Plastic Hood

## 50 pos. with large cable opening – 25 pos. – Snap locking hood



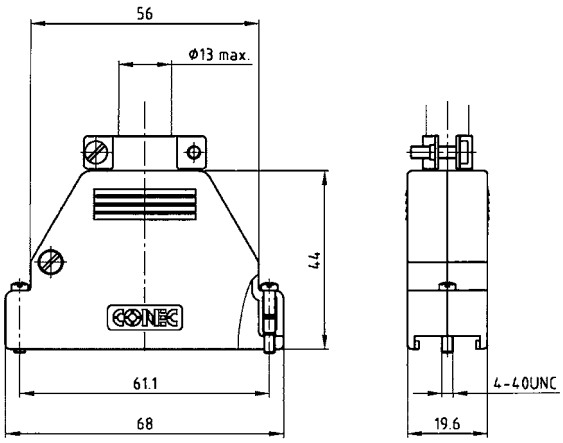
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

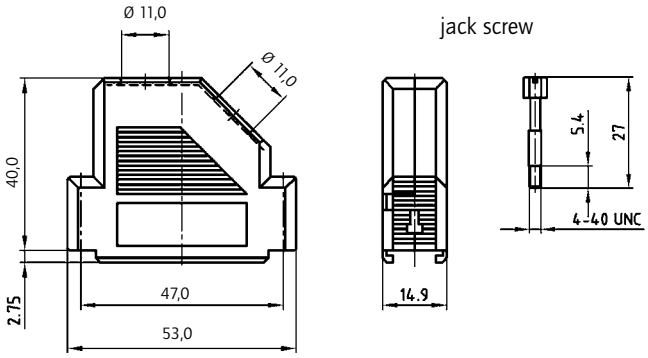
- Large cable opening
- 50 pos. version
  - Plastic hood black: Polyamide 6.6 + Glas filled, UL 94 V-0
  - Fastening: 4-40 UNC short screws
- 25 pos. version with snap locking for simple assembly
  - integrated strain relief for several cable diameters
  - Plastic hood black: ABS, UL 94 V-0
  - Fastening: with or without Jack screws 4-40 UNC
- Packaging: in bulk or in pack units as a single package

### Product drawing

50 pos. plastic hood with large strain relief




25 pos. plastic hood – two cable openings




### Order data

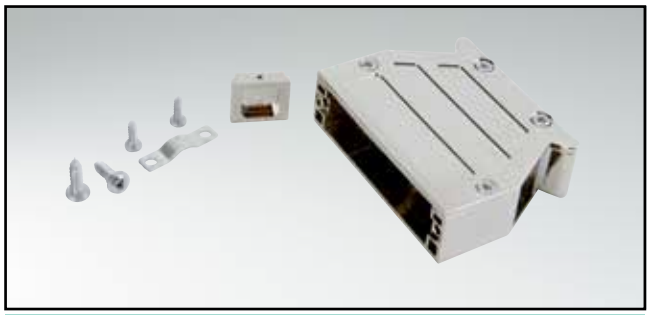
| D-SUB Plastic hood – 50 pos. | | |
|---|---|---|
| No. of pos. | Design | Part Number |
| 50 | Black / 4-40 UNC Short screw | 165X13269X |

| D-SUB Plastic hood – 25 pos. with Snap locking | | |
|---|---|---|
| No. of pos. | Design | Part Number |
| 25 | Black / Without jack screws | 165X11419X |
| 25 | Black / With 4-40 UNC Jack screw | 165X11459X |

**For single packaged add the letter „E" at the end of the part number.**

# D-SUB Plastic Hood

## Variable cable entries – 9-50 pos. – Without jack screws



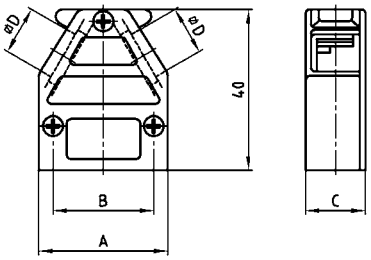
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

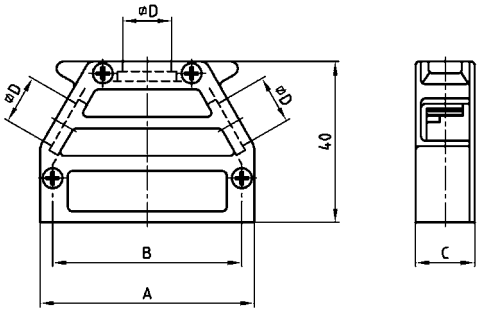
- Entries not in use are blanked off with blanking plugs
- Design:
  - 9 pos.: two cable entries
  - 15-50 pos.: two side and one straight cable entry
- simultaneous use of all cable entries possible
- Material:
  - Plastic hood black: ABS, UL 94 V-0
  - Plastic hood metallized: ABS, UL 94 V-0
- Packaging: in pack units as a single package

### Product drawing

9 pos. with two cable entries




15-50 pos. with three cable entries




| No. of pos. | A | B | C | Ø D |
|---|---|---|---|---|
| 09 | 31.00 | 25.00 | 15.40 | 12.10 |
| 15 | 39.30 | 33.30 | 15.40 | 12.10 |
| 25 | 53.20 | 47.00 | 15.40 | 12.10 |
| 37 | 69.50 | 63.50 | 15.40 | 12.10 |
| 50 | 67.00 | 61.10 | 17.90 | 14.60 |

### Order data

| D-SUB Plastic hood | | |
|---|---|---|
| No. of pos. | Design | Part Number |
| 09 | Black | 165X10489X |
| 15 | Black | 165X10499X |
| 25 | Black | 165X10509X |
| 37 | Black | 165X10519X |
| 50 | Black | 165X10529X |

| D-SUB Plastic hood – Metallized | | |
|---|---|---|
| No. of pos. | Design | Part Number |
| 09 | Metallized | 165X11559X |
| 15 | Metallized | 165X11569X |
| 25 | Metallized | 165X11579X |
| 37 | Metallized | 165X11589X |
| 50 | Metallized | 165X11599X |

# D-SUB Plastic Hood

## Straight or side cable entry – 9-50 pos. – One piece Design

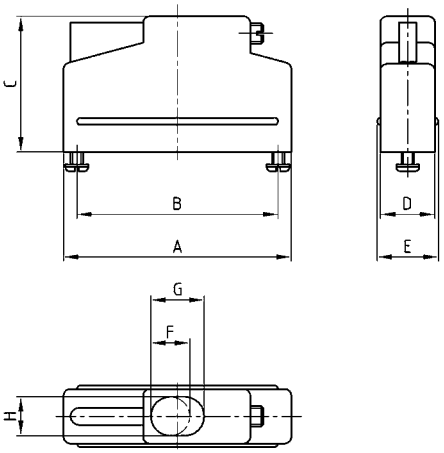
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

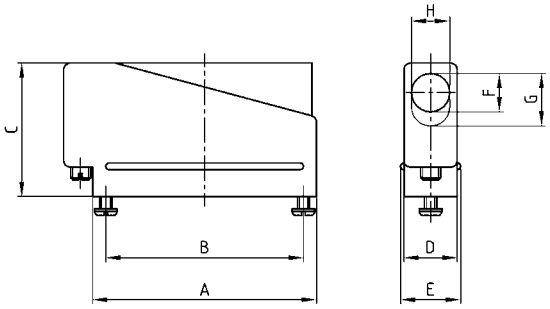
- Cable strain relief, set screws
- Material:
  Plastic hood black: Polyamide 6.6, UL 94 V-0
- Fastening:
  with connector mounting screws
- Packaging: in bulk or in pack units as a single package

### Product drawing

Straight cable entry




Side cable entry




| No. of pos. | A | B | C | D | E | Ø F | G | H |
|---|---|---|---|---|---|---|---|---|
| 09 | 30.90 | 25.00 | 25.40 | 12.70 | 14.30 | 7.10 | – | – |
| 15 | 39.30 | 33.30 | 25.40 | 12.70 | 14.30 | 9.10 | – | – |
| 25 | 53.20 | 47.00 | 31.70 | 12.70 | 14.30 | – | 12.50 | 9.10 |
| 37 | 69.40 | 63.50 | 38.10 | 12.70 | 14.30 | – | 17.60 | 9.10 |
| 50 | 67.10 | 61.10 | 38.10 | 15.50 | 17.00 | – | 18.60 | 11.90 |

### Order data

D-SUB Plastic hood – Straight cable entry

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Black | 165X10389X |
| 15 | Black | 165X10399X |
| 25 | Black | 165X10409X |
| 37 | Black | 165X10419X |
| 50 | Black | 165X10429X |

D-SUB Plastic hood - Side cable entry

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Black | 165X10439X |
| 15 | Black | 165X10449X |
| 25 | Black | 165X10459X |
| 37 | Black | 165X10469X |
| 50 | Black | 165X10479X |

For single packaged add the letter „E“ at the end of the part number.

# D-SUB Plastic Hood

## Straight or side cable entry – Hinged version – 9 and 25 pos.

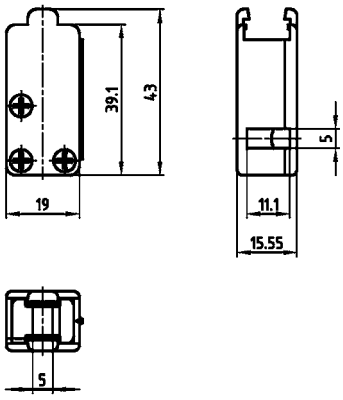
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

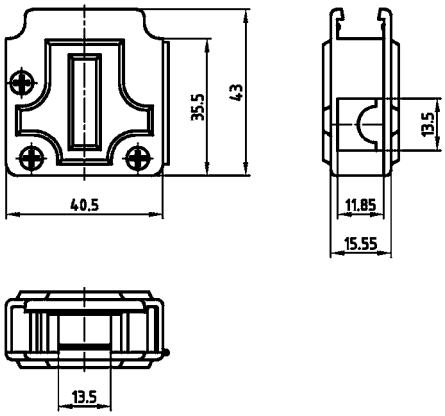
- Strain relief is achieved by plastic inserts
- Material:
  Plastic hood black: Polypropylene, UL 94 V-0
- Fastening:
  without jack screws
- Packaging: in bulk or in pack units as a single package

### Product drawing

9 pos.




25 pos.




### Order data

| D-SUB Plastic hood | | |
|---|---|---|
| No. of pos. | Design | Part Number |
| 09 | Black | 165X13219X |
| 25 | Black | 165X13239X |

For single packaged add the letter „E" at the end of the part number.

# D-SUB Plastic Hood

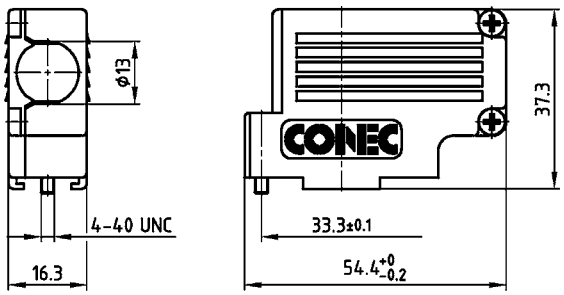
## Side cable entry – Low profile – 15 pos.

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

- Requires little space
- Integrated strain relief
- Material:
  - Plastic hood black: PBT + Glas filled, UL 94 V-0
  - Plastic hood metallized: ABS V-0
- Fastening:
  4-40 UNC short screw
- Packaging: in bulk or in pack units as a single package

### Product drawing




### Order data

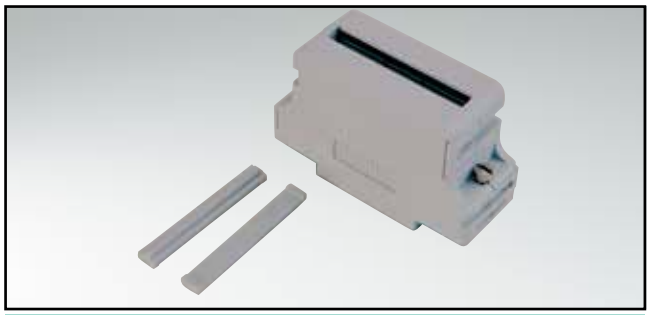
| D-SUB Plastic hood – Black | | |
|---|---|---|
| No. of pos. | Design | Part Number |
| 15 | Black | 500X10015MP |

| D-SUB Plastic hood – Metallized | | |
|---|---|---|
| No. of pos. | Design | Part Number |
| 15 | Metallized | 165X17729X |

For single packaged add the letter „E" at the end of the part number.

# D-SUB Plastic Hood

## For flat cable – Snap locking – 25 and 37 pos.

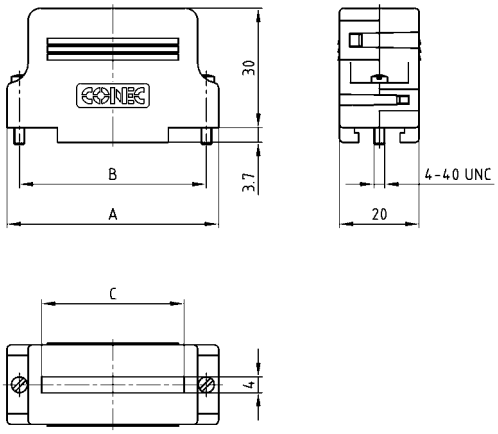


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

- Hood for IDC D-SUB Connectors
- Quick assembly snap locking feature
- Integrated strain relief
- Material:
  - plastic hood grey: ABS, UL 94 V-0
  - Plastic hood metallized: ABS, UL 94 V-0
- Fastening:
  4-40 UNC short screws
- Packaging: in bulk or in pack units as a single package

### Product drawing




| No. of pos. | A | B | C |
|---|---|---|---|
| 25 | 53.20 | 47.00 | 35.80 |
| 37 | 69.50 | 63.50 | 50.50 |

### Order data

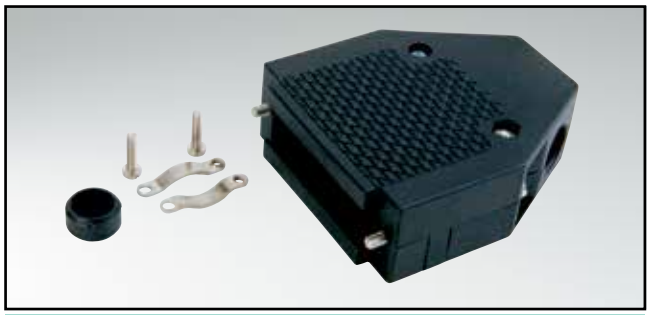
| D-SUB Plastic hood | | |
|---|---|---|
| No. of pos. | Design | Part Number |
| 25 | Grey | 165X14029X |
| 37 | Grey | 165X14039X |

| D-SUB Plastic hood – Metallized | | |
|---|---|---|
| No. of pos. | Design | Part Number |
| 25 | Metallized | 165X14069X |
| 37 | Metallized | 165X14079X |

For single packaged add the letter „E" at the end of the part number.

# D-SUB Plastic Hood

## For flat cable version and round cable version – 9 and 50 pos.



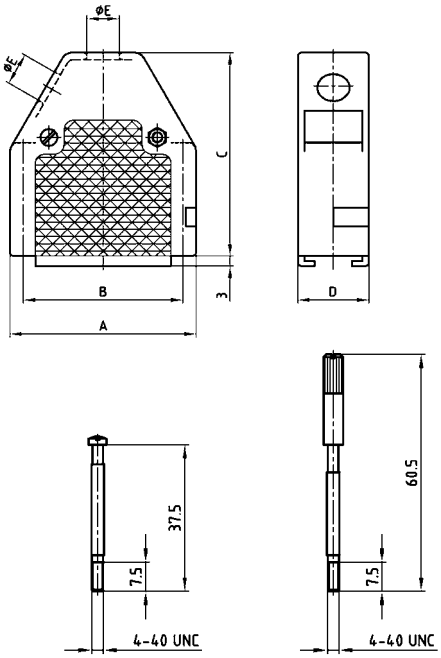
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

- Hood for IDC D-SUB Connectors
- Design:
  - round cable version with straight and side cable entry
    for flat cable
- Material:
  plastic hood black: ABS, UL 94 V-0
- Fastening:
  - 4-40 UNC short screws
  - 4-40 UNC jack screws
- Packaging: in bulk or in pack units as a single package

### Product drawing

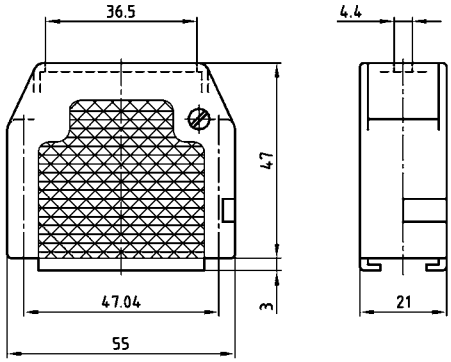
Round cable entry




Short screw

Jack screw

Flat cable entry




| No. of pos. | A | B | C | D | Ø E |
|---|---|---|---|---|---|
| 25 | 55.00 | 47.00 | 60.00 | 21.00 | 9.50 |
| 50 | 79.00 | 61.10 | 65.00 | 24.00 | 12.50 |

### Order data

**D-SUB Plastic hood – Round cable entry**

| No. of pos. | Design | Part Number |
|---|---|---|
| 25 | Black / Short screw | 165X12919X |
| 50 | Black / Short screw | 165X12929X |
| 25 | Black / Jack screw | 165X12939X |

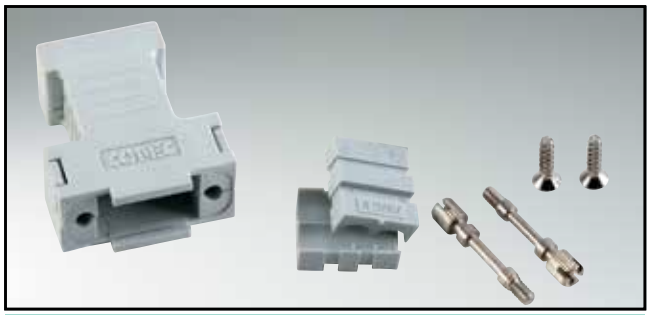
**D-SUB Plastic hood – Flat cable entry**

| No. of pos. | Design | Part Number |
|---|---|---|
| 25 | Black / Jack screw | 165X12949X |

**Also available as single package – in case of single package (polybag) please add „E" at the end of part number.**

# D-SUB Plastic Hood

## Design for power 2W2 Combination D-SUB Connectors – Wire size AWG 8...20

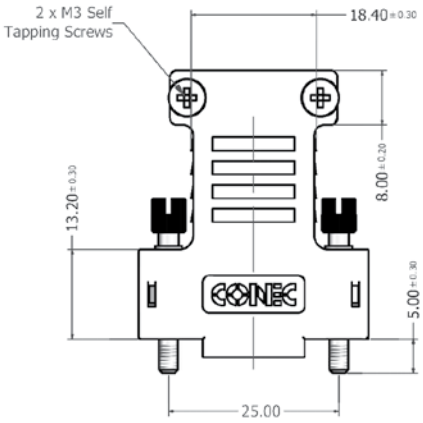


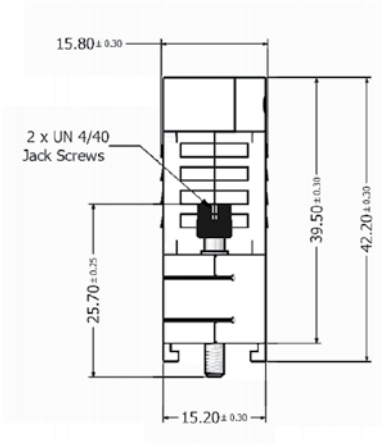
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

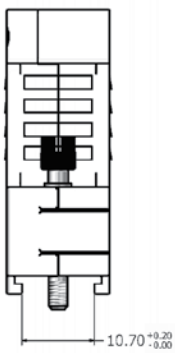
### Description

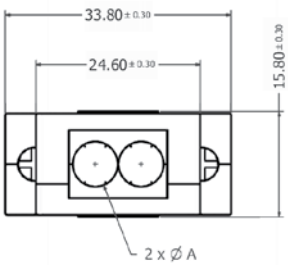
- Hood for 2W2 Combination D-SUB Connector
- Design:
  round cable entries with strain relief for wire size AWG 8...20
- Material:
  Plastic hood grey: PA 6.6 Glas filled, UL 94 V-0
- Fastening:
  4-40 UNC jack screws
- Packaging: in bulk or in pack units as a single package

### Product drawing




| AWG | Outer Diameter Cable | Ø A $^{+0.10}_{-0.0}$ |
|---|---|---|
| 8 | 6.58 ± 0.13 | 6.75 |
| 10 | 4.42 ± 0.10 | 4.52 |
| 12 | 3.88 ± 0.10 | 4.52 |
| 14 | 3.45 ± 0.10 | 3.55 |
| 16 | 2.95 ± 0.10 | 3.55 |
| 18 | 2.92 ± 0.10 | 3.02 |
| 20 | 2.44 ± 0.10 | 3.02 |

### Order data

| D-SUB Plastic hood 2W2 Number of cable openings | Design | Part Number |
|---|---|---|
| Two supplied for | AWG 8 | 165X17889X |
| Two supplied for | AWG 10/AWG 12 | 165X17949X |
| Two supplied for | AWG 14/AWG 16 | 165X17959X |
| Two supplied for | AWG 18/AWG 20 | 165X17969X |

**For single packaged add the letter „E" at the end of the part number.**

# D-SUB Plastic Hood

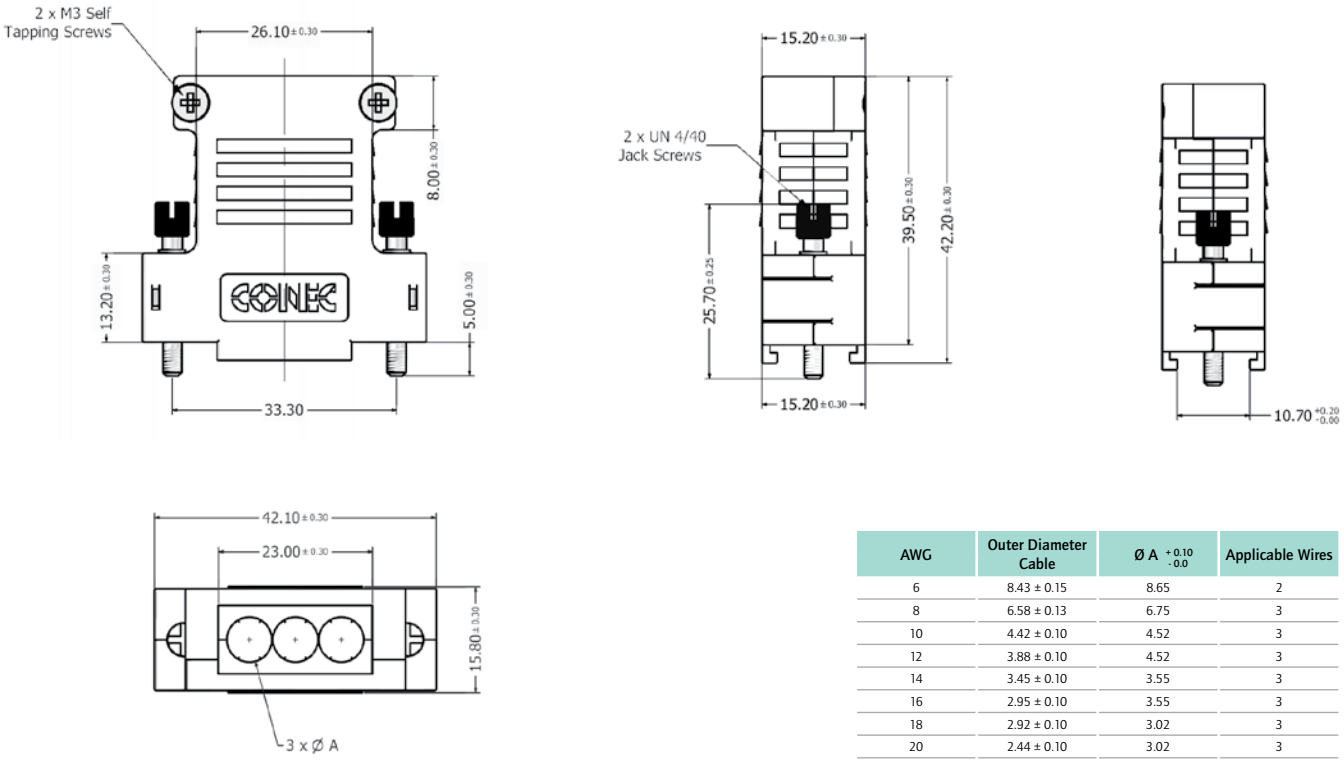
## Design for power 3W3 Combination D-SUB Connectors – Wire size AWG 6...20

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

- Hood for 3W3 Combination D-SUB Connector
- Design:
  round cable entries with strain relief for wire size AWG 6...20
- Material:
  Plastic hood grey: PA 6.6 Glas filled, UL 94 V-0
- Fastening:
  4-40 UNC jack screw
- Packaging: in bulk or in pack units as a single package

### Product drawing




| AWG | Outer Diameter Cable | Ø A +0.10 -0.0 | Applicable Wires |
|---|---|---|---|
| 6 | 8.43 ± 0.15 | 8.65 | 2 |
| 8 | 6.58 ± 0.13 | 6.75 | 3 |
| 10 | 4.42 ± 0.10 | 4.52 | 3 |
| 12 | 3.88 ± 0.10 | 4.52 | 3 |
| 14 | 3.45 ± 0.10 | 3.55 | 3 |
| 16 | 2.95 ± 0.10 | 3.55 | 3 |
| 18 | 2.92 ± 0.10 | 3.02 | 3 |
| 20 | 2.44 ± 0.10 | 3.02 | 3 |

### Order data

| D-SUB Plastic hood 3W3 Number of cable openings | Design | Part Number |
|---|---|---|
| Two supplied for | AWG 6 | 165X18169X |
| Three supplied for | AWG 8 | 165X17899X |
| Three supplied for | AWG 10/AWG 12 | 165X17979X |
| Three supplied for | AWG 14/AWG 16 | 165X17989X |
| Three supplied for | AWG 18/AWG 20 | 165X17999X |

**For single packaged add the letter „E" at the end of the part number.**

# D-SUB MicroTCA Metal Hood

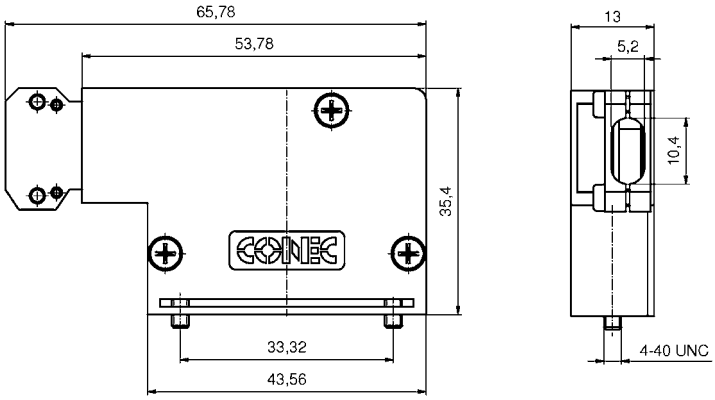
## Side cable entry – Slim design

RoHS compliant

### Description

- Cable hood for 7W2 MicroTCA Connector
- Suitable for other D-SUB Connectors
- Slim design for use on dual port interfaces
- Solid strain relief
- Material: zinc die-cast
- Fastening 4-40 UNC screws
- Packaging: in pack units as a single package

### Product drawing




### Order data

| D-SUB MicroTCA Hood 7W2 | | |
|---|---|---|
| Type | Design | Part Number |
| 7W2 | Metal hood | 16-000010 |

# D-SUB MicroTCA Hood set

## Plastic hood with crimp connector body – Straight cable entry

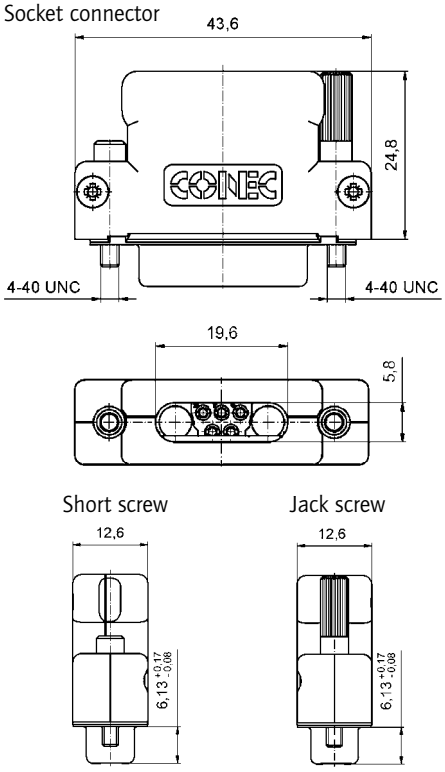
RoHS compliant

### Description

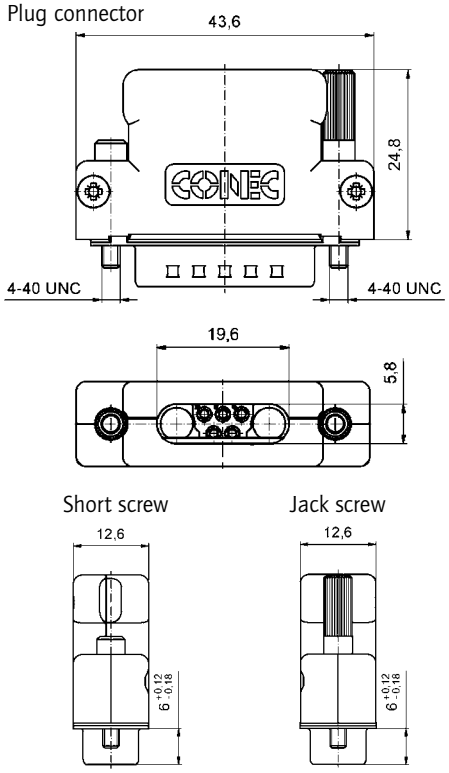
- Compact 7W2 shell inclusive crimp-socket connector
- Available with bridged signal contacts
- Short 4-40 UNC screws with Phillips or Allen key
- Material Housing: PBT GF; UL 94 V0, black
- Integrated strain relief
- Power contacts for wire size AWG 8 up to AWG 20
- This hood only fits this included connector, sold together as a set
- Choose short power contacts from page 5|15, sold separately

### Product drawing

Socket connector




Plug connector




### Order data

| D-SUB MicroTCA Hood set - Socket connector | | |
|---|---|---|
| **Type** | **Design** | **Part Number** |
| 7W2 | Black/Short screw Phillips | 13-000220 |
| 7W2 | Black/Short screw Allen Key | 13-000210 |
| 7W2 | Black/Jack screw Phillips | 13-000380 |
| 7W2 | Black/Jack screw Allen Key | 13-000370 |

| D-SUB MicroTCA Hood set - Plug connector | | |
|---|---|---|
| **Type** | **Design** | **Part Number** |
| 7W2 | Black/Short screw Phillips | 13-002780 |
| 7W2 | Black/Short screw Allen Key | 13-002770 |
| 7W2 | Black/Jack screw Phillips | 13-002760 |
| 7W2 | Black/Jack screw Allen Key | 13-002750 |

# IP67 D-SUB Plastic Hood and Accessories

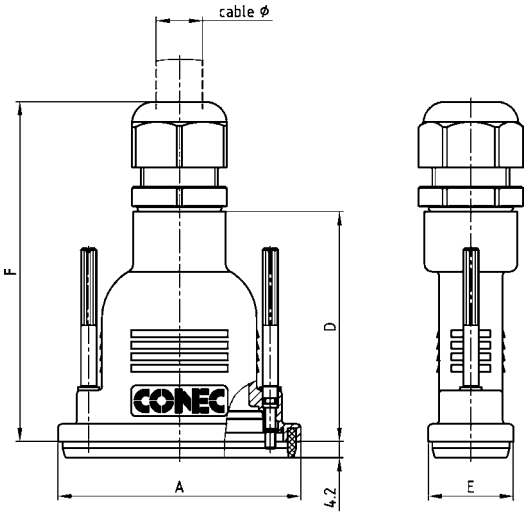
## Straight cable entry – 9-50 pos. – large interior

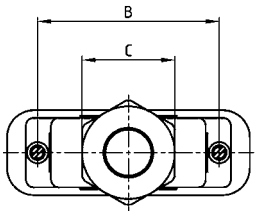
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

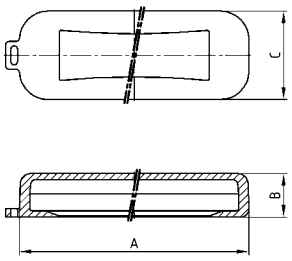
- Water resistant hood for Standard- and Combination D-SUB
- With large internal space for high power and coaxial contacts
- Material:
  - Plastic hood black: PBT + Glas filled, UL 94 V-0
  - Plastic hood metallized: ABS, UL 94 V-0
- Fastening:
  - M3 or 4-40 UNC short screws stainless steel
  - M3 or 4-40 UNC jack screws stainless steel
- Accessories: Protection cap and Outside sealing made from TPE
- Packaging: in pack units as a single package

### Product drawing

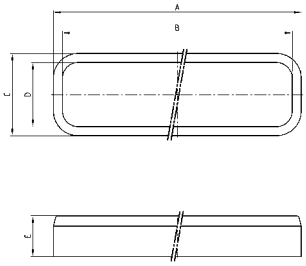



Protection cap




Outside sealing




| No. of pos. | A | B | C |
|---|---|---|---|
| 09 | 44.56 | 12.60 | 25.60 |
| 15 | 52.86 | 12.60 | 25.60 |
| 25 | 66.60 | 12.60 | 25.60 |
| 37 | 82.66 | 12.60 | 25.60 |
| 50 | 80.26 | 12.60 | 28.40 |

| No. of pos. | A -0.2 | B +0.2 | C -0.2 | D +0.2 | E +0.5 |
|---|---|---|---|---|---|
| 09 | 38.36 | 33.96 | 20.00 | 15.60 | 9.90 |
| 15 | 46.66 | 42.26 | 20.00 | 15.60 | 9.90 |
| 25 | 60.40 | 56.00 | 20.00 | 15.60 | 9.90 |
| 37 | 76.86 | 72.46 | 20.00 | 15.60 | 9.90 |
| 50 | 74.50 | 70.10 | 22.80 | 18.40 | 9.90 |

| Shellsize | A | B | C | | D | E | F +1 -3 | G | Cable Ø | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | black/grey | metallized | | | | | black/grey | metallized |
| 1 | 40.76 | 25.00 | SW 22 | SW 20 | 51.00 | 22.00 | 77.00 | 44.00 | 5 - 10 | 5 - 10 |
| 2 | 49.06 | 33.30 | SW 24 | SW 24 | 51.00 | 22.00 | 79.00 | 52.00 | 6 - 12 | 7 - 12 |
| 3 | 62.80 | 47.04 | SW 24 | SW 24 | 59.50 | 22.00 | 87.50 | 52.00 | 6 - 12 | 7 - 12 |
| 4 | 78.86 | 63.50 | SW 33 | SW 30 | 67.00 | 22.00 | 99.00 | 52.00 | 9 - 16 | 9 - 16 |
| 5 | 76.46 | 61.10 | SW 42 | SW 40 | 67.00 | 24.80 | 107.00 | 52.00 | 13 - 20 | 13 - 20 |

### Order data

**D-SUB Plastic hood – Black**

| No. of pos. | Jack screw M3 | Jack screw 4-40 UNC |
|---|---|---|
| 09 | 165X15119X | 165X14819X |
| 15 | 165X15129X | 165X14829X |
| 25 | 165X15139X | 165X14839X |
| 37 | 165X15149X | 165X14849X |
| 50 | 165X15159X | 165X14859X |
| **No. of pos.** | **Short screw M3** | **Short screw 4-40 UNC** |
| 09 | 165X15169X | 165X14869X |
| 15 | 165X15179X | 165X14879X |
| 25 | 165X15189X | 165X14889X |
| 37 | 165X15199X | 165X14899X |
| 50 | 165X15209X | 165X14909X |

**D-SUB Plastic hood – Metallized**

| No. of pos. | Jack screw M3 | Jack screw 4-40 UNC |
|---|---|---|
| 09 | 165X15319X | 165X15019X |
| 15 | 165X15329X | 165X15029X |
| 25 | 165X15339X | 165X15039X |
| 37 | 165X15349X | 165X15049X |
| 50 | 165X15359X | 165X15059X |
| **No. of pos.** | **Short screw M3** | **Short screw 4-40 UNC** |
| 09 | 165X15369X | 165X15069X |
| 15 | 165X15379X | 165X15079X |
| 25 | 165X15389X | 165X15089X |
| 37 | 165X15399X | 165X15099X |
| 50 | 165X15409X | 165X15109X |

**Protection cap**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Protection cap | 165X17509X |
| 15 | Protection cap | 165X17519X |
| 25 | Protection cap | 165X17529X |
| 37 | Protection cap | 165X17539X |
| 50 | Protection cap | 165X17549X |

**Outside sealing**

| No. of pos. | Ausführung | Part Number |
|---|---|---|
| 09 | Outside sealing | 795-305420 |
| 15 | Outside sealing | 795-305490 |
| 25 | Outside sealing | 795-305580 |
| 37 | Outside sealing | 795-305640 |
| 50 | Outside sealing | 795-305710 |

# IP67 D-SUB Plastic Hood

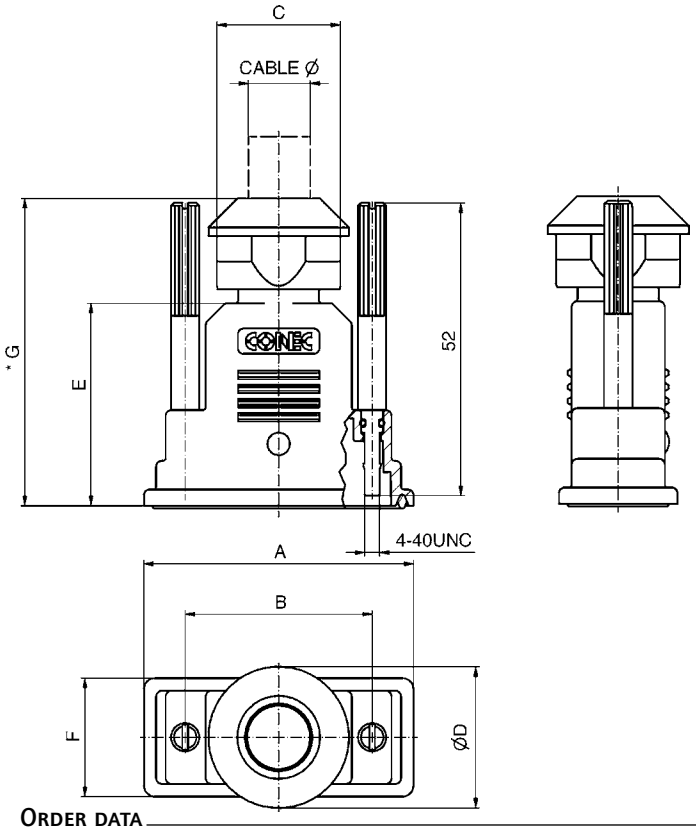
## Straight cable entry – 9-50 pos.

RoHS compliant

### Description

- Water resistant hood for Standard and Combination D-SUB
- for high power and coaxial contacts
- Material:
  - Plastic hood black: PBT + Glas filled, UL 94 V-0
  - Plastic hood metallized: ABS, UL 94 V-0
- Fastening:
  - 4-40 UNC short screws stainless steel
  - 4-40 UNC jack screws stainless steel
- Packaging: in pack units as a single package

### Product drawing




| Shellsize | A | B | C | Ø D | E | F | G ±1 | Cable Ø |
|---|---|---|---|---|---|---|---|---|
| 1 | 40.00 | 25.00 | 20 A/F | 23 | 36 | 21.00 | 54.30 | 7 - 9 |
| 2 | 48.00 | 33.30 | 22 A/F | 25 | 36 | 21.00 | 54.60 | 9 - 11 |
| 3 | 62.00 | 47.04 | 24 A/F | 27 | 44 | 21.00 | 67.70 | 10 - 12 |
| 4 | 78.00 | 63.50 | 28 A/F | 31 | 53 | 25.20 | 77.20 | 14 - 16 |
| 5 | 75.60 | 61.10 | 28 A/F | 31 | 53 | 23.80 | 77.20 | 14 - 16 |

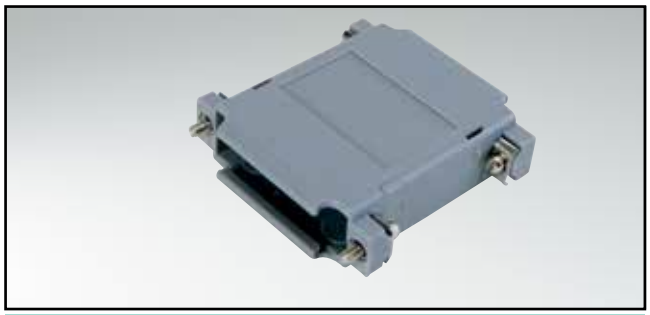
### Order data

| D-SUB Plastic hood – Black | | |
|---|---|---|
| No. of pos. | Short screw 4-40 UNC | Jack screw 4-40 UNC |
| 09 | 15-004710 | |
| 15 | 15-004720 | 15-004670 |
| 25 | 15-004730 | 15-004680 |
| 37 | 15-004740 | 15-004690 |
| 50 | 15-004750 | 15-004700 |

| D-SUB Plastic hood – Metallized | | |
|---|---|---|
| No. of pos. | Short screw 4-40 UNC | Jack screw 4-40 UNC |
| 09 | 15-004810 | |
| 15 | 15-004820 | 15-004770 |
| 25 | 15-004830 | 15-004780 |
| 37 | 15-004840 | 15-004790 |
| 50 | 15-004850 | 15-004800 |

# D-SUB Adapter Hood

## Plastic design – 9-25 pos.

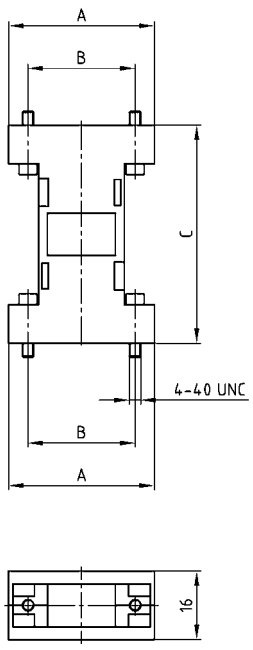


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

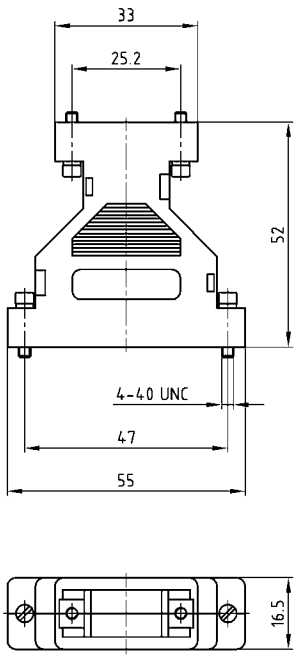
- Adapter hood with large internal space inside for custom applications
- Material:
  - Plastic hood grey: ABS, UL 94 V-2
  - Plastic hood metallized: ABS, UL 94 V-0
- Fastening:
  4-40 UNC short screws
- Packaging: in pack units as a single package

### Product drawing




| No. of pos. | A | B | C |
|---|---|---|---|
| 09/ 09 | 34.00 | 25.00 | 53.00 |
| 15/ 15 | 41.30 | 33.30 | 52.00 |
| 25/ 25 | 55.60 | 47.00 | 53.00 |

9-25 pos.




### Order data

| D-SUB Adapter hood – Grey | | |
|---|---|---|
| No. of pos. | Design 4-40 UNC | Part Number |
| 09/09 | Grey / Short screw | 300X10729X |
| 15/15 | Grey / Short screw | 300X10739X |
| 25/25 | Grey / Short screw | 300X10749X |
| 09/25 | Grey / Short screw | 300X10759X |

| D-SUB Adapter hood – Metallized | | |
|---|---|---|
| No. of pos. | Design 4-40 UNC | Part Number |
| 09/09 | Metallized / Short screw | 300X10779X |
| 15/15 | Metallized / Short screw | 300X10789X |
| 25/25 | Metallized / Short screw | 300X10799X |
| 09/25 | Metallized / Short screw | 300X10809X |

# D-SUB Protection cap

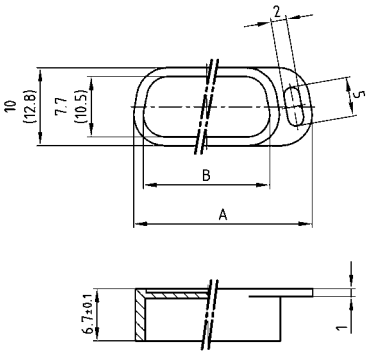
## Plastic design – Black or metallized

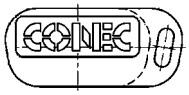
RoHS compliant

### Description

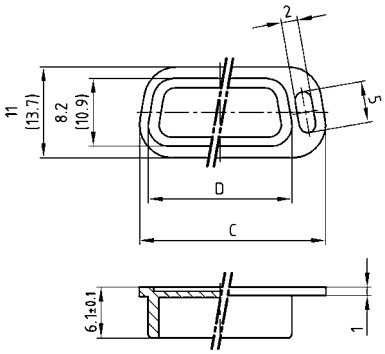
- Dust cap protecting connector mounting area
- Material: TPE; UL94 V-0
- Color: Black
- Shielded cap protecting against EMI/RFI as well as ESD
- Material: ABS, UL94 V-0; metallized
- Temperature range: -35°C... +85°C

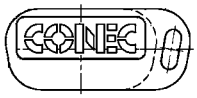
### Socket connector



### Plug connector



50-pos. = Dim. in (..)

| No. of pos. | A | B | C | D |
|---|---|---|---|---|
| 09 | 22.90 | 16.20 | 22.50 | 16.90 |
| 15 | 31.40 | 24.70 | 30.65 | 25.05 |
| 25 | 44.70 | 38.00 | 44.40 | 38.80 |
| 37 | 61.20 | 54.50 | 60.75 | 55.15 |
| 50 | 58.80 | 52.10 | 58.15 | 52.55 |

### Order data

**Protection cap for socket connector**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Black/Plastic | 160X10449X |
| 15 | Black/Plastic | 160X10459X |
| 25 | Black/Plastic | 160X10469X |
| 37 | Black/Plastic | 160X10479X |
| 50 | Black/Plastic | 160X10959X |
| 09 | Metallized plastic | 600X518009X |
| 15 | Metallized plastic | 600X518015X |
| 25 | Metallized plastic | 600X518025X |
| 37 | Metallized plastic | 600X518037X |
| 50 | Metallized plastic | 600X518050X |

**Protection cap for plug connector**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Black/Plastic | 160X10409X |
| 15 | Black/Plastic | 160X10419X |
| 25 | Black/Plastic | 160X10429X |
| 37 | Black/Plastic | 160X10439X |
| 50 | Black/Plastic | 160X10969X |
| 09 | Metallized plastic | 600X517009X |
| 15 | Metallized plastic | 600X517015X |
| 25 | Metallized plastic | 600X517025X |
| 37 | Metallized plastic | 600X517037X |
| 50 | Metallized plastic | 600X517050X |

# D-SUB Shielded cap

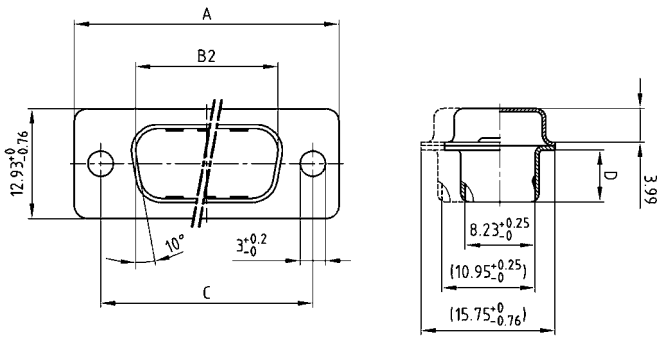
## Metal design – Shielded

RoHS compliant

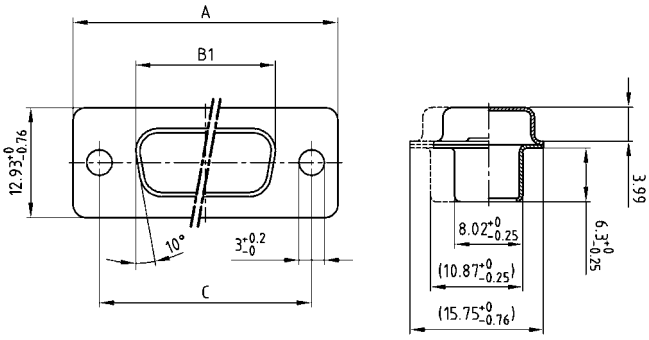
### Description

- Shielded cap protecting against EMI/RFI
- Material: Steel tin plated
- Mounting style:
  with Through-hole Ø .118"/3.00 mm

### Socket connector




### Plug connector




50-pos. = Dim. in (..)

| No. of pos. | A-0,76 | B1-0,25 | B2+0,25 | C | D-0,3 |
|---|---|---|---|---|---|
| 09 | 31.19 | 16.46 | 16.79 | 25.00 +0.12 | 6.12 |
| 15 | 39.52 | 24.79 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 25 | 53.42 | 38.50 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 54.96 | 55.30 | 63.50 ±0.13 | 5.99 |
| 50 | 67.31 | 52.55 | 52.68 | 61.10 +0.14 +0.11 | 5.99 |

### Order data

**Shielded cap for socket connector**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Metal/Through-hole Ø .118"/3.00 mm | 165X12969X |
| 15 | Metal/Through-hole Ø .118"/3.00 mm | 165X12979X |
| 25 | Metal/Through-hole Ø .118"/3.00 mm | 165X12989X |
| 37 | Metal/Through-hole Ø .118"/3.00 mm | 165X12999X |
| 50 | Metal/Through-hole Ø .118"/3.00 mm | 165X13009X |

**Shielded cap for plug connector**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Metal/Through-hole Ø .118"/3.00 mm | 165X13129X |
| 15 | Metal/Through-hole Ø .118"/3.00 mm | 165X13139X |
| 25 | Metal/Through-hole Ø .118"/3.00 mm | 165X13149X |
| 37 | Metal/Through-hole Ø .118"/3.00 mm | 165X13159X |
| 50 | Metal/Through-hole Ø .118"/3.00 mm | 165X13169X |

# D-SUB Shielded cap

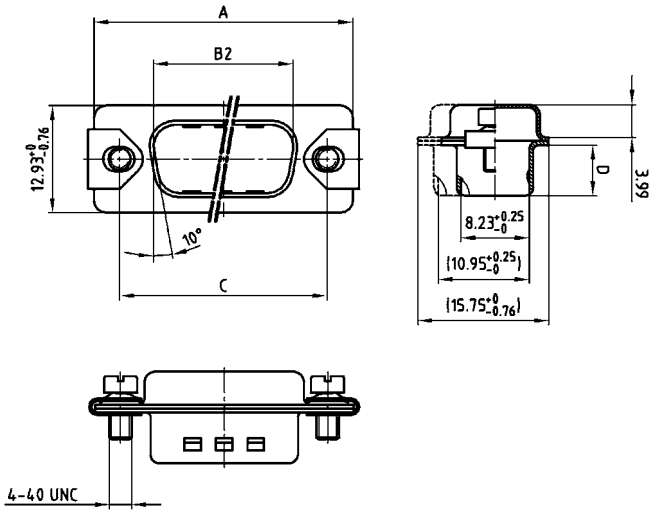
## Metal design – Shielded – Fastening screws

RoHS compliant

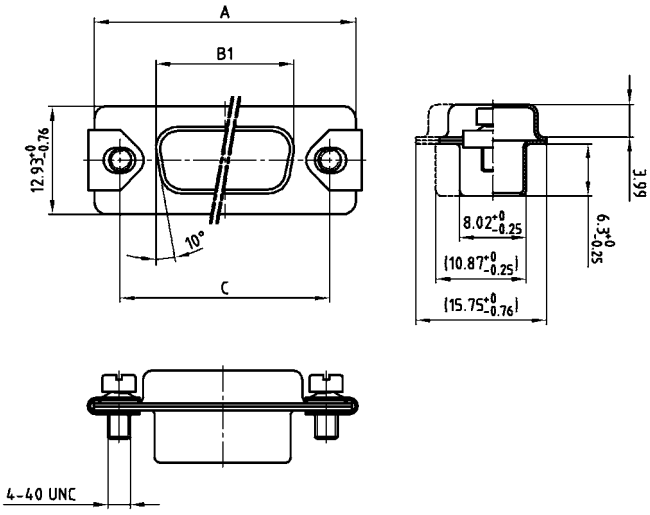
### Description

- Shielded cap protecting against EMI/RFI
- Material: Steel tin plated
- Mounting style:
  with 4-40 UNC screw and clip

### Socket connector




### Plug connector




50-pos. = Dim. in (..)

| No. of pos. | A-0,76 | B1-0,25 | B2+0,25 | C | D-0,3 |
|---|---|---|---|---|---|
| 09 | 31.19 | 16.46 | 16.79 | 25.00 +0.12 | 6.12 |
| 15 | 39.52 | 24.79 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 25 | 53.42 | 38.50 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 54.96 | 55.30 | 63.50 ±0.13 | 5.99 |
| 50 | 67.31 | 52.55 | 52.68 | 61.10 +0.14 +0.11 | 5.99 |

### Order data

**Shielded capfor socket connector**

| No. of pos. | Design 4-40 UNC | Part Number |
|---|---|---|
| 09 | Metal/Screw and clip | 165X16719X |
| 15 | Metal/Screw and clip | 165X16729X |
| 25 | Metal/Screw and clip | 165X16739X |
| 37 | Metal/Screw and clip | 165X16749X |
| 50 | Metal/Screw and clip | 165X16759X |

**Shielded cap for plug connector**

| No. of pos. | Design 4-40 UNC | Part Number |
|---|---|---|
| 09 | Metal/Screw and clip | 165X16769X |
| 15 | Metal/Screw and clip | 165X16779X |
| 25 | Metal/Screw and clip | 165X16789X |
| 37 | Metal/Screw and clip | 165X16799X |
| 50 | Metal/Screw and clip | 165X16809X |

# D-SUB Shielded cap

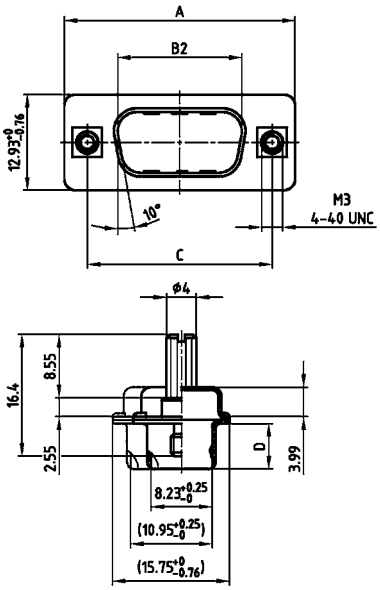
## Metal design – Shielded – Jack screws

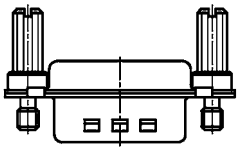
RoHS compliant

### Description

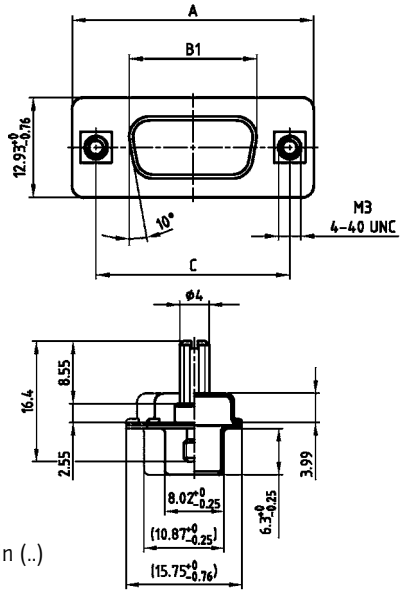
- Shielded cap protecting against EMI/RFI
- Material: Steel tin plated
- Mounting style:
  - with jack screw M3 or
  - with jack screw 4-40 UNC

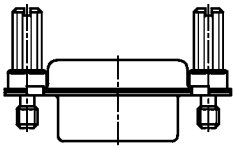
### Socket connector



### Plug connector



50-pos. = Dim. in (..)

| No. of pos. | A-0,76 | B1-0,25 | B2+0,25 | C | D-0,3 |
|---|---|---|---|---|---|
| 09 | 31.19 | 16.46 | 16.79 | 25.00 +0.12 | 6.12 |
| 15 | 39.52 | 24.79 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 25 | 53.42 | 38.50 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 54.96 | 55.30 | 63.50 ±0.13 | 5.99 |
| 50 | 67.31 | 52.55 | 52.68 | 61.10 +0.14 +0.11 | 5.99 |

### Order data

**Shielded cap for socket connector**

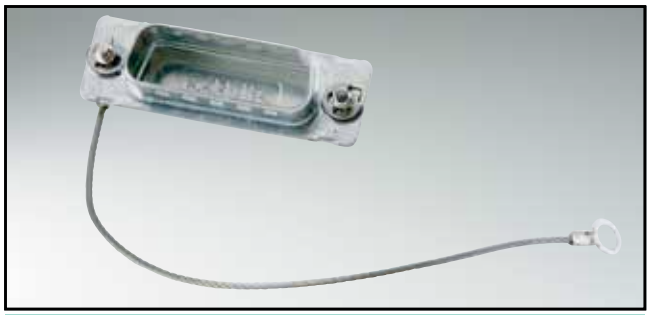
| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Metal/M3 Jack screw | 165X16859X |
| 15 | Metal/M3 Jack screw | 165X16869X |
| 25 | Metal/M3 Jack screw | 165X16879X |
| 37 | Metal/M3 Jack screw | 165X16889X |
| 50 | Metal/M3 Jack screw | 165X16899X |
| 09 | Metal/4-40 UNC Jack screw | 165X16909X |
| 15 | Metal/4-40 UNC Jack screw | 165X16919X |
| 25 | Metal/4-40 UNC Jack screw | 165X16929X |
| 37 | Metal/4-40 UNC Jack screw | 165X16939X |
| 50 | Metal/4-40 UNC Jack screw | 165X16949X |

**Shielded cap for plug connector**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Metal/M3 Jack screw | 165X16959X |
| 15 | Metal/M3 Jack screw | 165X16969X |
| 25 | Metal/M3 Jack screw | 165X16979X |
| 37 | Metal/M3 Jack screw | 165X16989X |
| 50 | Metal/M3 Jack screw | 165X16999X |
| 09 | Metal/4-40 UNC Jack screw | 165X17009X |
| 15 | Metal/4-40 UNC Jack screw | 165X17019X |
| 25 | Metal/4-40 UNC Jack screw | 165X17029X |
| 37 | Metal/4-40 UNC Jack screw | 165X17039X |
| 50 | Metal/4-40 UNC Jack screw | 165X17049X |

# D-SUB Shielded cap

## Metal design – Shielded – Lanyard – Fastening screws

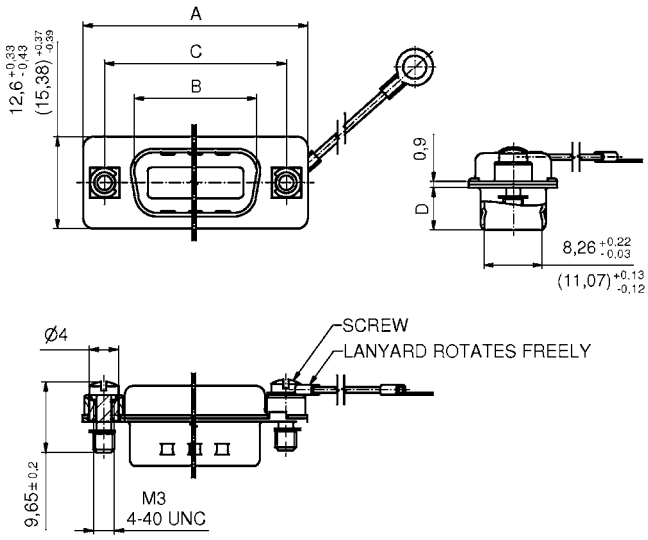


RoHS compliant

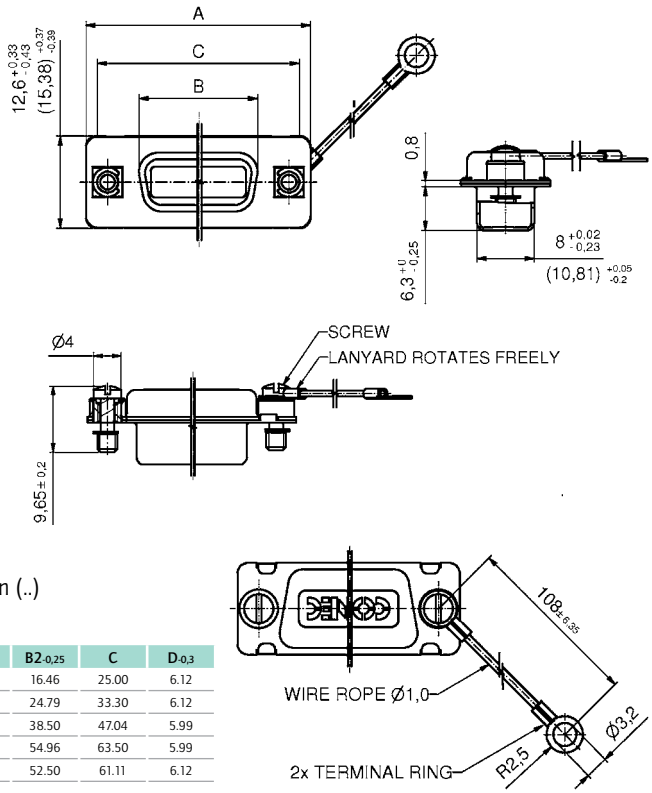
### Description

- Shielded cap protecting against EMI/RFI
- Material:
  - Shell: Steel tin plated
  - Lanyard: Stainless steel
- Mounting style:
  - with steel screws M3 or
  - with short screws 4-40 UNC

### Socket connector




### Plug connector




50-pos. = Dim. in (..)

| No. of pos. | A-0,76 | B1+0,25 | B2-0,25 | C | D-0,3 |
|---|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 16.46 | 25.00 | 6.12 |
| 15 | 39.52 | 25.12 | 24.79 | 33.30 | 6.12 |
| 25 | 53.42 | 38.84 | 38.50 | 47.04 | 5.99 |
| 37 | 69.70 | 55.30 | 54.96 | 63.50 | 5.99 |
| 50 | 67.00 | 52.81 | 52.50 | 61.11 | 6.12 |

### Order data

**Shielded cap for socket connector**

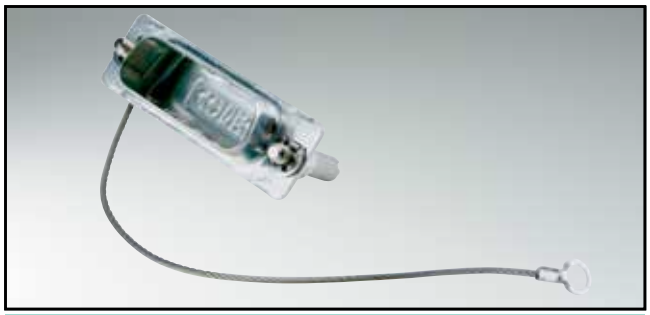
| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Metal/M3 fastening screw/Lanyard | 16-001000 |
| 15 | Metal/M3 fastening screw/Lanyard | 16-001010 |
| 25 | Metal/M3 fastening screw/Lanyard | 16-001020 |
| 37 | Metal/M3 fastening screw/Lanyard | 16-001030 |
| 50 | Metal/M3 fastening screw/Lanyard | 16-001040 |
| 09 | Metal/4-40 UNC fastening screw/Lanyard | 16-001050 |
| 15 | Metal/4-40 UNC fastening screw/Lanyard | 16-001060 |
| 25 | Metal/4-40 UNC fastening screw/Lanyard | 16-001070 |
| 37 | Metal/4-40 UNC fastening screw/Lanyard | 16-001080 |
| 50 | Metal/4-40 UNC fastening screw/Lanyard | 16-001090 |

**Shielded cap for plug connector**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Metal/M3 fastening screw/Lanyard | 16-001100 |
| 15 | Metal/M3 fastening screw/Lanyard | 16-001110 |
| 25 | Metal/M3 fastening screw/Lanyard | 16-001120 |
| 37 | Metal/M3 fastening screw/Lanyard | 16-001130 |
| 50 | Metal/M3 fastening screw/Lanyard | 16-001140 |
| 09 | Metal/4-40 UNC fastening screw/Lanyard | 16-001150 |
| 15 | Metal/4-40 UNC fastening screw/Lanyard | 16-001160 |
| 25 | Metal/4-40 UNC fastening screw/Lanyard | 16-001170 |
| 37 | Metal/4-40 UNC fastening screw/Lanyard | 16-001180 |
| 50 | Metal/4-40 UNC fastening screw/Lanyard | 16-001190 |

# D-SUB Shielded cap

## Metal design – Shielded – Jack screw – Lanyard

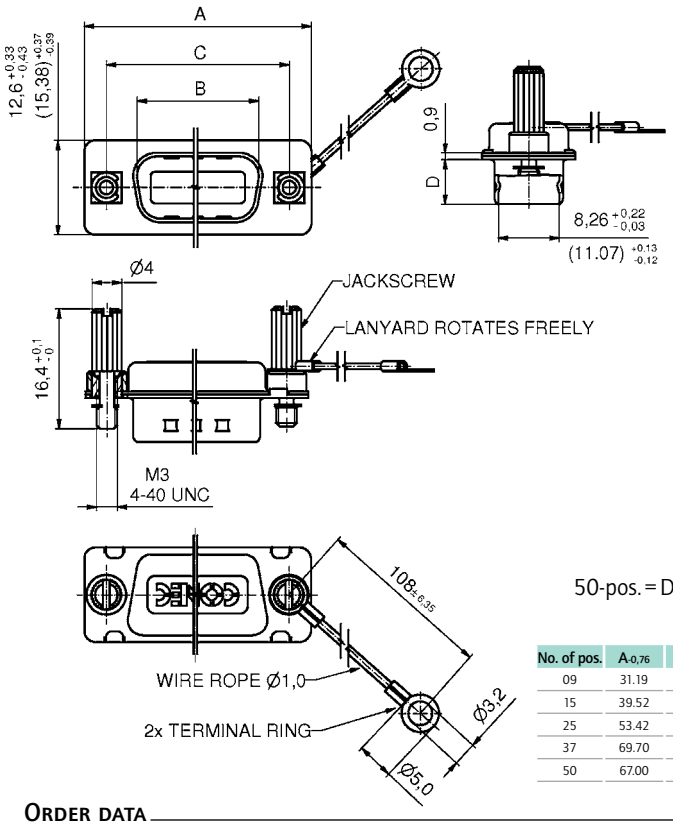


RoHS compliant

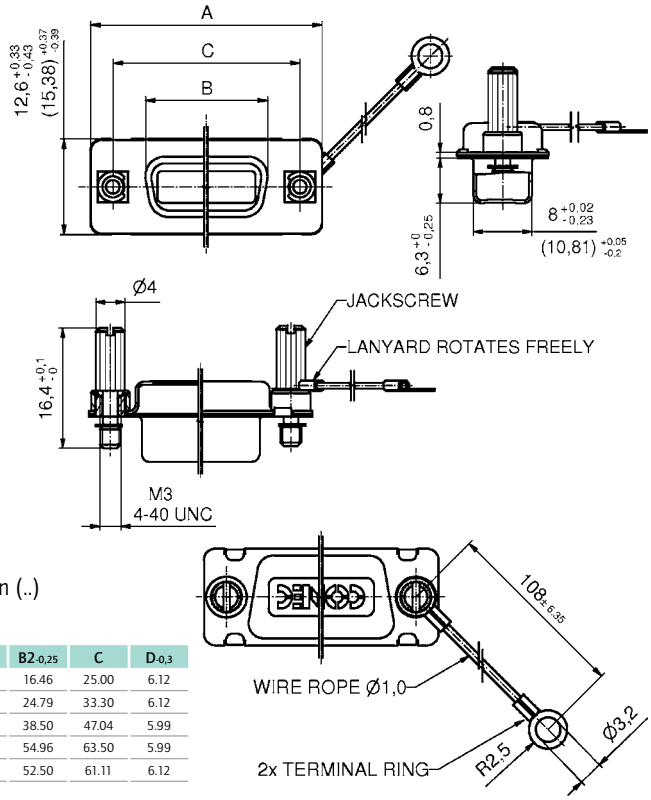
### Description

- Shielded cap protecting against EMI/RFI
- Material:
  - Shell: Steel tin plated
  - Lanyard: Stainless steel
  - Screw: Steel or stainless steel
- Mounting style:
  with M3 or 4-40 UNC Jack screw

### Socket connector




### Plug connector




50-pos. = Dim. in (..)

| No. of pos. | $A_{-0,76}$ | $B1_{+0,25}$ | $B2_{-0,25}$ | C | $D_{-0,3}$ |
|---|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 16.46 | 25.00 | 6.12 |
| 15 | 39.52 | 25.12 | 24.79 | 33.30 | 6.12 |
| 25 | 53.42 | 38.84 | 38.50 | 47.04 | 5.99 |
| 37 | 69.70 | 55.30 | 54.96 | 63.50 | 5.99 |
| 50 | 67.00 | 52.81 | 52.50 | 61.11 | 6.12 |

### Order data

**Shielded cap for Socket connector**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Metal/M3 Jack screw steel/Lanyard | 16-000790 |
| 15 | Metal/M3 Jack screw steel/Lanyard | 16-000800 |
| 25 | Metal/M3 Jack screw steel/Lanyard | 16-000810 |
| 37 | Metal/M3 Jack screw steel/Lanyard | 16-000820 |
| 50 | Metal/M3 Jack screw steel/Lanyard | 16-000830 |
| 09 | Metal/4-40 UNC Jack screw steel/Lanyard | 16-000840 |
| 15 | Metal/4-40 UNC Jack screw steel/Lanyard | 16-000850 |
| 25 | Metal/4-40 UNC Jack screw steel/Lanyard | 16-000860 |
| 37 | Metal/4-40 UNC Jack screw steel/Lanyard | 16-000870 |
| 50 | Metal/4-40 UNC Jack screw steel/Lanyard | 16-000890 |
| 09 | Metal/M3 Jack screw stainless steel/Lanyard | 16-000230 |
| 15 | Metal/M3 Jack screw stainless steel/Lanyard | 16-000240 |
| 25 | Metal/M3 Jack screw stainless steel/Lanyard | 16-000250 |
| 37 | Metal/M3 Jack screw stainless steel/Lanyard | 16-000260 |
| 50 | Metal/M3 Jack screw stainless steel/Lanyard | 16-000270 |
| 09 | Metal/4-40 UNC Jack screw stainless steel/Lanyard | 16-000280 |
| 15 | Metal/4-40 UNC Jack screw stainless steel/Lanyard | 16-000290 |
| 25 | Metal/4-40 UNC Jack screw stainless steel/Lanyard | 16-000300 |
| 37 | Metal/4-40 UNC Jack screw stainless steel/Lanyard | 16-000310 |
| 50 | Metal/4-40 UNC Jack screw stainless steel/Lanyard | 16-000320 |

**Shielded cap for Plug connector**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Metal/M3 Jack screw steel/Lanyard | 16-000900 |
| 15 | Metal/M3 Jack screw steel/Lanyard | 16-000910 |
| 25 | Metal/M3 Jack screw steel/Lanyard | 16-000920 |
| 37 | Metal/M3 Jack screw steel/Lanyard | 16-000930 |
| 50 | Metal/M3 Jack screw steel/Lanyard | 16-000940 |
| 09 | Metal/4-40 UNC Jack screw steel/Lanyard | 16-000950 |
| 15 | Metal/4-40 UNC Jack screw steel/Lanyard | 16-000960 |
| 25 | Metal/4-40 UNC Jack screw steel/Lanyard | 16-000970 |
| 37 | Metal/4-40 UNC Jack screw steel/Lanyard | 16-000980 |
| 50 | Metal/4-40 UNC Jack screw steel/Lanyard | 16-000990 |
| 09 | Metal/M3 Jack screw stainless steel/Lanyard | 16-000330 |
| 15 | Metal/M3 Jack screw stainless steel/Lanyard | 16-000340 |
| 25 | Metal/M3 Jack screw stainless steel/Lanyard | 16-000350 |
| 37 | Metal/M3 Jack screw stainless steel/Lanyard | 16-000360 |
| 50 | Metal/M3 Jack screw stainless steel/Lanyard | 16-000370 |
| 09 | Metal/4-40 UNC Jack screw stainless steel/Lanyard | 16-000380 |
| 15 | Metal/4-40 UNC Jack screw stainless steel/Lanyard | 16-000390 |
| 25 | Metal/4-40 UNC Jack screw stainless steel/Lanyard | 16-000400 |
| 37 | Metal/4-40 UNC Jack screw stainless steel/Lanyard | 16-000410 |
| 50 | Metal/4-40 UNC Jack screw stainless steel/Lanyard | 16-000420 |

# IP67 D-SUB Protection cap

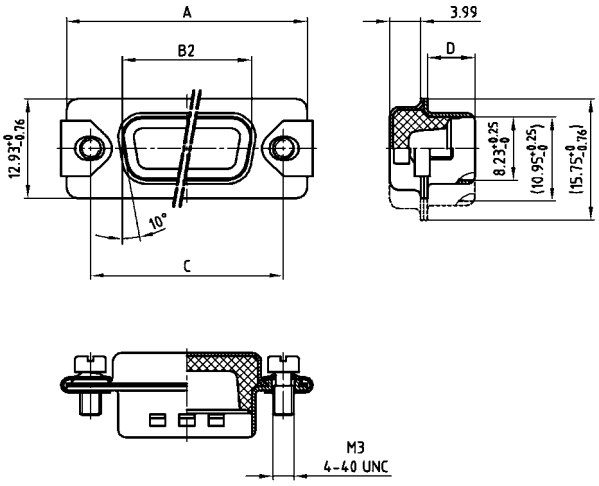
## Metal design – Shielded – Fastening screws

RoHS compliant

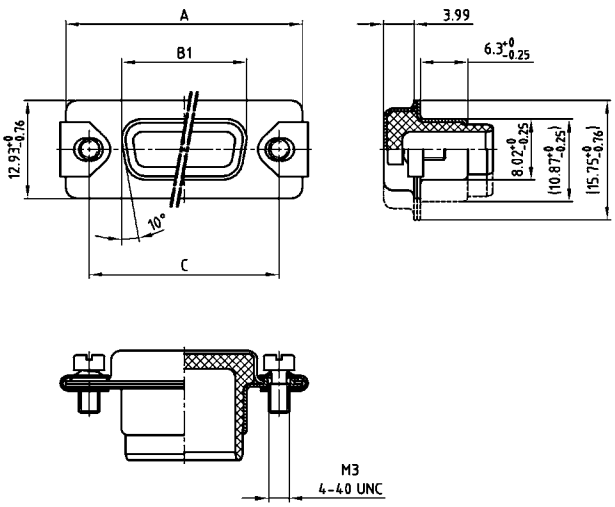
### Description

- IP67 Protection cap with gasket
- EMI/RFI protection
- Material: Brass tin plated
- Mounting style:
  with M3 or 4-40 UNC screw and stainless steel clip

### Socket connector




### Plug connector




50-pos. = Dim. in (..)

| No. of pos. | A-0,76 | B1+0,25 | B2-0,25 | C | D-0,3 |
|---|---|---|---|---|---|
| 09 | 31.19 | 16.46 | 16.79 | 25.00 +0.12 | 6.12 |
| 15 | 39.52 | 24.79 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 25 | 53.42 | 38.50 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 54.96 | 55.30 | 63.50 ±0.13 | 5.99 |
| 50 | 67.31 | 52.55 | 52.68 | 61.10 +0.14 +0.11 | 5.99 |

### Order data

| Protection cap for Socket connector IP67 | | |
|---|---|---|
| No. of pos. | Design | Part Number |
| 09 | Metal/M3 Screw and clip | 165X16619X |
| 15 | Metal/M3 Screw and clip | 165X16629X |
| 25 | Metal/M3 Screw and clip | 165X16639X |
| 37 | Metal/M3 Screw and clip | 165X16649X |
| 50 | Metal/M3 Screw and clip | 165X16659X |
| 09 | Metal/4-40 UNC Screw and clip | 165X14719X |
| 15 | Metal/4-40 UNC Screw and clip | 165X14729X |
| 25 | Metal/4-40 UNC Screw and clip | 165X14739X |
| 37 | Metal/4-40 UNC Screw and clip | 165X14749X |
| 50 | Metal/4-40 UNC Screw and clip | 165X14759X |

| Protection cap for Plug connector IP67 | | |
|---|---|---|
| No. of pos. | Design | Part Number |
| 09 | Metal/M3 Screw and clip | 165X16669X |
| 15 | Metal/M3 Screw and clip | 165X16679X |
| 25 | Metal/M3 Screw and clip | 165X16689X |
| 37 | Metal/M3 Screw and clip | 165X16699X |
| 50 | Metal/M3 Screw and clip | 165X16709X |
| 09 | Metal/4-40 UNC Screw and clip | 165X14769X |
| 15 | Metal/4-40 UNC Screw and clip | 165X14779X |
| 25 | Metal/4-40 UNC Screw and clip | 165X14789X |
| 37 | Metal/4-40 UNC Screw and clip | 165X14799X |
| 50 | Metal/4-40 UNC Screw and clip | 165X14809X |

# IP67 D-SUB Protection cap

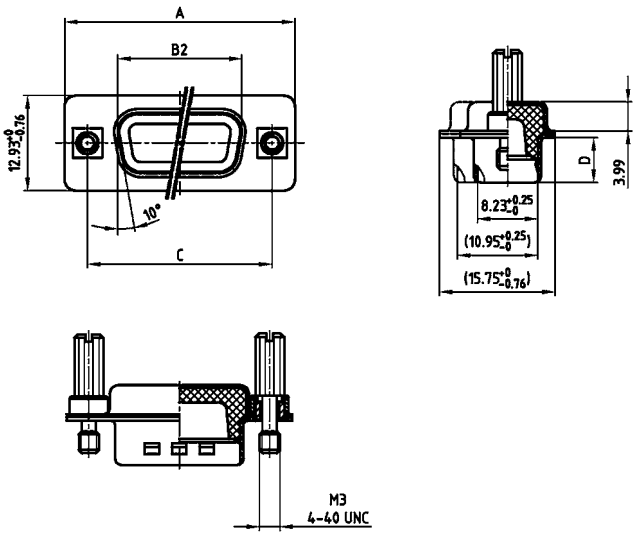
## Metal design – Shielded – Jack screw

RoHS compliant

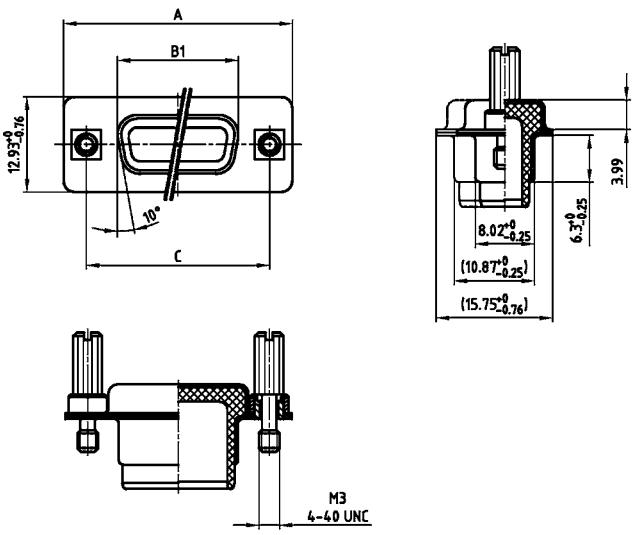
### Description

- IP67 Protection cap with gasket
- EMI/RFI protection
- Material:
  - Shell: Brass tin plated
  - Jack screw: steel nickel plated
- Mounting style:
  with M3 or 4-40 UNC Jack screws

### Socket connector




### Plug connector




50-pos. = Dim. in (..)

| No. of pos. | A-0,76 | B1+0,25 | B2-0,25 | C | D-0,3 |
|---|---|---|---|---|---|
| 09 | 31.19 | 16.46 | 16.79 | 25.00 ±0.12 | 6.12 |
| 15 | 39.52 | 24.79 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 25 | 53.42 | 38.50 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 54.96 | 55.30 | 63.50 ±0.13 | 5.99 |
| 50 | 67.31 | 52.55 | 52.68 | 61.10 +0.14 +0.11 | 5.99 |

### Order data

**Protection cap for Socket connector IP67**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Metal/M3 Jack screw | 165X17159X |
| 15 | Metal/M3 Jack screw | 165X17169X |
| 25 | Metal/M3 Jack screw | 165X17179X |
| 37 | Metal/M3 Jack screw | 165X17189X |
| 50 | Metal/M3 Jack screw | 165X17199X |
| 09 | Metal/4-40 UNC Jack screw | 165X17109X |
| 15 | Metal/4-40 UNC Jack screw | 165X17119X |
| 25 | Metal/4-40 UNC Jack screw | 165X17129X |
| 37 | Metal/4-40 UNC Jack screw | 165X17139X |
| 50 | Metal/4-40 UNC Jack screw | 165X17149X |

**Shielded cap for Plug connector IP67**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Metal/M3 Jack screw | 165X17259X |
| 15 | Metal/M3 Jack screw | 165X17269X |
| 25 | Metal/M3 Jack screw | 165X17279X |
| 37 | Metal/M3 Jack screw | 165X17289X |
| 50 | Metal/M3 Jack screw | 165X17299X |
| 09 | Metal/4-40 UNC Jack screw | 165X17209X |
| 15 | Metal/4-40 UNC Jack screw | 165X17219X |
| 25 | Metal/4-40 UNC Jack screw | 165X17229X |
| 37 | Metal/4-40 UNC Jack screw | 165X17239X |
| 50 | Metal/4-40 UNC Jack screw | 165X17249X |

# IP67 D-SUB Protection cap

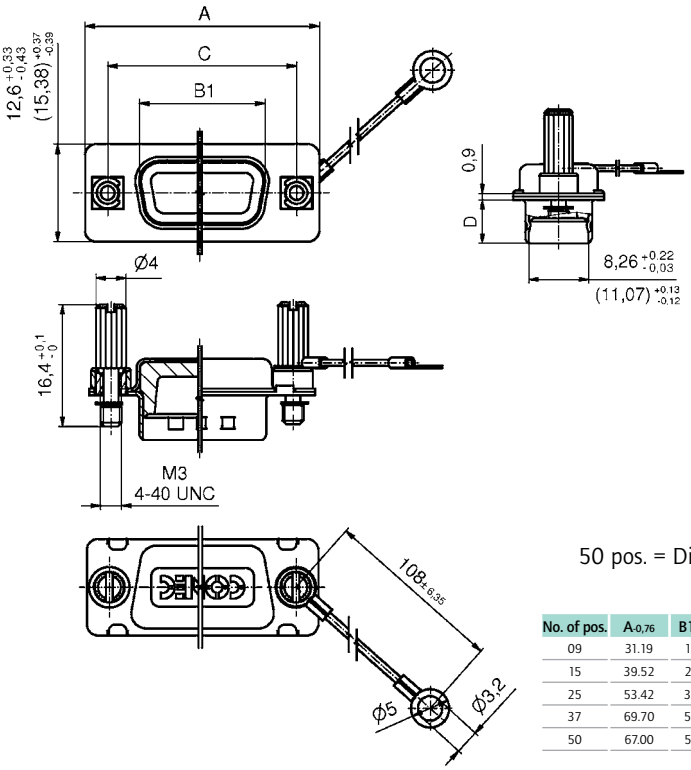
## Metal design – Shielded – 9-50pos. – Jack screw – Lanyard

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

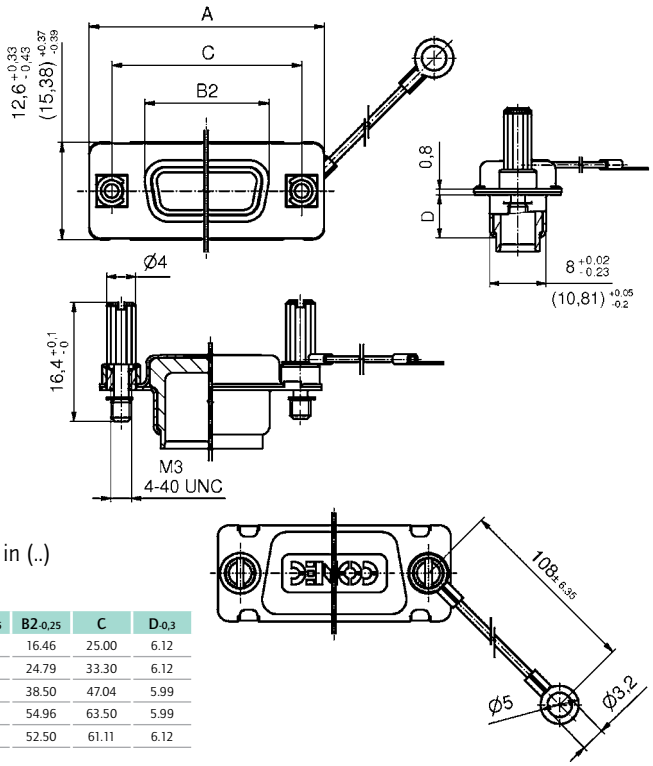
### Description

- IP67 Protection cap with gasket and Lanyard
- Protection against EMI/RFI
- Material:
  - Shell: Brass tin plated
  - Lanyard: Stainless steel
  - Jack screw: Stainless steel
- Mounting style:
  with M3 or 4-40 UNC Jack screws

### Socket connector




### Plug connector




50 pos. = Dim. in (..)

| No. of pos. | A-0,76 | B1+0,25 | B2-0,25 | C | D-0,3 |
|---|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 16.46 | 25.00 | 6.12 |
| 15 | 39.52 | 25.12 | 24.79 | 33.30 | 6.12 |
| 25 | 53.42 | 38.84 | 38.50 | 47.04 | 5.99 |
| 37 | 69.70 | 55.30 | 54.96 | 63.50 | 5.99 |
| 50 | 67.00 | 52.81 | 52.50 | 61.11 | 6.12 |

### Order data

**Shielded cap for Socket connector**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Metal/M3 Jack screw stainless steel/Lanyard | 15-000060 |
| 15 | Metal/M3 Jack screw stainless steel/Lanyard | 15-000070 |
| 25 | Metal/M3 Jack screw stainless steel/Lanyard | 15-000080 |
| 37 | Metal/M3 Jack screw stainless steel/Lanyard | 15-000090 |
| 50 | Metal/M3 Jack screw stainless steel/Lanyard | 15-000100 |
| 09 | Metal/4-40 UNC Jack screw stainless steel/Lanyard | 15-000010 |
| 15 | Metal/4-40 UNC Jack screw stainless steel/Lanyard | 15-000020 |
| 25 | Metal/4-40 UNC Jack screw stainless steel/Lanyard | 15-000030 |
| 37 | Metal/4-40 UNC Jack screw stainless steel/Lanyard | 15-000040 |
| 50 | Metal/4-40 UNC Jack screw stainless steel/Lanyard | 15-000050 |

**Shielded cap for Plug connector**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Metal/M3 Jack screw stainless steel/Lanyard | 15-000160 |
| 15 | Metal/M3 Jack screw stainless steel/Lanyard | 15-000170 |
| 25 | Metal/M3 Jack screw stainless steel/Lanyard | 15-000180 |
| 37 | Metal/M3 Jack screw stainless steel/Lanyard | 15-000190 |
| 50 | Metal/M3 Jack screw stainless steel/Lanyard | 15-000200 |
| 09 | Metal/4-40 UNC Jack screw stainless steel/Lanyard | 15-000110 |
| 15 | Metal/4-40 UNC Jack screw stainless steel/Lanyard | 15-000120 |
| 25 | Metal/4-40 UNC Jack screw stainless steel/Lanyard | 15-000130 |
| 37 | Metal/4-40 UNC Jack screw stainless steel/Lanyard | 15-000140 |
| 50 | Metal/4-40 UNC Jack screw stainless steel/Lanyard | 15-000150 |

# D-SUB Hardware accessories

## Hex bolt-spacer – Screw locking

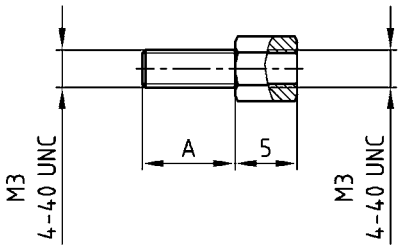
RoHS compliant

### Description

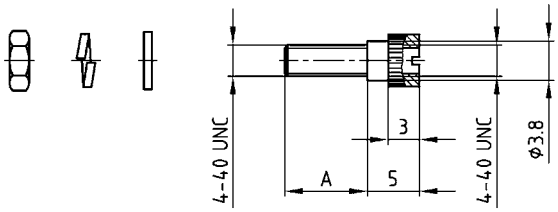
- Material: Steel nickel plated
- Delivery includes:
  - Single hex bolts
  - Set composed of each with
    - 2 hex bolts
    - 2 flat washers
    - 2 spring rings
    - 2 nuts

### Product drawing

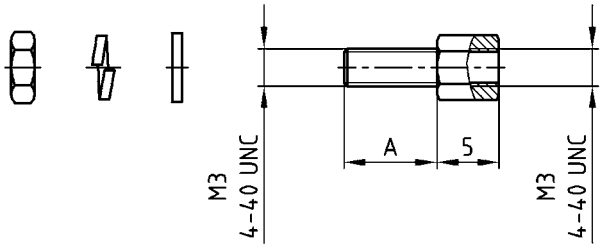
Single hex bolt



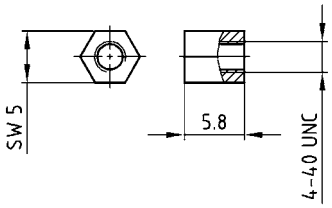

Screw locking set



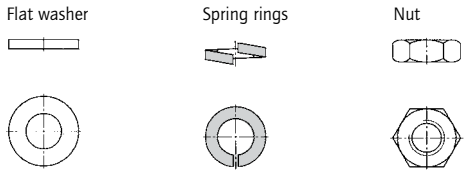

Single hex bolt set




Hex bolt nut .228"/5.8 mm




Accessories




### Order data

**Single hex bolts packaging unit 200 pieces**

| Length A | Internal / External thread | Part Number |
|---|---|---|
| .256"/6.5 mm | 4-40 UNC / 4-40 UNC | 740-353770 |
| .315"/8.0 mm | 4-40 UNC / 4-40 UNC | 740-331370 |
| .433"/11.0 mm | 4-40 UNC / 4-40 UNC | 740-331570 |
| .512"/13.0 mm | 4-40 UNC / 4-40 UNC | 740-331870 |
| .551"/14.0 mm | 4-40 UNC / 4-40 UNC | 740-331670 |
| .158"/4.0 mm | M3 / M3 | 740-354470 |
| .276"/7.0 mm | M3 / M3 | 740-320570 |
| .315"/8.0 mm | M3 / M3 | 740-342470 |
| .512"/13.0 mm | M3 / M3 | 740-365270 |
| .158"/4.0 mm | 4-40 UNC / M3 | 740-354370 |
| .276"/7.0 mm | 4-40 UNC / M3 | 740-320170 |
| .512"/13.0 mm | 4-40 UNC / M3 | 740-344970 |

**Single hex bolts set packaging unit 100 pieces**

| Length A | Internal / External thread | Part Number |
|---|---|---|
| .315"/8.0 mm | 4-40 UNC / 4-40 UNC | 160X10359X |
| .551"/14.0 mm | 4-40 UNC / 4-40 UNC | 160X10639X |
| .315"/8.0 mm | M3 / M3 | 160X10529X |

**Screw locking set packaging unit 100 pieces**

| Length A | Internal / External thread | Part Number |
|---|---|---|
| .315"/8.0 mm | 4-40 UNC / 4-40 UNC | 160X10329 X |

**Other accessories packaging unit 200 pieces**

| Description | Part Number |
|---|---|
| Hex bolt nut .228"/5.8 mm | 160X10379 X |
| Flat washer | 765-329670 |
| Spring ring | 765-329570 |
| 4-40 UNC nut | 765-329770 |
| M3 nut | 765-329870 |

# D-SUB Hardware accessories

## Screw locking with clamp – Steel or stainless steel and brass

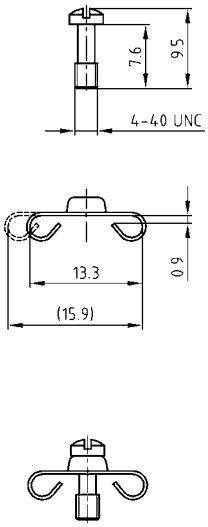
RoHS compliant

### Description

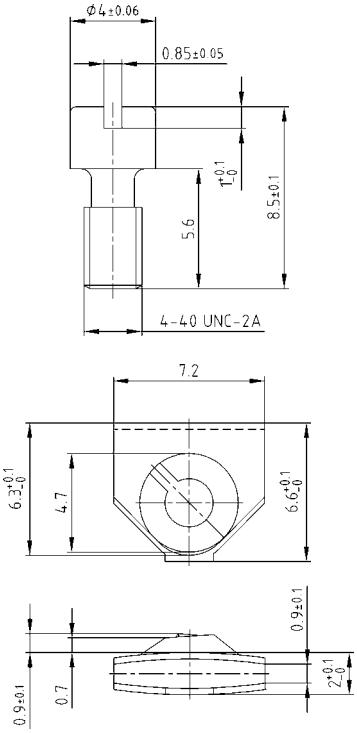
- Two types available
  - Type 1: Steel
  - Type 2: Stainless steel
  - Type 3: Brass
- Delivery includes:
  - Set consists of
    - 2 clamps
    - 2 screws

### Product drawing

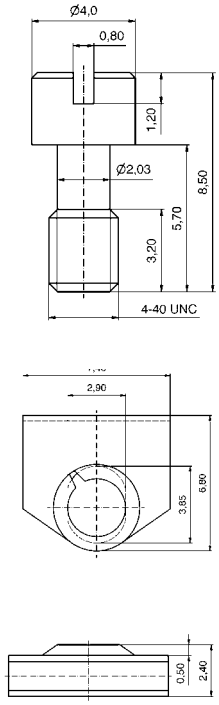
Type 1: Steel




Type 2: Stainless steel




Type 3: Brass




50-pos. = Dim. in (..)

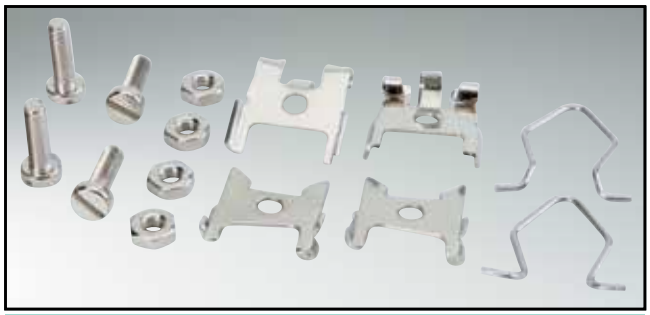
### Order data

| Screw coupling with clamps | | |
|---|---|---|
| No. of pos. | Design 4-40 UNC | Part Number |
| 09-37 | Type 1 steel | 160X10259X |
| 50 | Type 1 steel | 160X10659X |

| Screw coupling with clamps | | |
|---|---|---|
| No. of pos. | Design 4-40 UNC | Part Number |
| 09-50 | Type 2 stainless steel | 160X00470A |
| 09-50 | Type 3 brass | 16-505750 |

# D-SUB Hardware accessories

## Spring locking

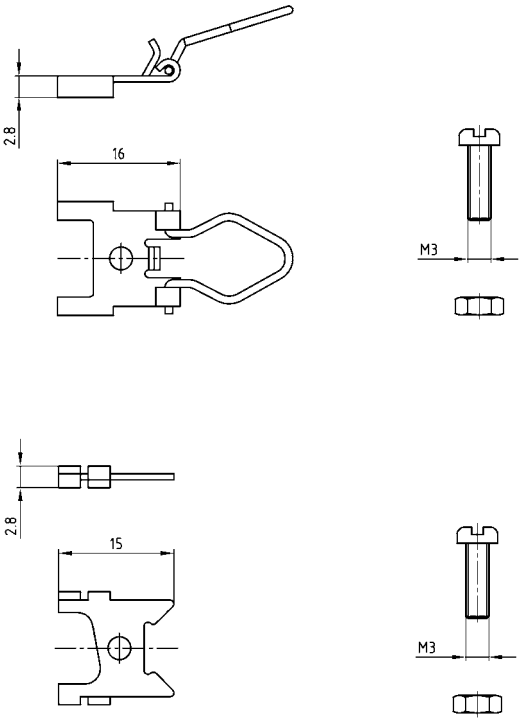


RoHS compliant

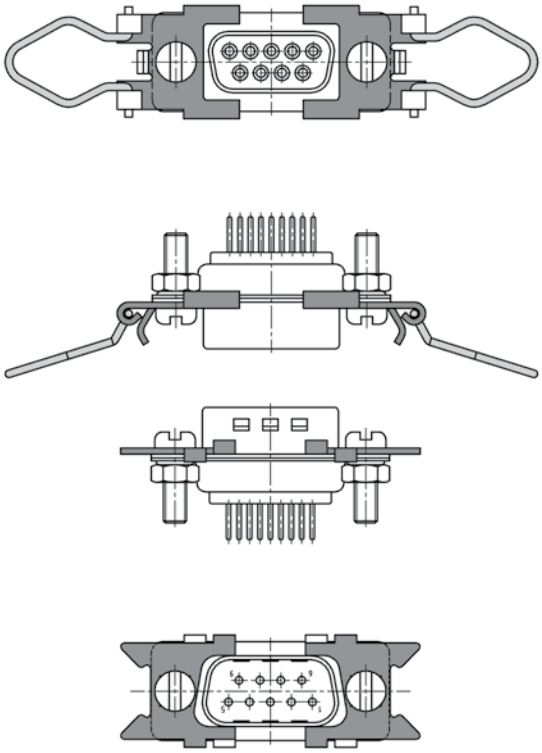
### Description

- Steel
- Delivery includes:
  - Set consists of
    - 2 spring clips
    - 2 wire clamp holders
    - 2 clamps
    - 4 M3 screws
    - 4 M3 nuts

### Product drawing




View for assembly

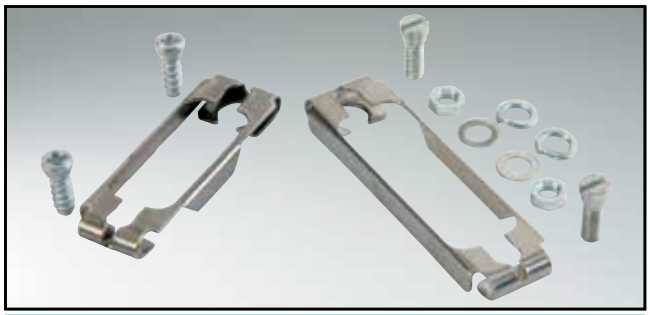


### Order data

| Spring locking | | |
|---|---|---|
| No. of pos. | Design | Part Number |
| 09 - 37 | Spring locking | 160X10239X |

# D-SUB Hardware accessories

## Slide lock with holding bolt



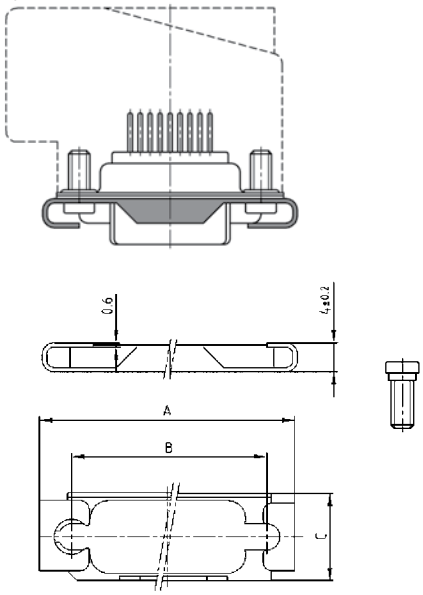
RoHS compliant

### Description

- Slide lock set in two designs:
  - Type 3: 1 frame, 2 screws 4-40 UNC, 2 flat washers, 2 spring rings, 2 4-40 UNC nuts
  - Type 4: 1 frame, 2 4-40 UNC screws, 2 flat washers, 2 spring rings, 2 4-40 UNC nuts
- Holding bolt set consists of 2 hex bolts, 2 flat washers, 2 spring rings, 2 nuts

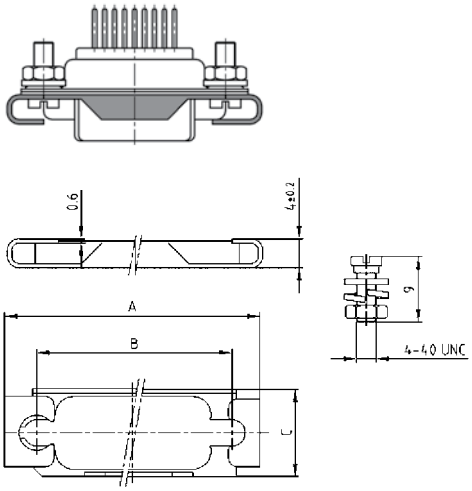
### Product drawing

Type 3

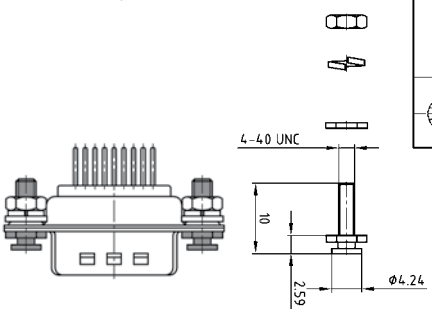



| No. of pos. | A | B | C |
|---|---|---|---|
| 09 | 35.00 | 27.40 | 12.00 |
| 15 | 43.30 | 35.70 | 11.50 |
| 25 | 57.00 | 49.40 | 12.00 |
| 37 | 74.40 | 65.90 | 12.00 |
| 50 | 72.00 | 63.50 | 15.00 |

Type 4




holding bolt for slide lock




### Order data

**Slide lock Type 3**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Slide lock set type 3 | 160X10159X |
| 15 | Slide lock set type 3 | 160X10169X |
| 25 | Slide lock set type 3 | 160X10179X |
| 37 | Slide lock set type 3 | 160X10189X |
| 50 | Slide lock set type 3 | 160X10199X |

**Slide lock Type 4**

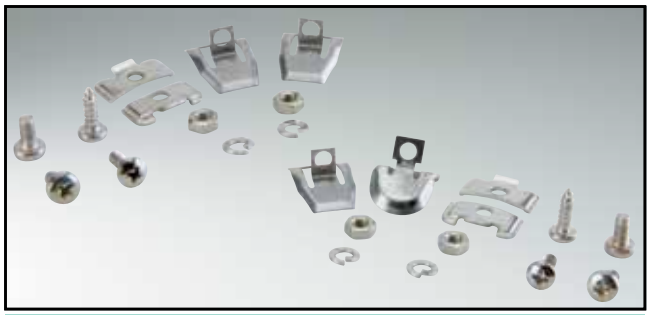
| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Slide lock set type 4 | 160X10689X |
| 15 | Slide lock set type 4 | 160X10699X |
| 25 | Slide lock set type 4 | 160X10709X |
| 37 | Slide lock set type 4 | 160X10719X |
| 50 | Slide lock set type 4 | 160X10729X |

**Holding bolt for slide lock**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 - 50 | Slide lock type 3 and type 4 | 160X10209X |

# D-SUB Hardware accessories

## Snap locking for hoods with straight and side cable entry



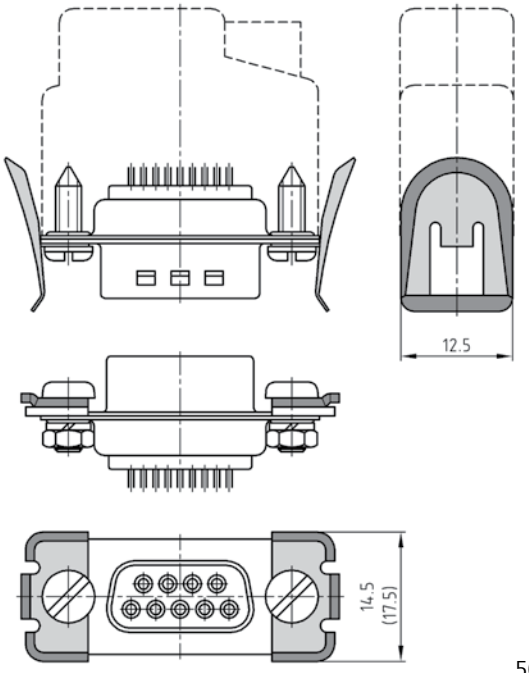
RoHS compliant

### Description

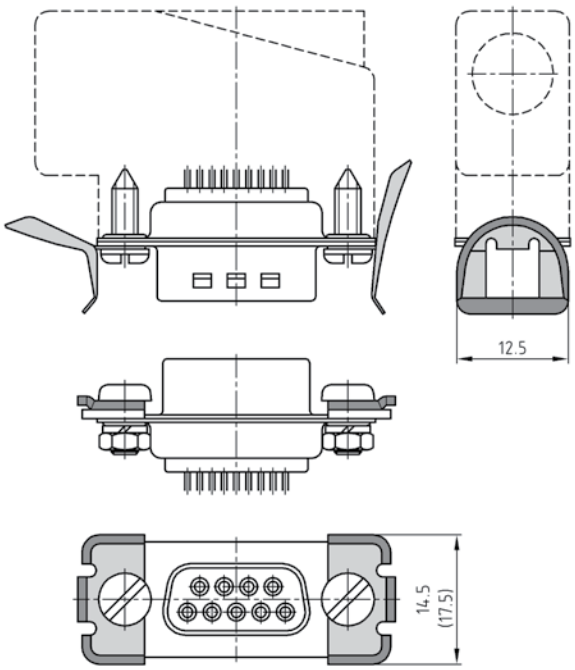
- Steel design
- Delivery includes: - Set consists of
  - 2 locking levers
  - 2 self threading screws
  - 2 snap-fits
  - 2 M3 screws
  - 2 spring rings
  - 2 M3 nuts
- Steel, nickel plated

### Product drawing

For straight Cable entry




For sided Cable entry




50-pos. = Dim. in (..)

### Order data

For straight cable entry

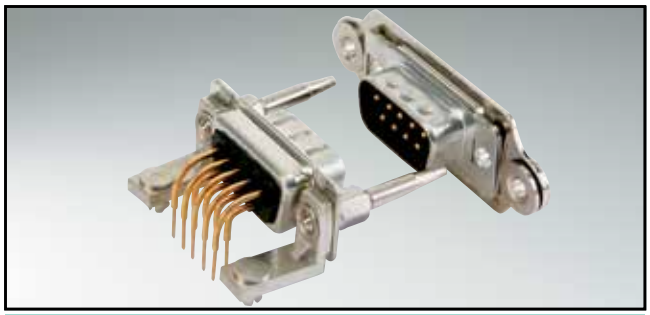
| No. of pos. | Design | Part Number |
|---|---|---|
| 09 - 37 | Snap in locking | 160X10219X |
| 50 | Snap in locking | 160X10229X |

For side cable entry

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 - 37 | Snap in locking | 160X10609X |
| 50 | Snap in locking | 160X10619X |

# D-SUB Hardware accessories

## Blind mating – Plug-in system



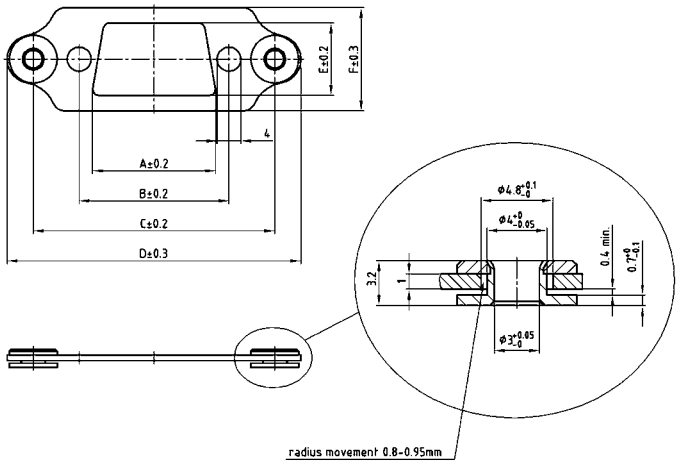
RoHS compliant

### Description

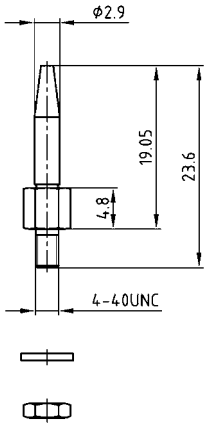
- Mounting for mating applications consist of frame, float mount and guide pins
- Material: Steel nickel plated
- Frame is factory assembled.
  It requires a special hollow rivet to accept the Guide Post.
- Contact factory to configure part number for the connector/frame assembly

### Product drawing

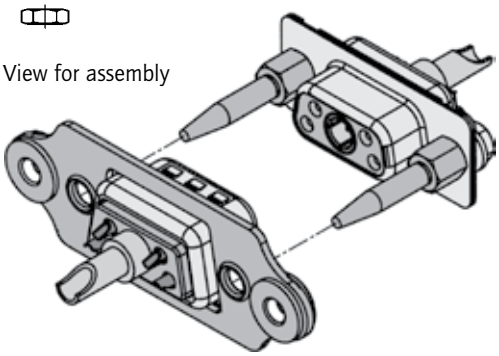
Frame




Guide post




View for assembly



| No. of pos. | A ± 0.2 | B ± 0.2 | C ± 0.2 | D ± 0.3 | E ± 0.2 | F ± 0.3 |
|---|---|---|---|---|---|---|
| 09 | 20.20 | 24.99 | 40.28 | 49.02 | 12.10 | 17.20 |
| 15 | 28.80 | 33.32 | 48.62 | 57.35 | 12.10 | 17.20 |
| 25 | 42.50 | 47.04 | 62.51 | 71.25 | 12.10 | 17.20 |
| 37 | 59.10 | 63.50 | 78.79 | 87.53 | 12.10 | 17.20 |
| 50 | 56.30 | 61.11 | 76.40 | 85.14 | 14.80 | 20.04 |

### Order data

**Frame with float mount**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 | Blind mating frame | 160X10889X |
| 15 | Blind mating frame | 160X10899X |
| 25 | Blind mating frame | 160X10909X |
| 37 | Blind mating frame | 160X10919X |
| 50 | Blind mating frame | 160X10929X |

**Guiding pin**

| No. of pos. | Design | Part Number |
|---|---|---|
| 09 - 50 | Blind mating guide posts | 160X10949X |

# Section 8
# IP67 D-SUB Connectors

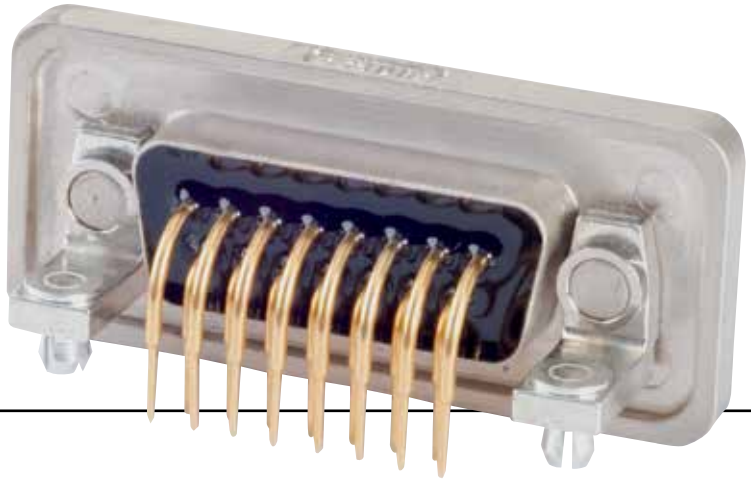
Connector systems able to meet special demands are needed for industrial use in harsh environments.

The water resistant connector system developed by CONEC is intended for applications where dust and water are factors.

The system includes D-Subminiature Connectors in standard and high density configurations as well as corresponding accessories, such as water resistant hoods and protective caps.

The type of protection is defined by IEC 60529 which also specifies the suitability of electrical components for various ambient conditions.

CONEC water resistant connectors ensure a continuously secure connection compliant with the IP67 rating. They are dustproof and protect against temporary submersion in water.



**System details:**

- Standard design with metal shell and O-ring
- One piece "solid body" design available for increased mechanical stresses
- Seal in the connector, water cannot penetrate into the housing
- Available for front and rear side panel mounting
- Connector without frame for cable housing
- Special threaded parts, 4-40 UNC and M 3
- Plastic materials comply with UL 94 V0
- Machined precision contacts for heavy duty usage
- Various gold plating options available
- Basic connector dimensions - without frame - in compliance with DIN 41652 / MIL-C-24308
- All conventional contact termination types available
- Various accessories, including waterproof hoods and protective caps

# Part Number Creator

6 S T D 0 9 S A M 9 9 B 3 O X

**Product Line**

| | |
|---|---|
| 6 | = Shell brass tin plated with die-cast frame |
| 4 | = Shell brass tin plated with plastic frame or without frame |
| 8* | = Shell stainless steel with or without die-cast frame |
| 9* | = Shell stainless steel with plastic frame |
| | * on request |

**Variations**

| | |
|---|---|
| STD | = D-SUBMINIATURE, Standard |
| HDD | = D-SUBMINIATURE, High Density |

| Position for STD | | Position for HDD | |
|---|---|---|---|
| 09 | = 9 pos. | 15 | = 15 pos. |
| 15 | = 15 pos. | 26 | = 26 pos. |
| 25 | = 25 pos. | 44 | = 44 pos. |
| 37 | = 37 pos. | 62 | = 62 pos. |
| 50 | = 50 pos. | 78 | = 78 pos. |

**Contact type**

| | |
|---|---|
| P | = Plug connector |
| S | = Socket connector |
| A | = Adapter |

**Quality class for contacts**

| | | |
|---|---|---|
| A | = Quality class 3 | = 50 mating cycles |
| B | = Quality class 2 | = 200 mating cycles |
| C | = Quality class 1 | = 500 mating cycles |

**Termination**

| | |
|---|---|
| M | = Solder cup |
| R | = Solder pin, straight |
| T | = Solder pin, angled, .189"/4.80 mm |
| U | = Solder pin, angled, .276"/7.00 mm |
| Z | = Solder pin, angled, .465"/11.8 mm |
| Y | = Solder pin, angled, .220"/5.60 mm (high density design only) |
| A | = Adapter |

**Capacitance**

| | |
|---|---|
| 99 | = Without filter for STD and HDD |

**Mounting style**

| | | | |
|---|---|---|---|
| A1 | = Riveted for wire assembly shell without sealing frame | E2 | = 4-40 UNC Threaded rear spacer with PCB clip, PCB 1,60 mm |
| B2 | = M3 threaded insert | S1 | = Metal bracket, M3 threaded insert |
| B3 | = 4-40 UNC threaded insert | S2 | = Metal bracket, 4-40 UNC threaded insert |
| B4 | = M3 front spacer | S3 | = Metal bracket, M3 threaded insert and PCB clip |
| B5 | = 4-40 UNC front spacer | S4 | = Metal bracket, 4-40 UNC threaded insert and PCB clip |
| B7 | = 4-40 UNC front spacer and rear mounting stud | R1 | = Metal bracket, M3 threaded insert |
| B8 | = M3 threaded lock for adapter | R2 | = Metal bracket, 4-40 UNC threaded insert |
| B9 | = 4-40 UNC front spacer for adapter | R3 | = Metal bracket, M3 threaded insert and PCB clip |
| E1 | = M3 threaded rear spacer with PCB clip .063"/1.60 mm | R4 | = Metal bracket, 4-40 UNC threaded insert and PCB clip |

| | |
|---|---|
| OX | = Standard |

# Panel Mounting

## Front panel mounting

## Rear panel mounting

The hex bolts illustrated here (4-40 UNC or M3 threads) are included in the delivery complement of every connector with a sealing frame. The length of this spacer has been selected to accommodate a panel thickness of .063"/1.6 mm such that it does not extend beyond the plug-in height. Furthermore, the hex bolts outside threads are shorter than standard hex bolts. Material: stainless steel.

# IP67 D-SUB Standard

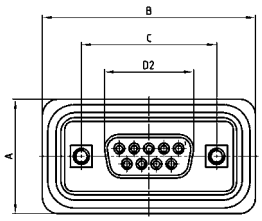
## Solder cup – Precision machined contacts – For wire size AWG 20

RoHS compliant - CSA listed, File No.LR115000-1 UL listed, File No. E202784

### Description

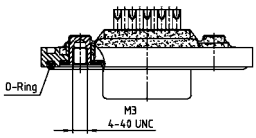
- Suitable for wire size **AWG 20**
- Mounting style:
  with 4-40 UNC or M3 threaded insert including hex locking bolt
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (stainless steel available on request)
- Nickel plated die-cast frame
  (Black plastic frame on request)

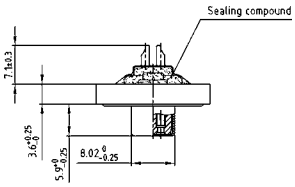
### Socket connector



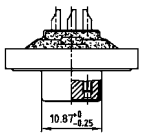

| No. of pos. | A +0.3 | B +0.3 | C | D2 -0.25 |
|---|---|---|---|---|
| 09 | 21.10 | 39.40 | 25.00 $^{+0.12}$ | 16.46 |
| 15 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 24.79 |
| 25 | 21.10 | 61.40 | 47.04 $\pm 0.13$ | 38.50 |
| 37 | 21.10 | 77.90 | 63.50 $\pm 0.13$ | 54.96 |
| 50 | 23.90 | 75.50 | 61.10 $^{+0.14}_{-0.11}$ | 52.55 |

Mounting style: Threaded insert



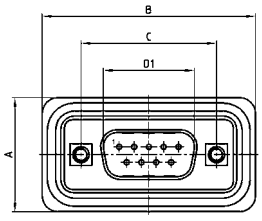




9-37 pos.



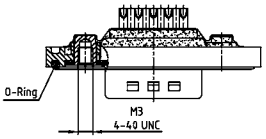

50 pos.

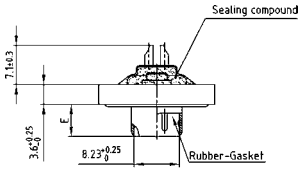
### Plug connector



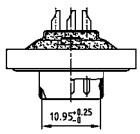

| No. of pos. | A +0.3 | B +0.3 | C | D1 +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 9 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.79 | 5.82 |
| 15 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 25.12 | 5.82 |
| 25 | 21.10 | 61.40 | 47.04 $\pm 0.13$ | 38.84 | 5.69 |
| 37 | 21.10 | 77.90 | 63.50 $\pm 0.13$ | 55.30 | 5.69 |
| 50 | 23.90 | 75.50 | 61.10 $^{+0.14}_{-0.11}$ | 52.68 | 5.69 |

Mounting style: Threaded insert




9-37 pos.




50 pos.

### Order data

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded insert | 6STD09SAM99B20X |
| 15 | M3 Threaded insert | 6STD15SAM99B20X |
| 25 | M3 Threaded insert | 6STD25SAM99B20X |
| 37 | M3 Threaded insert | 6STD37SAM99B20X |
| 50 | M3 Threaded insert | 6STD50SAM99B20X |
| 09 | 4-40 UNC Threaded insert | 6STD09SAM99B30X |
| 15 | 4-40 UNC Threaded insert | 6STD15SAM99B30X |
| 25 | 4-40 UNC Threaded insert | 6STD25SAM99B30X |
| 37 | 4-40 UNC Threaded insert | 6STD37SAM99B30X |
| 50 | 4-40 UNC Threaded insert | 6STD50SAM99B30X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded insert | 6STD09PAM99B20X |
| 15 | M3 Threaded insert | 6STD15PAM99B20X |
| 25 | M3 Threaded insert | 6STD25PAM99B20X |
| 37 | M3 Threaded insert | 6STD37PAM99B20X |
| 50 | M3 Threaded insert | 6STD50PAM99B20X |
| 09 | 4-40 UNC Threaded insert | 6STD09PAM99B30X |
| 15 | 4-40 UNC Threaded insert | 6STD15PAM99B30X |
| 25 | 4-40 UNC Threaded insert | 6STD25PAM99B30X |
| 37 | 4-40 UNC Threaded insert | 6STD37PAM99B30X |
| 50 | 4-40 UNC Threaded insert | 6STD50PAM99B30X |

# IP67 D-SUB Standard

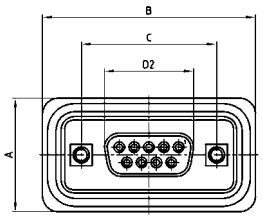
## Solder pin – Straight – Precision machined contacts

RoHS compliant - CSA listed, File No.LR115000-1 UL listed, File No. E202784

### Description

- Mounting styles:
  - with 4-40 UNC or M3 threaded insert including hex locking bolt
  - with 4-40 UNC or M3 threaded rear spacer and PCB clip including hex locking bolt
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (stainless steel available on request)
- Nickel plated die-cast frame (Black plastic frame on request)

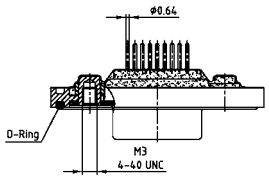
### Socket connector

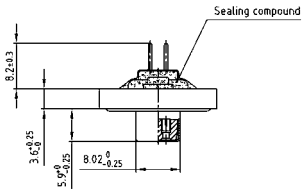



| No. of pos. | A +0.3 | B +0.3 | C | D2 -0.25 |
|---|---|---|---|---|
| 09 | 21.10 | 39.40 | 25.00 $^{+0.12}$ | 16.46 |
| 15 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 24.79 |
| 25 | 21.10 | 61.40 | 47.04 ±0.13 | 38.50 |
| 37 | 21.10 | 77.90 | 63.50 ±0.13 | 54.96 |
| 50 | 23.90 | 75.50 | 61.10 $^{+0.14}_{-0.11}$ | 52.55 |

PCB-Layout: Kat1kFVA / Kat1kFUA

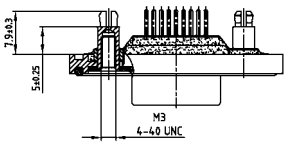
Mounting style: Threaded insert

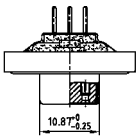



9-37 pos.

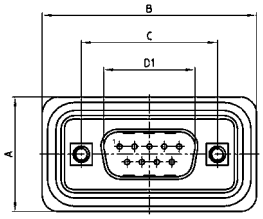
Mounting style:
Threaded rear spacer with PCB clip




50 pos.

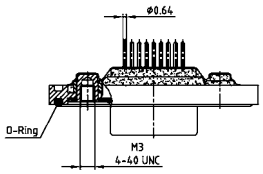
### Plug connector

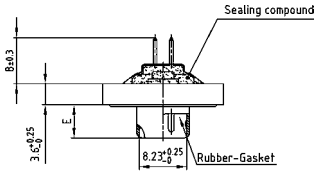



| No. of pos. | A +0.3 | B +0.3 | C | D1 +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 9 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.79 | 5.82 |
| 15 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 25.12 | 5.82 |
| 25 | 21.10 | 61.40 | 47.04 ±0.13 | 38.84 | 5.69 |
| 37 | 21.10 | 77.90 | 63.50 ±0.13 | 55.30 | 5.69 |
| 50 | 23.90 | 75.50 | 61.10 $^{+0.14}_{-0.11}$ | 52.68 | 5.69 |

PCB-Layout: Kat1kFVA / Kat1kFUA

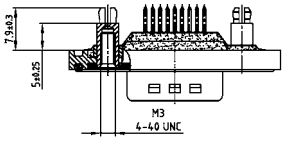
Mounting style: Threaded insert

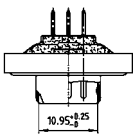



9-37 pos.

Mounting style:
Threaded rear spacer with PCB clip




50 pos.

### Order data

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded insert | 6STD09SAR99B20X |
| 15 | M3 Threaded insert | 6STD15SAR99B20X |
| 25 | M3 Threaded insert | 6STD25SAR99B20X |
| 37 | M3 Threaded insert | 6STD37SAR99B20X |
| 50 | M3 Threaded insert | 6STD50SAR99B20X |
| 09 | 4-40 UNC Threaded insert | 6STD09SAR99B30X |
| 15 | 4-40 UNC Threaded insert | 6STD15SAR99B30X |
| 25 | 4-40 UNC Threaded insert | 6STD25SAR99B30X |
| 37 | 4-40 UNC Threaded insert | 6STD37SAR99B30X |
| 50 | 4-40 UNC Threaded insert | 6STD50SAR99B30X |
| 09 | M3 Threaded rear spacer PCB clip | 6STD09SAR99E10X |
| 15 | M3 Threaded rear spacer PCB clip | 6STD15SAR99E10X |
| 25 | M3 Threaded rear spacer PCB clip | 6STD25SAR99E10X |
| 37 | M3 Threaded rear spacer PCB clip | 6STD37SAR99E10X |
| 50 | M3 Threaded rear spacer PCB clip | 6STD50SAR99E10X |
| 09 | 4-40 UNC Threaded rear spacer PCB clip | 6STD09SAR99E20X |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 6STD15SAR99E20X |
| 25 | 4-40 UNC Threaded rear spacer PCB clip | 6STD25SAR99E20X |
| 37 | 4-40 UNC Threaded rear spacer PCB clip | 6STD37SAR99E20X |
| 50 | 4-40 UNC Threaded rear spacer PCB clip | 6STD50SAR99E20X |

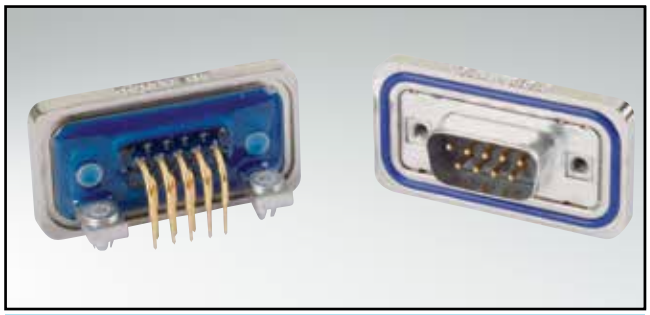
**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded insert | 6STD09PAR99B20X |
| 15 | M3 Threaded insert | 6STD15PAR99B20X |
| 25 | M3 Threaded insert | 6STD25PAR99B20X |
| 37 | M3 Threaded insert | 6STD37PAR99B20X |
| 50 | M3 Threaded insert | 6STD50PAR99B20X |
| 09 | 4-40 UNC Threaded insert | 6STD09PAR99B30X |
| 15 | 4-40 UNC Threaded insert | 6STD15PAR99B30X |
| 25 | 4-40 UNC Threaded insert | 6STD25PAR99B30X |
| 37 | 4-40 UNC Threaded insert | 6STD37PAR99B30X |
| 50 | 4-40 UNC Threaded insert | 6STD50PAR99B30X |
| 09 | M3 Threaded rear spacer PCB clip | 6STD09PAR99E10X |
| 15 | M3 Threaded rear spacer PCB clip | 6STD15PAR99E10X |
| 25 | M3 Threaded rear spacer PCB clip | 6STD25PAR99E10X |
| 37 | M3 Threaded rear spacer PCB clip | 6STD37PAR99E10X |
| 50 | M3 Threaded rear spacer PCB clip | 6STD50PAR99E10X |
| 09 | 4-40 UNC Threaded rear spacer PCB clip | 6STD09PAR99E20X |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 6STD15PAR99E20X |
| 25 | 4-40 UNC Threaded rear spacer PCB clip | 6STD25PAR99E20X |
| 37 | 4-40 UNC Threaded rear spacer PCB clip | 6STD37PAR99E20X |
| 50 | 4-40 UNC Threaded rear spacer PCB clip | 6STD50PAR99E20X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# IP67 D-SUB Standard

## Solder pin – Angled – .189"/4.8 mm – Precision machined contacts – Metal bracket

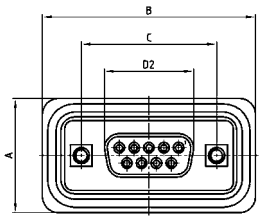


RoHS compliant - CSA listed, File No.LR115000-1 UL listed, File No. E202784

### Description

- Mounting styles:
  - with mounting bracket and 4-40 UNC or M3 threaded insert including hex locking bolt
  - with mounting bracket, PCB clip and M3 or UNC 4-40 threaded insert including hex locking bolt
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (stainless steel available on request)
- Nickel plated die-cast frame (Black plastic frame on request)

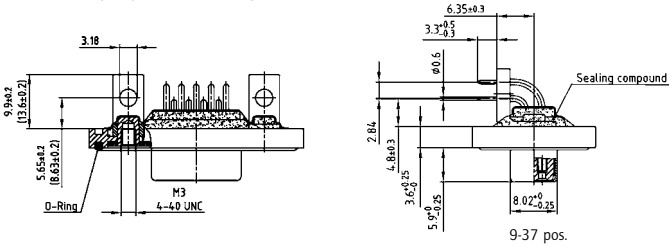
### Socket connector



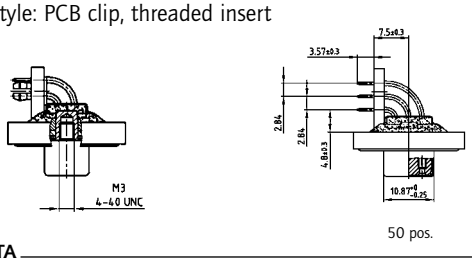

| No. of pos. | A +0.3 | B +0.3 | C | D2 -0.25 |
|---|---|---|---|---|
| 09 | 21.10 | 39.40 | 25.00 $^{+0.12}$ | 16.46 |
| 15 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 24.79 |
| 25 | 21.10 | 61.40 | 47.04 ±0.13 | 38.50 |
| 37 | 21.10 | 77.90 | 63.50 ±0.13 | 54.96 |
| 50 | 23.90 | 75.50 | 61.10 $^{+0.14}_{-0.11}$ | 52.55 |

PCB-Layout: Kat1kGSA

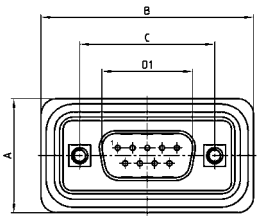
Mounting style: Mounting bracket, threaded insert




Mounting style: PCB clip, threaded insert



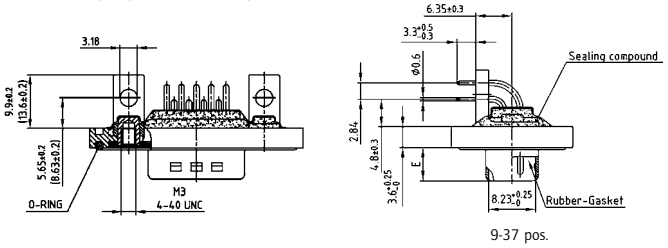

### Plug connector



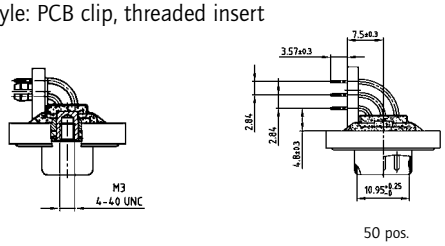

| No. of pos. | A +0.3 | B +0.3 | C | D1 +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 9 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.79 | 5.82 |
| 15 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 25.12 | 5.82 |
| 25 | 21.10 | 61.40 | 47.04 ±0.13 | 38.84 | 5.69 |
| 37 | 21.10 | 77.90 | 63.50 ±0.13 | 55.30 | 5.69 |
| 50 | 23.90 | 75.50 | 61.10 $^{+0.14}_{-0.11}$ | 52.68 | 5.69 |

PCB-Layout: Kat1kGSA

Mounting style: Mounting bracket, threaded insert




Mounting style: PCB clip, threaded insert




### Order data

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded insert | 6STD09SAT99S10X |
| 15 | M3 Threaded insert | 6STD15SAT99S10X |
| 25 | M3 Threaded insert | 6STD25SAT99S10X |
| 37 | M3 Threaded insert | 6STD37SAT99S10X |
| 50 | M3 Threaded insert | 6STD50SAT99S10X |
| 09 | 4-40 UNC Threaded insert | 6STD09SAT99S20X |
| 15 | 4-40 UNC Threaded insert | 6STD15SAT99S20X |
| 25 | 4-40 UNC Threaded insert | 6STD25SAT99S20X |
| 37 | 4-40 UNC Threaded insert | 6STD37SAT99S20X |
| 50 | 4-40 UNC Threaded insert | 6STD50SAT99S20X |
| 09 | PCB clip/M3 Threaded insert | 6STD09SAT99S30X |
| 15 | PCB clip/M3 Threaded insert | 6STD15SAT99S30X |
| 25 | PCB clip/M3 Threaded insert | 6STD25SAT99S30X |
| 37 | PCB clip/M3 Threaded insert | 6STD37SAT99S30X |
| 50 | PCB clip/M3 Threaded insert | 6STD50SAT99S30X |
| 09 | PCB clip/4-40 UNC Threaded insert | 6STD09SAT99S40X |
| 15 | PCB clip/4-40 UNC Threaded insert | 6STD15SAT99S40X |
| 25 | PCB clip/4-40 UNC Threaded insert | 6STD25SAT99S40X |
| 37 | PCB clip/4-40 UNC Threaded insert | 6STD37SAT99S40X |
| 50 | PCB clip/4-40 UNC Threaded insert | 6STD50SAT99S40X |

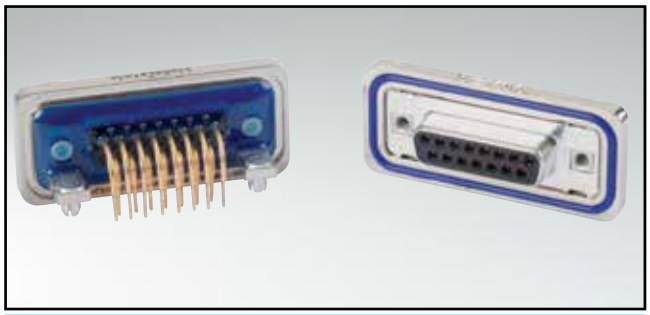
**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded insert | 6STD09PAT99S10X |
| 15 | M3 Threaded insert | 6STD15PAT99S10X |
| 25 | M3 Threaded insert | 6STD25PAT99S10X |
| 37 | M3 Threaded insert | 6STD37PAT99S10X |
| 50 | M3 Threaded insert | 6STD50PAT99S10X |
| 09 | 4-40 UNC Threaded insert | 6STD09PAT99S20X |
| 15 | 4-40 UNC Threaded insert | 6STD15PAT99S20X |
| 25 | 4-40 UNC Threaded insert | 6STD25PAT99S20X |
| 37 | 4-40 UNC Threaded insert | 6STD37PAT99S20X |
| 50 | 4-40 UNC Threaded insert | 6STD50PAT99S20X |
| 09 | PCB clip/M3 Threaded insert | 6STD09PAT99S30X |
| 15 | PCB clip/M3 Threaded insert | 6STD15PAT99S30X |
| 25 | PCB clip/M3 Threaded insert | 6STD25PAT99S30X |
| 37 | PCB clip/M3 Threaded insert | 6STD37PAT99S30X |
| 50 | PCB clip/M3 Threaded insert | 6STD50PAT99S30X |
| 09 | PCB clip/4-40 UNC Threaded insert | 6STD09PAT99S40X |
| 15 | PCB clip/4-40 UNC Threaded insert | 6STD15PAT99S40X |
| 25 | PCB clip/4-40 UNC Threaded insert | 6STD25PAT99S40X |
| 37 | PCB clip/4-40 UNC Threaded insert | 6STD37PAT99S40X |
| 50 | PCB clip/4-40 UNC Threaded insert | 6STD50PAT99S40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# IP67 D-SUB Standard

## Solder pin – Angled – .276"/7.0 mm – Precision machined contacts – Metal bracket

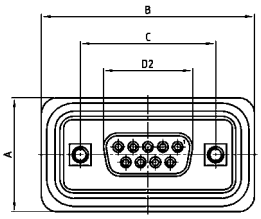


RoHS compliant - CSA listed, File No.LR115000-1 UL listed, File No. E202784

### Description

- Mounting styles:
  - with mounting bracket and 4-40 UNC or M3 threaded insert including hex locking bolt
  - with mounting bracket, PCB clip and M3 or UNC 4-40 threaded insert including hex locking bolt
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (stainless steel available on request)
- Nickel plated die-cast frame (Black plastic frame on request)

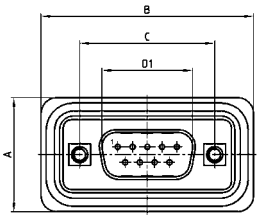
### Socket connector




| No. of pos. | A +0.3 | B +0.3 | C | D2 -0.25 |
|---|---|---|---|---|
| 09 | 21.10 | 39.40 | 25.00 +0.12 | 16.46 |
| 15 | 21.10 | 47.70 | 33.30 +0.15 -0.10 | 24.79 |
| 25 | 21.10 | 61.40 | 47.04 ±0.13 | 38.50 |
| 37 | 21.10 | 77.90 | 63.50 ±0.13 | 54.96 |
| 50 | 23.90 | 75.50 | 61.10 +0.14 -0.11 | 52.55 |

PCB-Layout: Kat1kGTA

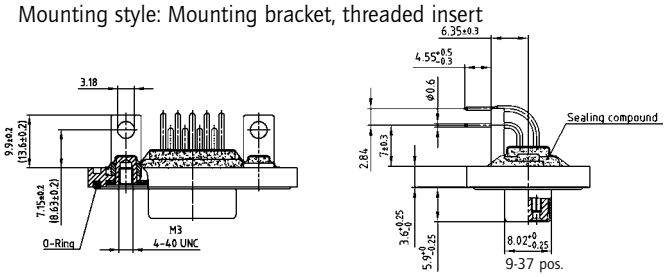
### Plug connector



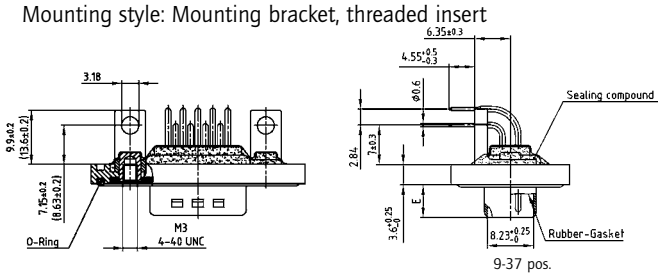

| No. of pos. | A +0.3 | B +0.3 | C | D1 +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 9 | 21.10 | 39.40 | 25.00 +0.12 -0.13 | 16.79 | 5.82 |
| 15 | 21.10 | 47.70 | 33.30 +0.15 -0.10 | 25.12 | 5.82 |
| 25 | 21.10 | 61.40 | 47.04 ±0.13 | 38.84 | 5.69 |
| 37 | 21.10 | 77.90 | 63.50 ±0.13 | 55.30 | 5.69 |
| 50 | 23.90 | 75.50 | 61.10 +0.14 -0.11 | 52.68 | 5.69 |

PCB-Layout: Kat1kGTA

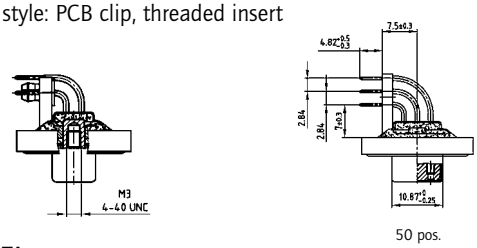
Mounting style: Mounting bracket, threaded insert



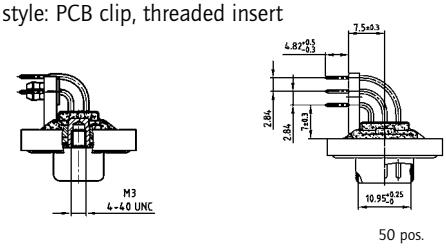

Mounting style: Mounting bracket, threaded insert




Mounting style: PCB clip, threaded insert




Mounting style: PCB clip, threaded insert




### Order data

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded insert | 6STD09SAU99R10X |
| 15 | M3 Threaded insert | 6STD15SAU99R10X |
| 25 | M3 Threaded insert | 6STD25SAU99R10X |
| 37 | M3 Threaded insert | 6STD37SAU99R10X |
| 50 | M3 Threaded insert | 6STD50SAU99R10X |
| 09 | 4-40 UNC Threaded insert | 6STD09SAU99R20X |
| 15 | 4-40 UNC Threaded insert | 6STD15SAU99R20X |
| 25 | 4-40 UNC Threaded insert | 6STD25SAU99R20X |
| 37 | 4-40 UNC Threaded insert | 6STD37SAU99R20X |
| 50 | 4-40 UNC Threaded insert | 6STD50SAU99R20X |
| 09 | PCB clip/M3 Threaded insert | 6STD09SAU99R30X |
| 15 | PCB clip/M3 Threaded insert | 6STD15SAU99R30X |
| 25 | PCB clip/M3 Threaded insert | 6STD25SAU99R30X |
| 37 | PCB clip/M3 Threaded insert | 6STD37SAU99R30X |
| 50 | PCB clip/M3 Threaded insert | 6STD50SAU99R30X |
| 09 | PCB clip/4-40 UNC Threaded insert | 6STD09SAU99R40X |
| 15 | PCB clip/4-40 UNC Threaded insert | 6STD15SAU99R40X |
| 25 | PCB clip/4-40 UNC Threaded insert | 6STD25SAU99R40X |
| 37 | PCB clip/4-40 UNC Threaded insert | 6STD37SAU99R40X |
| 50 | PCB clip/4-40 UNC Threaded insert | 6STD50SAU99R40X |

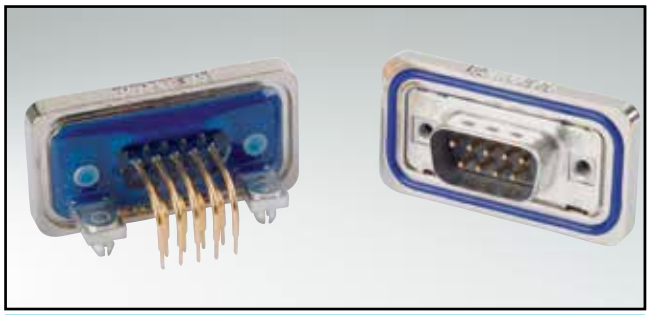
**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded insert | 6STD09PAU99R10X |
| 15 | M3 Threaded insert | 6STD15PAU99R10X |
| 25 | M3 Threaded insert | 6STD25PAU99R10X |
| 37 | M3 Threaded insert | 6STD37PAU99R10X |
| 50 | M3 Threaded insert | 6STD50PAU99R10X |
| 09 | 4-40 UNC Threaded insert | 6STD09PAU99R20X |
| 15 | 4-40 UNC Threaded insert | 6STD15PAU99R20X |
| 25 | 4-40 UNC Threaded insert | 6STD25PAU99R20X |
| 37 | 4-40 UNC Threaded insert | 6STD37PAU99R20X |
| 50 | 4-40 UNC Threaded insert | 6STD50PAU99R20X |
| 09 | PCB clip/M3 Threaded insert | 6STD09PAU99R30X |
| 15 | PCB clip/M3 Threaded insert | 6STD15PAU99R30X |
| 25 | PCB clip/M3 Threaded insert | 6STD25PAU99R30X |
| 37 | PCB clip/M3 Threaded insert | 6STD37PAU99R30X |
| 50 | PCB clip/M3 Threaded insert | 6STD50PAU99R30X |
| 09 | PCB clip/4-40 UNC Threaded insert | 6STD09PAU99R40X |
| 15 | PCB clip/4-40 UNC Threaded insert | 6STD15PAU99R40X |
| 25 | PCB clip/4-40 UNC Threaded insert | 6STD25PAU99R40X |
| 37 | PCB clip/4-40 UNC Threaded insert | 6STD37PAU99R40X |
| 50 | PCB clip/4-40 UNC Threaded insert | 6STD50PAU99R40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# IP67 D-SUB Standard

## Solder pin – Angled – .464"/11.8 mm – Precision machined contacts – Metal bracket

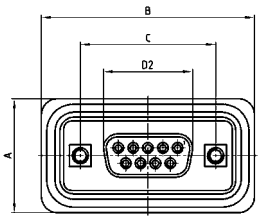


RoHS compliant - CSA listed, File No.LR115000-1 UL listed, File No. E202784

### Description

- Mounting styles:
  - with mounting bracket and 4-40 UNC or M3 threaded insert including hex locking bolt
  - with mounting bracket, PCB clip and M3 or UNC 4-40 threaded insert including hex locking bolt
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (stainless steel available on request)
- Nickel plated die-cast frame (Black plastic frame on request)

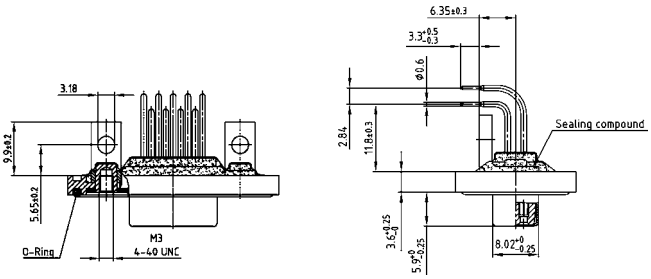
### Socket connector



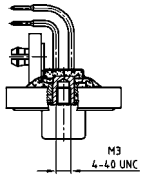

| No. of pos. | A +0.3 | B +0.3 | C | D2 -0.25 |
|---|---|---|---|---|
| 09 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.46 |
| 15 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 24.79 |
| 25 | 21.10 | 61.40 | 47.04 ±0.13 | 38.50 |
| 37 | 21.10 | 77.90 | 63.50 ±0.13 | 54.96 |

PCB-Layout: Kat1kGUA

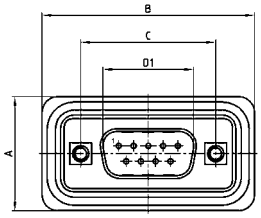
Mounting style: Mounting bracket, threaded insert




Mounting style: PCB clip, threaded insert



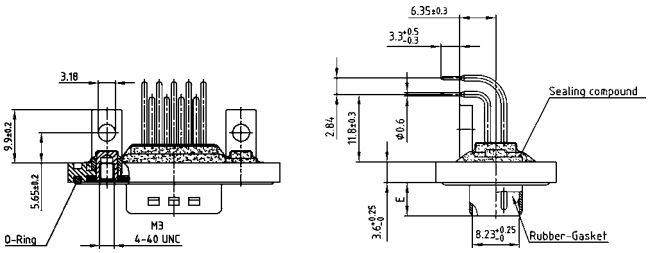

### Plug connector



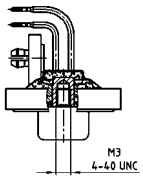

| No. of pos. | A +0.3 | B +0.3 | C | D1 +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 9 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.79 | 5.82 |
| 15 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 25.12 | 5.82 |
| 25 | 21.10 | 61.40 | 47.04 ±0.13 | 38.84 | 5.69 |
| 37 | 21.10 | 77.90 | 63.50 ±0.13 | 55.30 | 5.69 |

PCB-Layout: Kat1kGUA

Mounting style: Mounting bracket, threaded insert




Mounting style: PCB clip, threaded insert




### Order data

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded insert | 6STD09SAZ99S10X |
| 15 | M3 Threaded insert | 6STD15SAZ99S10X |
| 25 | M3 Threaded insert | 6STD25SAZ99S10X |
| 37 | M3 Threaded insert | 6STD37SAZ99S10X |
| 09 | 4-40 UNC Threaded insert | 6STD09SAZ99S20X |
| 15 | 4-40 UNC Threaded insert | 6STD15SAZ99S20X |
| 25 | 4-40 UNC Threaded insert | 6STD25SAZ99S20X |
| 37 | 4-40 UNC Threaded insert | 6STD37SAZ99S20X |
| 09 | PCB clip/M3 Threaded insert | 6STD09SAZ99S30X |
| 15 | PCB clip/M3 Threaded insert | 6STD15SAZ99S30X |
| 25 | PCB clip/M3 Threaded insert | 6STD25SAZ99S30X |
| 37 | PCB clip/M3 Threaded insert | 6STD37SAZ99S30X |
| 09 | PCB clip/4-40 UNC Threaded insert | 6STD09SAZ99S40X |
| 15 | PCB clip/4-40 UNC Threaded insert | 6STD15SAZ99S40X |
| 25 | PCB clip/4-40 UNC Threaded insert | 6STD25SAZ99S40X |
| 37 | PCB clip/4-40 UNC Threaded insert | 6STD37SAZ99S40X |

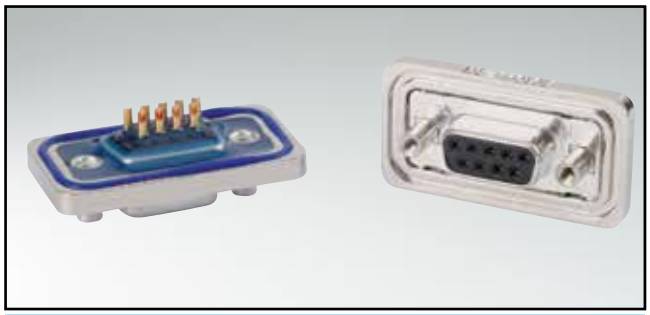
**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded insert | 6STD09PAZ99S10X |
| 15 | M3 Threaded insert | 6STD15PAZ99S10X |
| 25 | M3 Threaded insert | 6STD25PAZ99S10X |
| 37 | M3 Threaded insert | 6STD37PAZ99S10X |
| 09 | 4-40 UNC Threaded insert | 6STD09PAZ99S20X |
| 15 | 4-40 UNC Threaded insert | 6STD15PAZ99S20X |
| 25 | 4-40 UNC Threaded insert | 6STD25PAZ99S20X |
| 37 | 4-40 UNC Threaded insert | 6STD37PAZ99S20X |
| 09 | PCB clip/M3 Threaded insert | 6STD09PAZ99S30X |
| 15 | PCB clip/M3 Threaded insert | 6STD15PAZ99S30X |
| 25 | PCB clip/M3 Threaded insert | 6STD25PAZ99S30X |
| 37 | PCB clip/M3 Threaded insert | 6STD37PAZ99S30X |
| 09 | PCB clip/4-40 UNC Threaded insert | 6STD09PAZ99S40X |
| 15 | PCB clip/4-40 UNC Threaded insert | 6STD15PAZ99S40X |
| 25 | PCB clip/4-40 UNC Threaded insert | 6STD25PAZ99S40X |
| 37 | PCB clip/4-40 UNC Threaded insert | 6STD37PAZ99S40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# IP67 D-SUB Standard

## Solder cup – Precision machined contacts – Front mounting – For wire size AWG 20

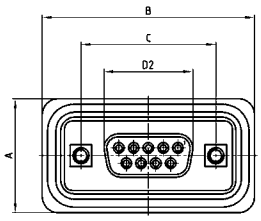


RoHS compliant - CSA listed, File No.LR115000-1 UL listed, File No. E202784

### Description

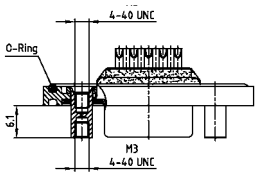
- Suitable for wire size **AWG 20**
- Mounting styles:
  - with M3 or 4-40 UNC front spacer
  - with M3 or 4-40 UNC front spacer and rear mounting stud
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (stainless steel available on request)
- Nickel plated die-cast frame
  (Black plastic frame on request)

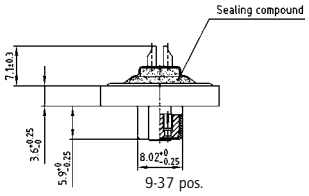
### Socket connector



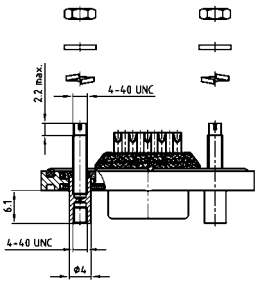

| No. of pos. | A +0.3 | B +0.3 | C | D2 -0.25 |
|---|---|---|---|---|
| 09 | 21.10 | 39.40 | 25.00 $^{+0.12}$ | 16.46 |
| 15 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 24.79 |
| 25 | 21.10 | 61.40 | 47.04 ±0.13 | 38.50 |
| 37 | 21.10 | 77.90 | 63.50 ±0.13 | 54.96 |
| 50 | 23.90 | 75.50 | 61.10 $^{+0.14}_{-0.11}$ | 52.55 |

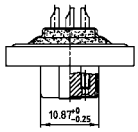
Mounting style: Front spacer



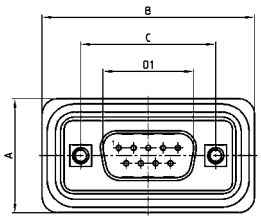

Mounting style: Front spacer and rear mounting stud



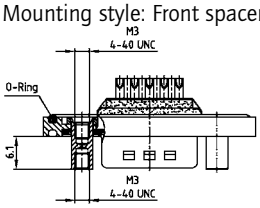

50 pos.

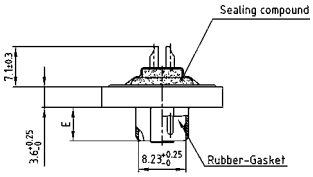
### Plug connector



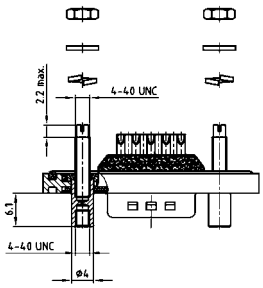

| No. of pos. | A +0.3 | B +0.3 | C | D1 +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 9 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.79 | 5.82 |
| 15 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 25.12 | 5.82 |
| 25 | 21.10 | 61.40 | 47.04 ±0.13 | 38.84 | 5.69 |
| 37 | 21.10 | 77.90 | 63.50 ±0.13 | 55.30 | 5.69 |
| 50 | 23.90 | 75.50 | 61.10 $^{+0.14}_{-0.11}$ | 52.68 | 5.69 |

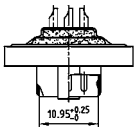
Mounting style: Front spacer




Mounting style: Front spacer and rear mounting stud




50 pos.

### Order data

**Socket connector**

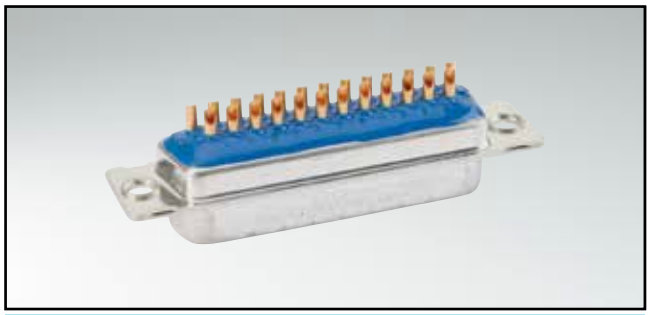
| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Front spacer | 6STD09SAM99B40X |
| 15 | M3 Front spacer | 6STD15SAM99B40X |
| 25 | M3 Front spacer | 6STD25SAM99B40X |
| 37 | M3 Front spacer | 6STD37SAM99B40X |
| 50 | M3 Front spacer | 6STD50SAM99B40X |
| 09 | 4-40 UNC Front spacer | 6STD09SAM99B50X |
| 15 | 4-40 UNC Front spacer | 6STD15SAM99B50X |
| 25 | 4-40 UNC Front spacer | 6STD25SAM99B50X |
| 37 | 4-40 UNC Front spacer | 6STD37SAM99B50X |
| 50 | 4-40 UNC Front spacer | 6STD50SAM99B50X |
| 09 | 4-40 UNC Front spacer and rear mounting stud | 6STD09SAM99B70X |
| 15 | 4-40 UNC Front spacer and rear mounting stud | 6STD15SAM99B70X |
| 25 | 4-40 UNC Front spacer and rear mounting stud | 6STD25SAM99B70X |
| 37 | 4-40 UNC Front spacer and rear mounting stud | 6STD37SAM99B70X |
| 50 | 4-40 UNC Front spacer and rear mounting stud | 6STD50SAM99B70X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Front spacer | 6STD09PAM99B40X |
| 15 | M3 Front spacer | 6STD15PAM99B40X |
| 25 | M3 Front spacer | 6STD25PAM99B40X |
| 37 | M3 Front spacer | 6STD37PAM99B40X |
| 50 | M3 Front spacer | 6STD50PAM99B40X |
| 09 | 4-40 UNC Front spacer | 6STD09PAM99B50X |
| 15 | 4-40 UNC Front spacer | 6STD15PAM99B50X |
| 25 | 4-40 UNC Front spacer | 6STD25PAM99B50X |
| 37 | 4-40 UNC Front spacer | 6STD37PAM99B50X |
| 50 | 4-40 UNC Front spacer | 6STD50PAM99B50X |
| 09 | 4-40 UNC Front spacer and rear mounting stud | 6STD09PAM99B70X |
| 15 | 4-40 UNC Front spacer and rear mounting stud | 6STD15PAM99B70X |
| 25 | 4-40 UNC Front spacer and rear mounting stud | 6STD25PAM99B70X |
| 37 | 4-40 UNC Front spacer and rear mounting stud | 6STD37PAM99B70X |
| 50 | 4-40 UNC Front spacer and rear mounting stud | 6STD50PAM99B70X |

# IP67 D-SUB Standard

## Solder cup – Precision machined contacts – For hood Assembly – For wire size AWG 20

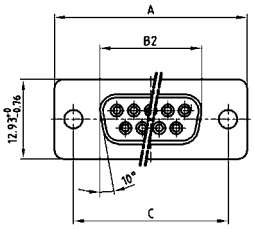


RoHS compliant - CSA listed, File No.LR115000-1 UL listed, File No. E202784

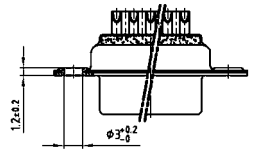
### Description

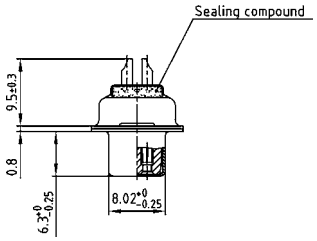
- Suitable for wire size **AWG 20**
- Mounting style:
  with through-hole, Ø .118" / 3.0 mm
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (stainless steel available on request)

### Socket connector

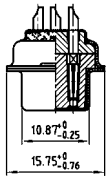



| No. of pos. | A -0.76 | B2 -0.25 | C |
|---|---|---|---|
| 09 | 31.19 | 16.46 | 25.00 +0.12 -0.13 |
| 15 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 25 | 53.42 | 38.50 | 47.04 ±0.13 |
| 37 | 69.70 | 54.96 | 63.50 ±0.13 |
| 50 | 67.31 | 52.55 | 61.10 +0.14 -0.11 |



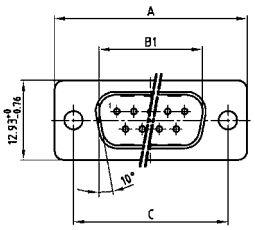




9-37 pos.

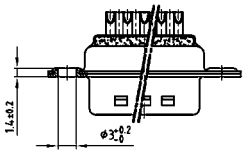


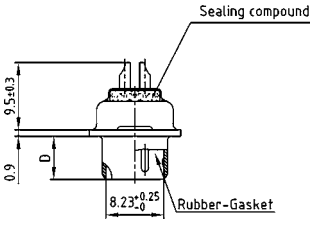

50 pos.

### Plug connector

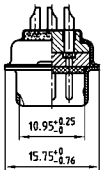



| No. of pos. | A | B1 +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 +0.12 -0.13 | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 50 | 67.31 | 52.68 | 61.10 +0.14 -0.11 | 5.99 |




9-37 pos.




50 pos.

### Order data

**Socket connector**

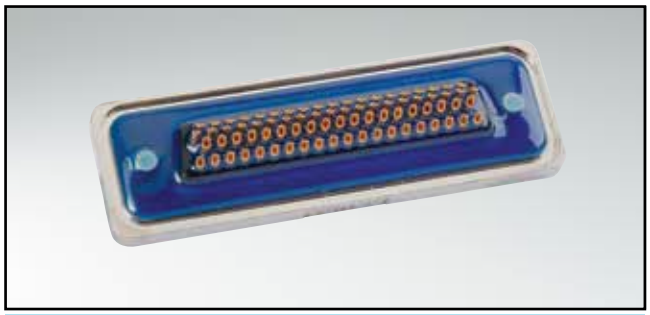
| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 4STD09SAM99A10X |
| 15 | Through-hole | 4STD15SAM99A10X |
| 25 | Through-hole | 4STD25SAM99A10X |
| 37 | Through-hole | 4STD37SAM99A10X |
| 50 | Through-hole | 4STD50SAM99A10X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 4STD09PAM99A10X |
| 15 | Through-hole | 4STD15PAM99A10X |
| 25 | Through-hole | 4STD25PAM99A10X |
| 37 | Through-hole | 4STD37PAM99A10X |
| 50 | Through-hole | 4STD50PAM99A10X |

# IP67 D-SUB High Density

## Solder cup – Precision machined contacts – For wire size AWG 22

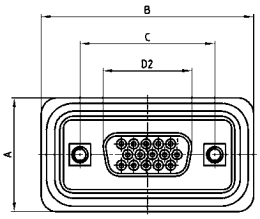


RoHS compliant - CSA listed, File No.LR115000-1 UL listed, File No. E202784

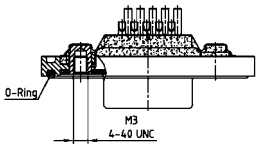
### Description

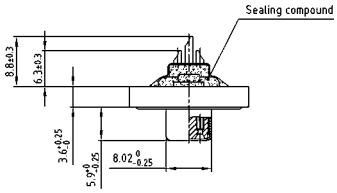
- Suitable for wire size **AWG 22**
- Mounting style:
  with 4-40 UNC or M3 threaded insert including hex locking bolt
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (stainless steel available on request)
- Nickel plated die-cast frame
  (Black plastic frame on request)

### Socket connector

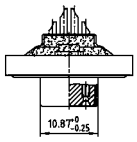



| No. of pos. | A +0.3 | B +0.3 | C | D2 -0.25 |
|---|---|---|---|---|
| 15 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.46 |
| 26 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 24.79 |
| 44 | 21.10 | 61.40 | 47.04 $\pm 0.13$ | 38.50 |
| 62 | 21.10 | 77.90 | 63.50 $\pm 0.13$ | 54.96 |
| 78 | 23.90 | 75.50 | 61.10 $^{+0.14}_{-0.11}$ | 52.55 |



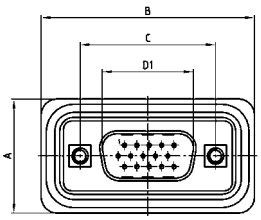




15-62 pos.

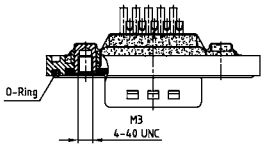


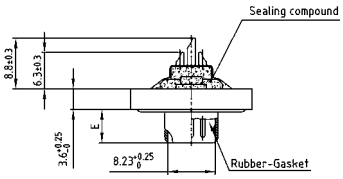

78 pos.

### Plug connector

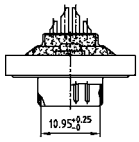



| No. of pos. | A +0.3 | B +0.3 | C | D1 +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 15 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.79 | 5.82 |
| 26 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 25.12 | 5.82 |
| 44 | 21.10 | 61.40 | 47.04 $\pm 0.13$ | 38.84 | 5.69 |
| 62 | 21.10 | 77.90 | 63.50 $\pm 0.13$ | 55.30 | 5.69 |
| 78 | 23.90 | 75.50 | 61.10 $^{+0.14}_{-0.11}$ | 52.68 | 5.69 |




15-62 pos.




78 pos.

### Order data

**Socket connector**

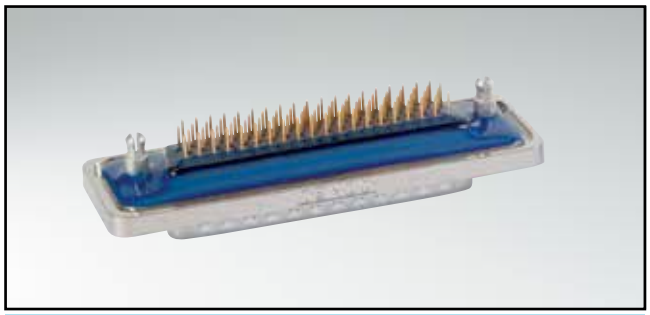
| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | M3 Threaded insert | 6HDD15SAM99B20X |
| 26 | M3 Threaded insert | 6HDD26SAM99B20X |
| 44 | M3 Threaded insert | 6HDD44SAM99B20X |
| 62 | M3 Threaded insert | 6HDD62SAM99B20X |
| 78 | M3 Threaded insert | 6HDD78SAM99B20X |
| 15 | 4-40 UNC Threaded insert | 6HDD15SAM99B30X |
| 26 | 4-40 UNC Threaded insert | 6HDD26SAM99B30X |
| 44 | 4-40 UNC Threaded insert | 6HDD44SAM99B30X |
| 62 | 4-40 UNC Threaded insert | 6HDD62SAM99B30X |
| 78 | 4-40 UNC Threaded insert | 6HDD78SAM99B30X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | M3 Threaded insert | 6HDD15PAM99B20X |
| 26 | M3 Threaded insert | 6HDD26PAM99B20X |
| 44 | M3 Threaded insert | 6HDD44PAM99B20X |
| 62 | M3 Threaded insert | 6HDD62PAM99B20X |
| 78 | M3 Threaded insert | 6HDD78PAM99B20X |
| 15 | 4-40 UNC Threaded insert | 6HDD15PAM99B30X |
| 26 | 4-40 UNC Threaded insert | 6HDD26PAM99B30X |
| 44 | 4-40 UNC Threaded insert | 6HDD44PAM99B30X |
| 62 | 4-40 UNC Threaded insert | 6HDD62PAM99B30X |
| 78 | 4-40 UNC Threaded insert | 6HDD78PAM99B30X |

# IP67 D-SUB High Density

## Solder pin – Straight – Precision machined contacts

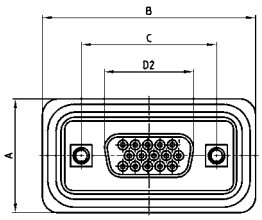


RoHS compliant - CSA listed, File No.LR115000-1 UL listed, File No. E202784

### Description

- Mounting styles:
  - with 4-40 UNC or M3 threaded insert including hex locking bolt
  - with M3 or 4-40 UNC threaded rear spacer and PCB clip including hex locking bolt
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (stainless steel available on request)
- Nickel plated die-cast frame (Black plastic frame on request)

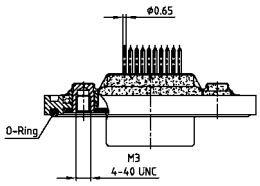
### Socket connector

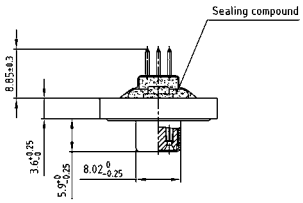



| No. of pos. | A +0.3 | B +0.3 | C | D2 -0.25 |
|---|---|---|---|---|
| 15 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.46 |
| 26 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 24.79 |
| 44 | 21.10 | 61.40 | 47.04 ±0.13 | 38.50 |
| 62 | 21.10 | 77.90 | 63.50 ±0.13 | 54.96 |
| 78 | 23.90 | 75.50 | 61.10 $^{+0.14}_{-0.11}$ | 52.55 |

PCB-Layout: Kat1kGDA / Kat1iT9A

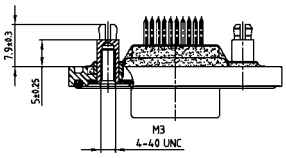
Mounting style: Threaded insert

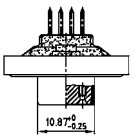



15-62 pos.

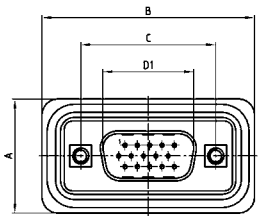
Mounting style: Threaded rear spacer with PCB clip




78 pos.

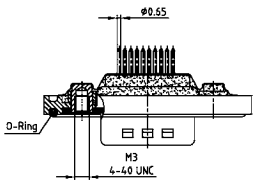
### Plug connector

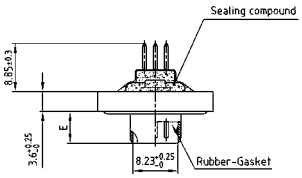



| No. of pos. | A +0.3 | B +0.3 | C | D1 +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 15 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.79 | 5.82 |
| 26 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 25.12 | 5.82 |
| 44 | 21.10 | 61.40 | 47.04 ±0.13 | 38.84 | 5.69 |
| 62 | 21.10 | 77.90 | 63.50 ±0.13 | 55.30 | 5.69 |
| 78 | 23.90 | 75.50 | 61.10 $^{+0.14}_{-0.11}$ | 52.68 | 5.69 |

PCB-Layout: Kat1kFWA / Kat1iU0A

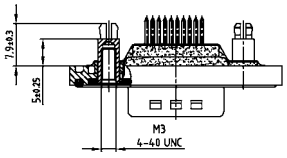
Mounting style: Threaded insert

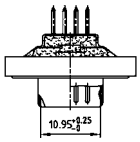



15-62 pos.

Mounting style: Threaded rear spacer with PCB clip




78 pos.

### Order data

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | M3 Threaded insert | 6HDD15SAR99B20X |
| 26 | M3 Threaded insert | 6HDD26SAR99B20X |
| 44 | M3 Threaded insert | 6HDD44SAR99B20X |
| 62 | M3 Threaded insert | 6HDD62SAR99B20X |
| 78 | M3 Threaded insert | 6HDD78SAR99B20X |
| 15 | 4-40 UNC Threaded insert | 6HDD15SAR99B30X |
| 26 | 4-40 UNC Threaded insert | 6HDD26SAR99B30X |
| 44 | 4-40 UNC Threaded insert | 6HDD44SAR99B30X |
| 62 | 4-40 UNC Threaded insert | 6HDD62SAR99B30X |
| 78 | 4-40 UNC Threaded insert | 6HDD78SAR99B30X |
| 15 | M3 Threaded rear spacer PCB clip | 6HDD15SAR99E10X |
| 26 | M3 Threaded rear spacer PCB clip | 6HDD26SAR99E10X |
| 44 | M3 Threaded rear spacer PCB clip | 6HDD44SAR99E10X |
| 62 | M3 Threaded rear spacer PCB clip | 6HDD62SAR99E10X |
| 78 | M3 Threaded rear spacer PCB clip | 6HDD78SAR99E10X |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 6HDD15SAR99E20X |
| 26 | 4-40 UNC Threaded rear spacer PCB clip | 6HDD26SAR99E20X |
| 44 | 4-40 UNC Threaded rear spacer PCB clip | 6HDD44SAR99E20X |
| 62 | 4-40 UNC Threaded rear spacer PCB clip | 6HDD62SAR99E20X |
| 78 | 4-40 UNC Threaded rear spacer PCB clip | 6HDD78SAR99E20X |

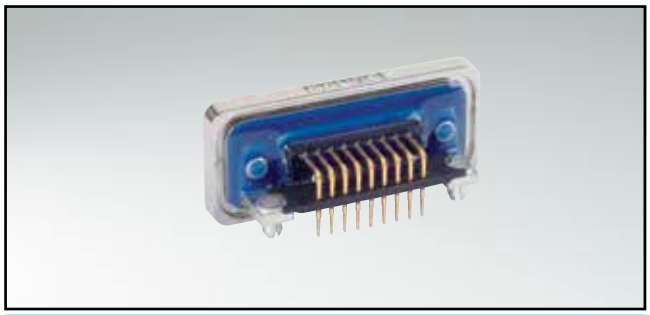
**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | M3 Threaded insert | 6HDD15PAR99B20X |
| 26 | M3 Threaded insert | 6HDD26PAR99B20X |
| 44 | M3 Threaded insert | 6HDD44PAR99B20X |
| 62 | M3 Threaded insert | 6HDD62PAR99B20X |
| 78 | M3 Threaded insert | 6HDD78PAR99B20X |
| 15 | 4-40 UNC Threaded insert | 6HDD15PAR99B30X |
| 26 | 4-40 UNC Threaded insert | 6HDD26PAR99B30X |
| 44 | 4-40 UNC Threaded insert | 6HDD44PAR99B30X |
| 62 | 4-40 UNC Threaded insert | 6HDD62PAR99B30X |
| 78 | 4-40 UNC Threaded insert | 6HDD78PAR99B30X |
| 15 | M3 Threaded rear spacer PCB clip | 6HDD15PAR99E10X |
| 26 | M3 Threaded rear spacer PCB clip | 6HDD26PAR99E10X |
| 44 | M3 Threaded rear spacer PCB clip | 6HDD44PAR99E10X |
| 62 | M3 Threaded rear spacer PCB clip | 6HDD62PAR99E10X |
| 78 | M3 Threaded rear spacer PCB clip | 6HDD78PAR99E10X |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 6HDD15PAR99E20X |
| 26 | 4-40 UNC Threaded rear spacer PCB clip | 6HDD26PAR99E20X |
| 44 | 4-40 UNC Threaded rear spacer PCB clip | 6HDD44PAR99E20X |
| 62 | 4-40 UNC Threaded rear spacer PCB clip | 6HDD62PAR99E20X |
| 78 | 4-40 UNC Threaded rear spacer PCB clip | 6HDD78PAR99E20X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# IP67 D-SUB High Density

## Solder pin – Angled – .220"/5,6 mm – Precision machined contacts – Metal Bracket

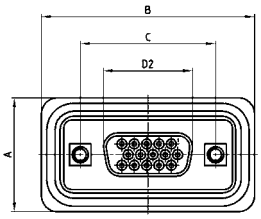


RoHS compliant - CSA listed, File No.LR115000-1 UL listed, File No. E202784

### Description

- Mounting styles:
  - with mounting bracket and 4-40 UNC or M3 threaded insert including hex locking bolt
  - with mounting bracket, PCB clip and 4-40 UNC or M3 threaded insert including hex locking bolt
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (stainless steel available on request)
- Nickel plated die-cast frame (Black plastic frame on request)

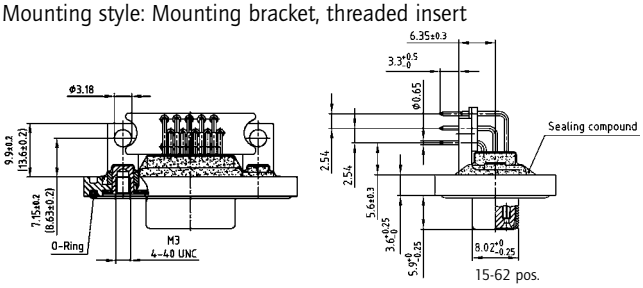
### Socket connector



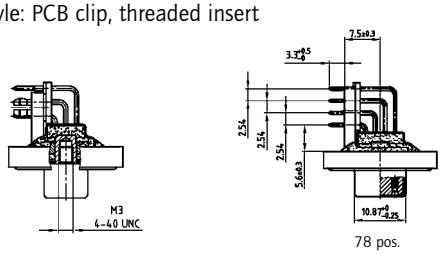

| No. of pos. | A +0.3 | B +0.3 | C | D2 -0.25 |
|---|---|---|---|---|
| 15 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.46 |
| 26 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 24.79 |
| 44 | 21.10 | 61.40 | 47.04 ±0.13 | 38.50 |
| 62 | 21.10 | 77.90 | 63.50 ±0.13 | 54.96 |
| 78 | 23.90 | 75.50 | 61.10 $^{+0.14}_{-0.11}$ | 52.55 |

PCB-Layout: Kat1kGVA

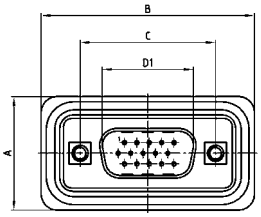
Mounting style: Mounting bracket, threaded insert




Mounting style: PCB clip, threaded insert



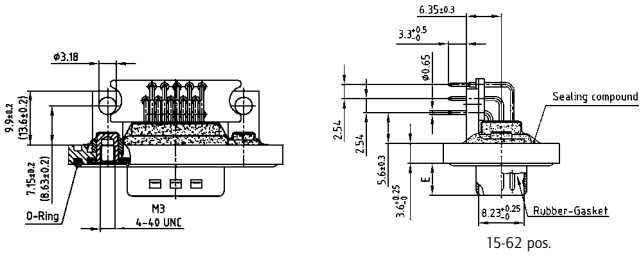

### Plug connector



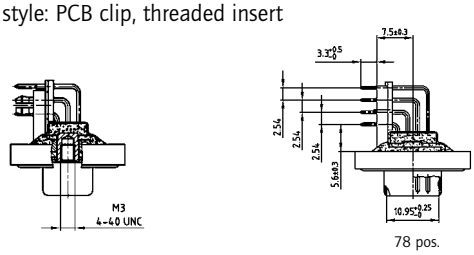

| No. of pos. | A +0.3 | B +0.3 | C | D1 +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 15 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.79 | 5.82 |
| 26 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 25.12 | 5.82 |
| 44 | 21.10 | 61.40 | 47.04 ±0.13 | 38.84 | 5.69 |
| 62 | 21.10 | 77.90 | 63.50 ±0.13 | 55.30 | 5.69 |
| 78 | 23.90 | 75.50 | 61.10 $^{+0.14}_{-0.11}$ | 52.68 | 5.69 |

PCB-Layout: Kat1kGWA

Mounting style: Mounting bracket, threaded insert




Mounting style: PCB clip, threaded insert




### Order data

**Socket connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | M3 Threaded insert | 6HDD15SAY99R10X |
| 26 | M3 Threaded insert | 6HDD26SAY99R10X |
| 44 | M3 Threaded insert | 6HDD44SAY99R10X |
| 62 | M3 Threaded insert | 6HDD62SAY99R10X |
| 78 | M3 Threaded insert | 6HDD78SAY99R10X |
| 15 | 4-40 UNC Threaded insert | 6HDD15SAY99R20X |
| 26 | 4-40 UNC Threaded insert | 6HDD26SAY99R20X |
| 44 | 4-40 UNC Threaded insert | 6HDD44SAY99R20X |
| 62 | 4-40 UNC Threaded insert | 6HDD62SAY99R20X |
| 78 | 4-40 UNC Threaded insert | 6HDD78SAY99R20X |
| 15 | PCB clip/M3 Threaded insert | 6HDD15SAY99R30X |
| 26 | PCB clip/M3 Threaded insert | 6HDD26SAY99R30X |
| 44 | PCB clip/M3 Threaded insert | 6HDD44SAY99R30X |
| 62 | PCB clip/M3 Threaded insert | 6HDD62SAY99R30X |
| 78 | PCB clip/M3 Threaded insert | 6HDD78SAY99R30X |
| 15 | PCB clip/4-40 UNC Threaded insert | 6HDD15SAY99R40X |
| 26 | PCB clip/4-40 UNC Threaded insert | 6HDD26SAY99R40X |
| 44 | PCB clip/4-40 UNC Threaded insert | 6HDD44SAY99R40X |
| 62 | PCB clip/4-40 UNC Threaded insert | 6HDD62SAY99R40X |
| 78 | PCB clip/4-40 UNC Threaded insert | 6HDD78SAY99R40X |

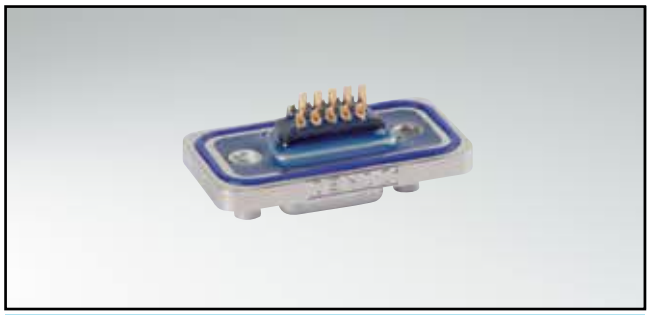
**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | M3 Threaded insert | 6HDD15PAY99R10X |
| 26 | M3 Threaded insert | 6HDD26PAY99R10X |
| 44 | M3 Threaded insert | 6HDD44PAY99R10X |
| 62 | M3 Threaded insert | 6HDD62PAY99R10X |
| 78 | M3 Threaded insert | 6HDD78PAY99R10X |
| 15 | 4-40 UNC Threaded insert | 6HDD15PAY99R20X |
| 26 | 4-40 UNC Threaded insert | 6HDD26PAY99R20X |
| 44 | 4-40 UNC Threaded insert | 6HDD44PAY99R20X |
| 62 | 4-40 UNC Threaded insert | 6HDD62PAY99R20X |
| 78 | 4-40 UNC Threaded insert | 6HDD78PAY99R20X |
| 15 | PCB clip/M3 Threaded insert | 6HDD15PAY99R30X |
| 26 | PCB clip/M3 Threaded insert | 6HDD26PAY99R30X |
| 44 | PCB clip/M3 Threaded insert | 6HDD44PAY99R30X |
| 62 | PCB clip/M3 Threaded insert | 6HDD62PAY99R30X |
| 78 | PCB clip/M3 Threaded insert | 6HDD78PAY99R30X |
| 15 | PCB clip/4-40 UNC Threaded insert | 6HDD15PAY99R40X |
| 26 | PCB clip/4-40 UNC Threaded insert | 6HDD26PAY99R40X |
| 44 | PCB clip/4-40 UNC Threaded insert | 6HDD44PAY99R40X |
| 62 | PCB clip/4-40 UNC Threaded insert | 6HDD62PAY99R40X |
| 78 | PCB clip/4-40 UNC Threaded insert | 6HDD78PAY99R40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# IP67 D-SUB High Density

## Solder cup – Precision machined contacts – Front mounting – For wire size AWG 22

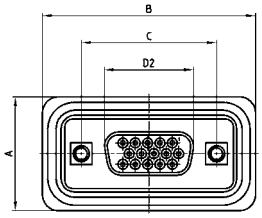


RoHS compliant - CSA listed, File No.LR115000-1 UL listed, File No. E202784

### Description

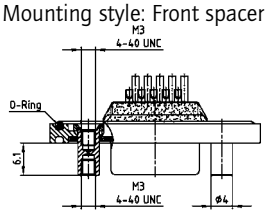
- Suitable for wire size **AWG 22**
- Mounting styles:
  - with M3 or 4-40 UNC front spacer
  - with M3 or 4-40 UNC front spacer and rear mounting stud
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (stainless steel available on request)
- Nickel plated die-cast frame
  (Black plastic frame on request)

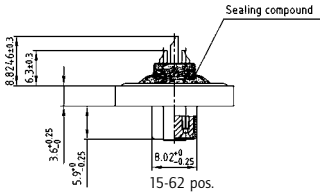
### Socket connector




| No. of pos. | A +0.3 | B +0.3 | C | D2 -0.25 |
|---|---|---|---|---|
| 15 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.46 |
| 26 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 24.79 |
| 44 | 21.10 | 61.40 | 47.04 $\pm 0.13$ | 38.50 |
| 62 | 21.10 | 77.90 | 63.50 $\pm 0.13$ | 54.96 |
| 78 | 23.90 | 75.50 | 61.10 $^{+0.14}_{-0.11}$ | 52.55 |

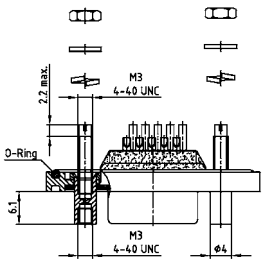
Mounting style: Front spacer

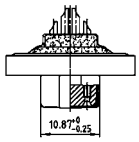



15-62 pos.

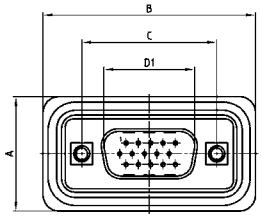
Mounting style: Front spacer and rear mounting stud



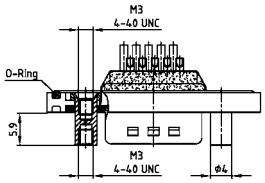

78 pos.

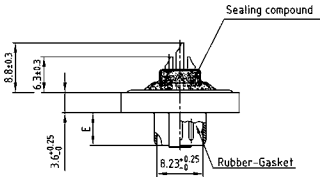
### Plug connector




| No. of pos. | A +0.3 | B +0.3 | C | D1 +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 15 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.79 | 5.82 |
| 26 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 25.12 | 5.82 |
| 44 | 21.10 | 61.40 | 47.04 $\pm 0.13$ | 38.84 | 5.69 |
| 62 | 21.10 | 77.90 | 63.50 $\pm 0.13$ | 55.30 | 5.69 |
| 78 | 23.90 | 75.50 | 61.10 $^{+0.14}_{-0.11}$ | 52.68 | 5.69 |

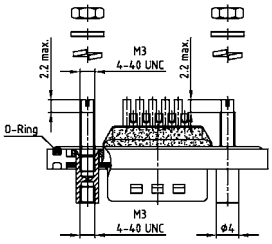
Mounting style: Front spacer

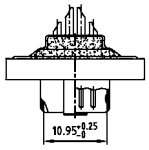



15-62 pos.

Mounting style: Front spacer and rear mounting stud




78 pos.

### Order data

**Socket connector**

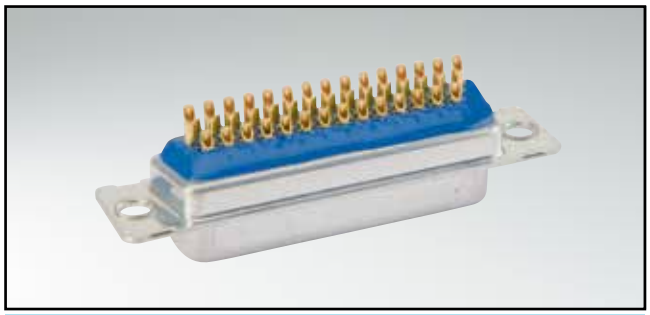
| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | M3 Front spacer | 6HDD15SAM99B40X |
| 26 | M3 Front spacer | 6HDD26SAM99B40X |
| 44 | M3 Front spacer | 6HDD44SAM99B40X |
| 62 | M3 Front spacer | 6HDD62SAM99B40X |
| 78 | M3 Front spacer | 6HDD78SAM99B40X |
| 15 | 4-40 UNC Front spacer | 6HDD15SAM99B50X |
| 26 | 4-40 UNC Front spacer | 6HDD26SAM99B50X |
| 44 | 4-40 UNC Front spacer | 6HDD44SAM99B50X |
| 62 | 4-40 UNC Front spacer | 6HDD62SAM99B50X |
| 78 | 4-40 UNC Front spacer | 6HDD78SAM99B50X |
| 15 | 4-40 UNC Front spacer and rear mounting stud | 6HDD15SAM99B70X |
| 26 | 4-40 UNC Front spacer and rear mounting stud | 6HDD26SAM99B70X |
| 44 | 4-40 UNC Front spacer and rear mounting stud | 6HDD44SAM99B70X |
| 62 | 4-40 UNC Front spacer and rear mounting stud | 6HDD62SAM99B70X |
| 78 | 4-40 UNC Front spacer and rear mounting stud | 6HDD78SAM99B70X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | M3 Front spacer | 6HDD15PAM99B40X |
| 26 | M3 Front spacer | 6HDD26PAM99B40X |
| 44 | M3 Front spacer | 6HDD44PAM99B40X |
| 62 | M3 Front spacer | 6HDD62PAM99B40X |
| 78 | M3 Front spacer | 6HDD78PAM99B40X |
| 15 | 4-40 UNC Front spacer | 6HDD15PAM99B50X |
| 26 | 4-40 UNC Front spacer | 6HDD26PAM99B50X |
| 44 | 4-40 UNC Front spacer | 6HDD44PAM99B50X |
| 62 | 4-40 UNC Front spacer | 6HDD62PAM99B50X |
| 78 | 4-40 UNC Front spacer | 6HDD78PAM99B50X |
| 15 | 4-40 UNC Front spacer and rear mounting stud | 6HDD15PAM99B70X |
| 26 | 4-40 UNC Front spacer and rear mounting stud | 6HDD26PAM99B70X |
| 44 | 4-40 UNC Front spacer and rear mounting stud | 6HDD44PAM99B70X |
| 62 | 4-40 UNC Front spacer and rear mounting stud | 6HDD62PAM99B70X |
| 78 | 4-40 UNC Front spacer and rear mounting stud | 6HDD78PAM99B70X |

# IP67 D-SUB High Density

## Solder cup – Precision machined contacts – For hood Assembly – For wire size AWG 22

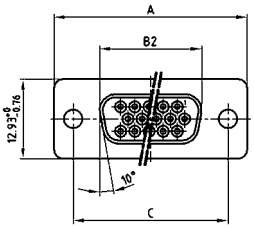


RoHS compliant - CSA listed, File No.LR115000-1 UL listed, File No. E202784

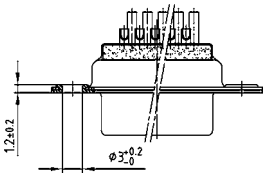
### Description

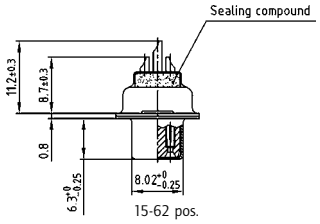
- Suitable for wire size **AWG 22**
- Mounting style:
  with through-hole, Ø .118" / 3.0 mm
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (stainless steel available on request)

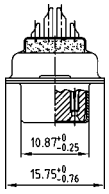
### Socket connector



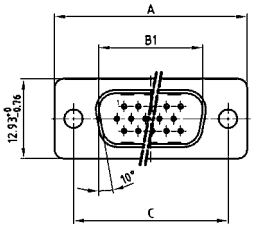

| No. of pos. | A -0.76 | B2 -0.25 | C |
|---|---|---|---|
| 15 | 31.19 | 16.46 | 25.00 +0.12 −0.13 |
| 26 | 39.52 | 24.79 | 33.30 +0.15 −0.10 |
| 44 | 53.42 | 38.50 | 47.04 ±0.13 |
| 62 | 69.70 | 54.96 | 63.50 ±0.13 |
| 78 | 67.31 | 52.55 | 61.10 +0.14 −0.11 |



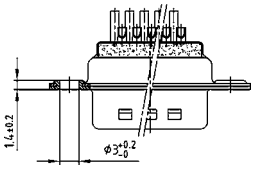



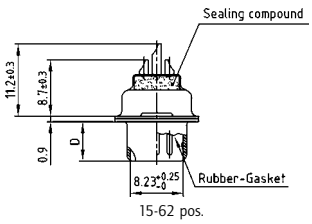



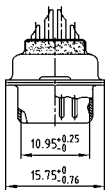

### Plug connector




| No. of pos. | A -0.76 | B1 +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 15 | 31.19 | 16.79 | 25.00 +0.12 −0.13 | 6.12 |
| 26 | 39.52 | 25.12 | 33.30 +0.15 −0.10 | 6.12 |
| 44 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 62 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 78 | 67.31 | 62.68 | 61.10 +0.14 −0.11 | 5.99 |




### Order data

**Socket connector**

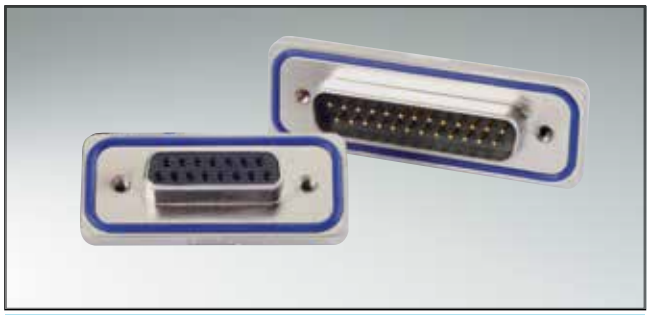
| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | Through-hole | 4HDD15SAM99A10X |
| 26 | Through-hole | 4HDD26SAM99A10X |
| 44 | Through-hole | 4HDD44SAM99A10X |
| 62 | Through-hole | 4HDD62SAM99A10X |
| 78 | Through-hole | 4HDD78SAM99A10X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | Through-hole | 4HDD15PAM99A10X |
| 26 | Through-hole | 4HDD26PAM99A10X |
| 44 | Through-hole | 4HDD44PAM99A10X |
| 62 | Through-hole | 4HDD62PAM99A10X |
| 78 | Through-hole | 4HDD78PAM99A10X |

# IP67 D-SUB Standard Solid Body

## Solder cup – Precision machined contacts – For wire size AWG 20

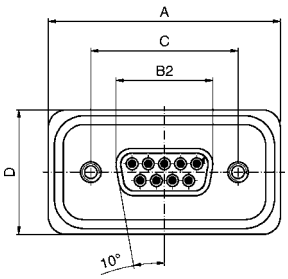


RoHS compliant - UL listed, File No. E202784

### Description

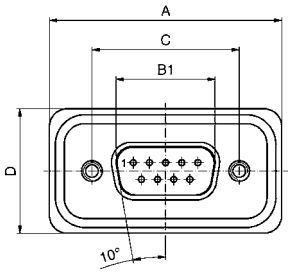
- Suitable for wire size **AWG 20**
- Mounting style:
  4-40 UNC threaded insert including hex locking bolt
- Quality class 3 (also available in quality class 1)
- One-piece zinc die-cast nickel plated shell
- IP67 for harsh environments, pressure-proof up to 1.45 PSI
- Higher protection on request

### Socket connector

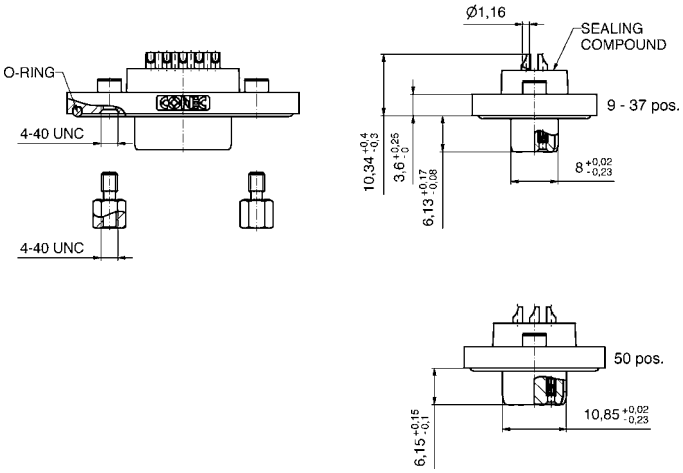


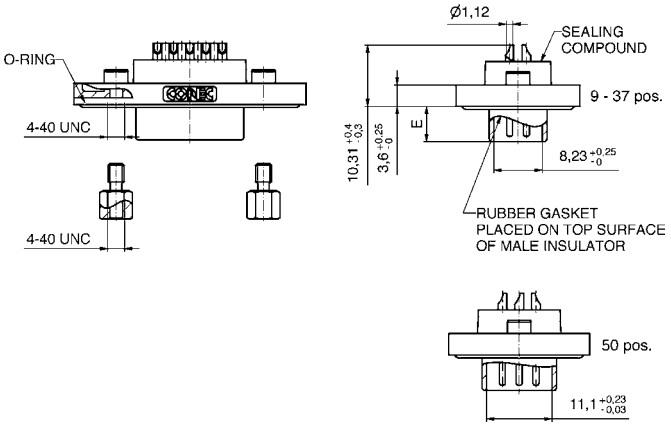

| No. of pos. | A | B2 $^{+0}_{-0.25}$ | C | D |
|---|---|---|---|---|
| 09 | 39.40 $^{+0.30}_{-0.00}$ | 16.46 | 25.00 $^{+0.12}_{-0.13}$ | 21.10 $^{+0.3}_{-0}$ |
| 15 | 47.70 $^{+0.30}_{-0.00}$ | 24.79 | 33.32 $^{+0.13}_{-0.12}$ | 21.10 $^{+0.3}_{-0}$ |
| 25 | 61.40 $^{+0.30}_{-0.00}$ | 38.50 | 47.04 $\pm 0.13$ | 21.10 $^{+0.3}_{-0}$ |
| 37 | 78.00 $^{+0.30}_{-0.00}$ | 54.96 | 63.50 $\pm 0.13$ | 21.10 $^{+0.3}_{-0}$ |
| 50 | 75.60 $^{+0.30}_{-0.10}$ | 52.55 | 61.10 $^{+0.14}_{-0.11}$ | 23.90 $^{+0.3}_{-0.1}$ |

### Plug connector




| No. of pos. | A | B1 | C | D | E |
|---|---|---|---|---|---|
| 09 | 39.4 $^{+0.30}_{-0.00}$ | 16.81 $^{+0.23}_{-0.02}$ | 25.00 $^{+0.12}_{-0.13}$ | 21.1 $^{+0.3}_{-0}$ | 6.00 $^{+0.12}_{-0.18}$ |
| 15 | 47.7 $^{+0.30}_{-0.00}$ | 25.14 $^{+0.23}_{-0.02}$ | 33.32 $^{+0.13}_{-0.12}$ | 21.1 $^{+0.3}_{-0}$ | 6.00 $^{+0.12}_{-0.18}$ |
| 25 | 61.4 $^{+0.30}_{-0.00}$ | 38.86 $^{+0.23}_{-0.02}$ | 47.04 $\pm 0.13$ | 21.1 $^{+0.3}_{-0}$ | 5.99 $^{+0}_{-0.3}$ |
| 37 | 78.0 $^{+0.30}_{-0.01}$ | 55.32 $^{+0.23}_{-0.02}$ | 63.50 $\pm 0.13$ | 21.1 $^{+0.3}_{-0}$ | 5.99 $^{+0}_{-0.3}$ |
| 50 | 75.6 $^{+0.30}_{-0.10}$ | 52.80 $^{+0.13}_{-0.12}$ | 61.10 $^{+0.14}_{-0.11}$ | 23.9 $^{+0.3}_{-0.1}$ | 5.99 $^{+0}_{-0.3}$ |




### Order data

**Socket connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 15-000613 |
| 15 | Threaded insert | 15-000623 |
| 25 | Threaded insert | 15-000633 |
| 37 | Threaded insert | 15-000643 |
| 50 | Threaded insert | 15-002103 |

**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 15-000573 |
| 15 | Threaded insert | 15-000583 |
| 25 | Threaded insert | 15-000593 |
| 37 | Threaded insert | 15-000603 |
| 50 | Threaded insert | 15-002093 |

# IP67 D-SUB Standard Solid Body

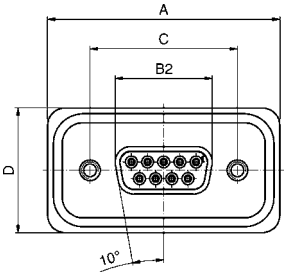
## Solder pin – Straight – Precision machined contacts

RoHS compliant - UL listed, File No. E202784

### Description

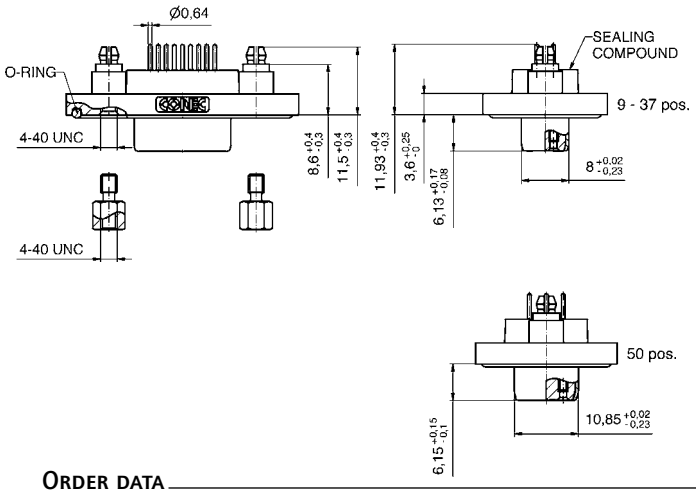
- Mounting style:
  4-40 UNC threaded rear spacer with PCB clip including hex locking bolt
- Quality class 3 (also available in quality class 1)
- One-piece zinc die-cast nickel plated shell
- IP67 for harsh environments, pressure-proof up to 1.45 PSI
- Higher protection on request

### Socket connector

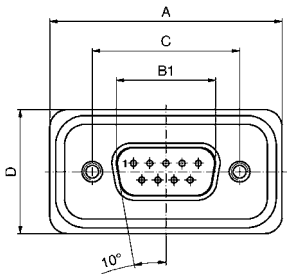



| No. of pos. | A | B2 $^{+0}_{-0.25}$ | C | D |
|---|---|---|---|---|
| 09 | 39.40 $^{+0.30}_{-0.00}$ | 16.46 | 25.00 $^{+0.12}_{-0.13}$ | 21.10 $^{+0.3}_{-0}$ |
| 15 | 47.70 $^{+0.30}_{-0.00}$ | 24.79 | 33.32 $^{+0.13}_{-0.12}$ | 21.10 $^{+0.3}_{-0}$ |
| 25 | 61.40 $^{+0.30}_{-0.00}$ | 38.50 | 47.04 $\pm 0.13$ | 21.10 $^{+0.3}_{-0}$ |
| 37 | 78.00 $^{+0.30}_{-0.00}$ | 54.96 | 63.50 $\pm 0.13$ | 21.10 $^{+0.3}_{-0}$ |
| 50 | 75.60 $^{+0.30}_{-0.10}$ | 52.55 | 61.10 $^{+0.14}_{-0.11}$ | 23.90 $^{+0.3}_{-0.1}$ |

PCB-Layout: Kat1kFUA

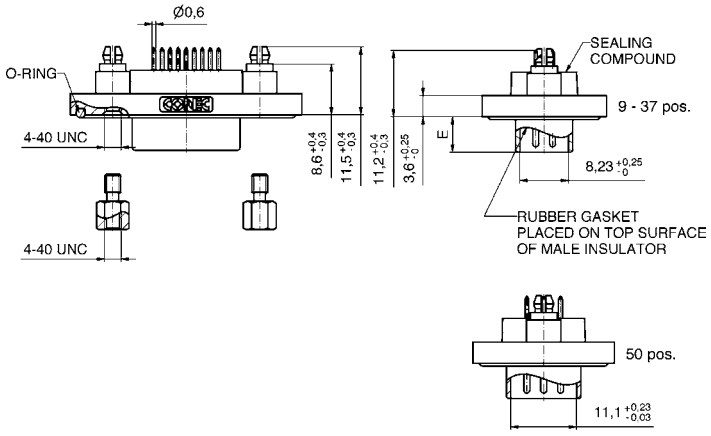



### Plug connector




| No. of pos. | A | B1 | C | D | E |
|---|---|---|---|---|---|
| 09 | 39.4 $^{+0.30}_{-0.00}$ | 16.81 $^{+0.23}_{-0.02}$ | 25.00 $^{+0.12}_{-0.13}$ | 21.1 $^{+0.3}_{-0}$ | 6.00 $^{+0.12}_{-0.18}$ |
| 15 | 47.7 $^{+0.30}_{-0.00}$ | 25.14 $^{+0.23}_{-0.02}$ | 33.32 $^{+0.13}_{-0.12}$ | 21.1 $^{+0.3}_{-0}$ | 6.00 $^{+0.12}_{-0.18}$ |
| 25 | 61.4 $^{+0.30}_{-0.00}$ | 38.86 $^{+0.23}_{-0.02}$ | 47.04 $\pm 0.13$ | 21.1 $^{+0.3}_{-0}$ | 5.99 $^{+0}_{-0.3}$ |
| 37 | 78.0 $^{+0.30}_{-0.01}$ | 55.32 $^{+0.23}_{-0.02}$ | 63.50 $\pm 0.13$ | 21.1 $^{+0.3}_{-0}$ | 5.99 $^{+0}_{-0.3}$ |
| 50 | 75.6 $^{+0.30}_{-0.10}$ | 52.80 $^{+0.13}_{-0.12}$ | 61.10 $^{+0.14}_{-0.11}$ | 23.9 $^{+0.3}_{-0.1}$ | 5.99 $^{+0}_{-0.3}$ |

PCB-Layout: Kat1kFUA




### Order data

**Socket connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded rear spacer PCB clip | 15-000453 |
| 15 | Threaded rear spacer PCB clip | 15-000463 |
| 25 | Threaded rear spacer PCB clip | 15-000473 |
| 37 | Threaded rear spacer PCB clip | 15-000483 |
| 50 | Threaded rear spacer PCB clip | 15-002063 |

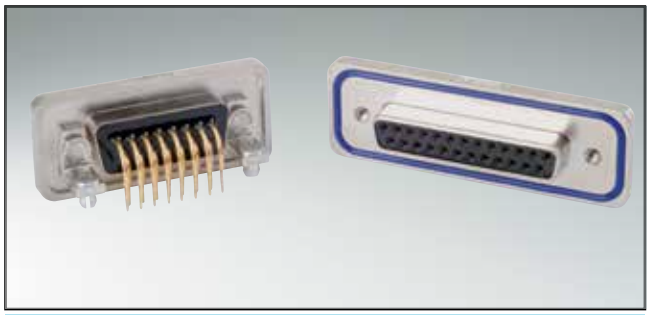
**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded rear spacer PCB clip | 15-000413 |
| 15 | Threaded rear spacer PCB clip | 15-000423 |
| 25 | Threaded rear spacer PCB clip | 15-000433 |
| 37 | Threaded rear spacer PCB clip | 15-000443 |
| 50 | Threaded rear spacer PCB clip | 15-002053 |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# IP67 D-SUB Standard Solid Body

## Solder pin – Angled – .402"/10.2 mm – Precision machined contacts – Metal bracket

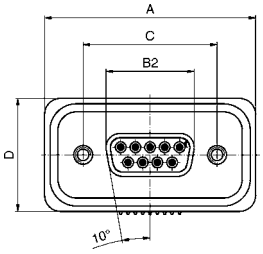


RoHS compliant - UL listed, File No. E202784

### Description

- Mounting style:
  mounting bracket, 4-40 UNC PCB clip
  including hex locking bolt
- Quality class 3 (also available in quality class 1)
- One-piece zinc die-cast nickel plated shell
- IP67 for harsh environments, pressure-proof up to 1.45 PSI
- Higher protection on request

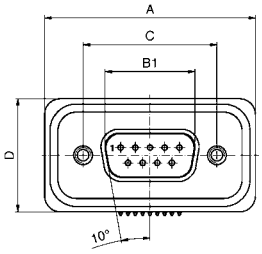
### Socket connector




| No. of pos. | A | B2 $^{+0}_{-0.25}$ | C | D |
|---|---|---|---|---|
| 09 | 39.40 $^{+0.30}_{-0.00}$ | 16.46 | 25.00 $^{+0.12}_{-0.13}$ | 21.10 $^{+0.3}_{-0}$ |
| 15 | 47.70 $^{+0.30}_{-0.00}$ | 24.79 | 33.32 $^{+0.13}_{-0.12}$ | 21.10 $^{+0.3}_{-0}$ |
| 25 | 61.40 $^{+0.30}_{-0.00}$ | 38.50 | 47.04 $\pm 0.13$ | 21.10 $^{+0.3}_{-0}$ |
| 37 | 78.00 $^{+0.30}_{-0.00}$ | 54.96 | 63.50 $\pm 0.13$ | 21.10 $^{+0.3}_{-0}$ |
| 50 | 75.60 $^{+0.30}_{-0.10}$ | 52.55 | 61.10 $^{+0.14}_{-0.11}$ | 23.90 $^{+0.3}_{-0.1}$ |

PCB-Layout: Kat1kGMA

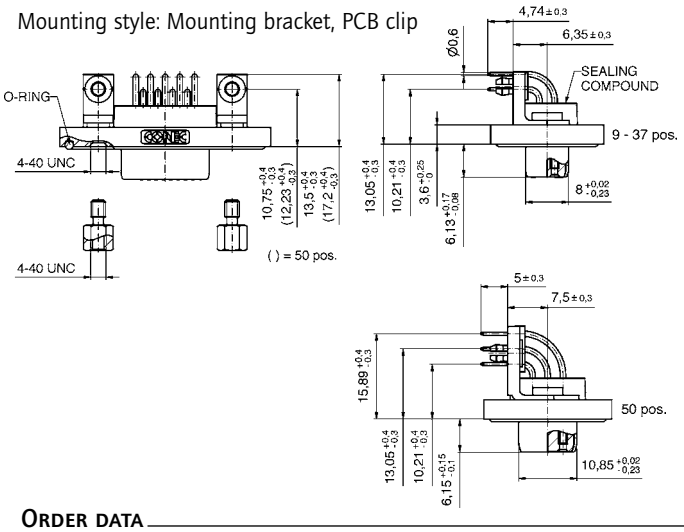
### Plug connector



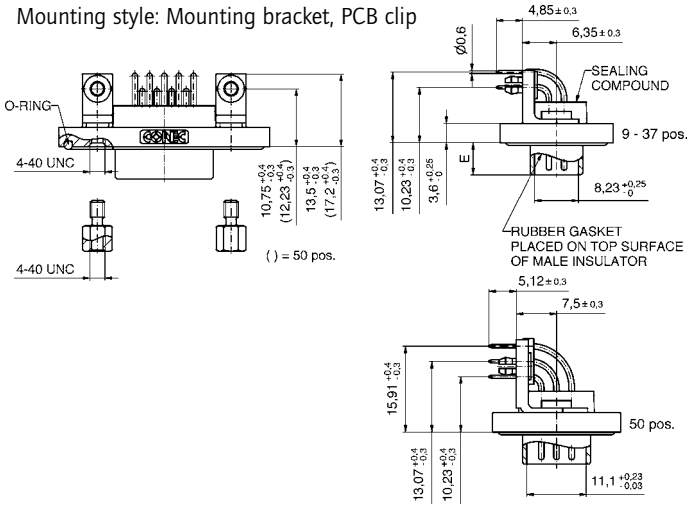

| No. of pos. | A | B1 | C | D | E |
|---|---|---|---|---|---|
| 09 | 39.4 $^{+0.30}_{-0.00}$ | 16.81 $^{+0.23}_{-0.02}$ | 25.00 $^{+0.12}_{-0.13}$ | 21.1 $^{+0.3}_{-0}$ | 6.00 $^{+0.12}_{-0.18}$ |
| 15 | 47.7 $^{+0.30}_{-0.00}$ | 25.14 $^{+0.23}_{-0.02}$ | 33.32 $^{+0.13}_{-0.12}$ | 21.1 $^{+0.3}_{-0}$ | 6.00 $^{+0.12}_{-0.18}$ |
| 25 | 61.4 $^{+0.30}_{-0.00}$ | 38.86 $^{+0.23}_{-0.02}$ | 47.04 $\pm 0.13$ | 21.1 $^{+0.3}_{-0}$ | 5.99 $^{+0.0}_{-0.3}$ |
| 37 | 78.0 $^{+0.30}_{-0.01}$ | 55.32 $^{+0.23}_{-0.02}$ | 63.50 $\pm 0.13$ | 21.1 $^{+0.3}_{-0}$ | 5.99 $^{+0.0}_{-0.3}$ |
| 50 | 75.6 $^{+0.30}_{-0.10}$ | 52.80 $^{+0.13}_{-0.12}$ | 61.10 $^{+0.14}_{-0.11}$ | 23.9 $^{+0.3}_{-0.1}$ | 5.99 $^{+0.0}_{-0.3}$ |

PCB-Layout: Kat1kGNA

Mounting style: Mounting bracket, PCB clip




Mounting style: Mounting bracket, PCB clip




### Order data

**Socket connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Mounting bracket/PCB clip | 15-000773 |
| 15 | Mounting bracket/PCB clip | 15-000783 |
| 25 | Mounting bracket/PCB clip | 15-000793 |
| 37 | Mounting bracket/PCB clip | 15-000803 |
| 50 | Mounting bracket/PCB clip | 15-002143 |

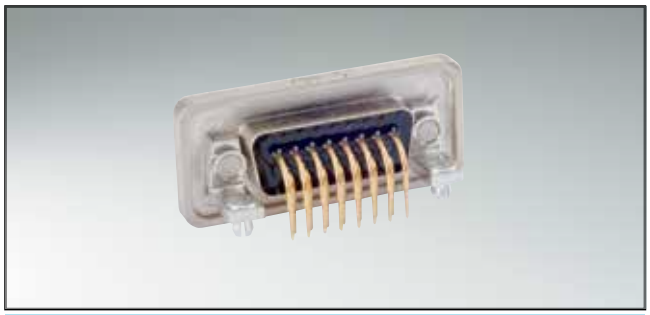
**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Mounting bracket/PCB clip | 15-000733 |
| 15 | Mounting bracket/PCB clip | 15-000743 |
| 25 | Mounting bracket/PCB clip | 15-000753 |
| 37 | Mounting bracket/PCB clip | 15-000763 |
| 50 | Mounting bracket/PCB clip | 15-002133 |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# IP67 D-SUB Standard Solid Body

## Solder pin – Angled – .590"/14.9 mm – Precision machined contacts – Metal bracket

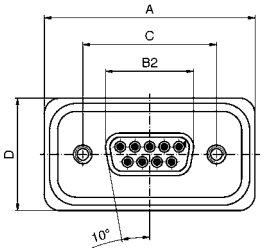


RoHS compliant - UL listed, File No. E202784

### Description

- Mounting style:
  mounting bracket, 4-40 UNC PCB clip
  including hex locking bolt
- Quality class 3 (also available in quality class 1)
- One-piece zinc die-cast nickel plated shell
- IP67 for harsh environments, pressure-proof up to 1.45 PSI
- Higher protection on request

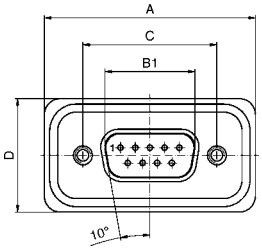
### Socket connector




| No. of pos. | A | B2 $^{+0}_{-0.25}$ | C | D |
|---|---|---|---|---|
| 09 | 39.40 $^{+0.30}_{-0.00}$ | 16.46 | 25.00 $^{+0.12}_{-0.13}$ | 21.10 $^{+0.3}_{-0}$ |
| 15 | 47.70 $^{+0.30}_{-0.00}$ | 24.79 | 33.32 $^{+0.13}_{-0.12}$ | 21.10 $^{+0.3}_{-0}$ |
| 25 | 61.40 $^{+0.30}_{-0.00}$ | 38.50 | 47.04 $\pm 0.13$ | 21.10 $^{+0.3}_{-0}$ |
| 37 | 78.00 $^{+0.30}_{-0.00}$ | 54.96 | 63.50 $\pm 0.13$ | 21.10 $^{+0.3}_{-0}$ |
| 50 | 75.60 $^{+0.30}_{-0.10}$ | 52.55 | 61.10 $^{+0.14}_{-0.11}$ | 23.90 $^{+0.3}_{-0.1}$ |

PCB-Layout: Kat1kGOA

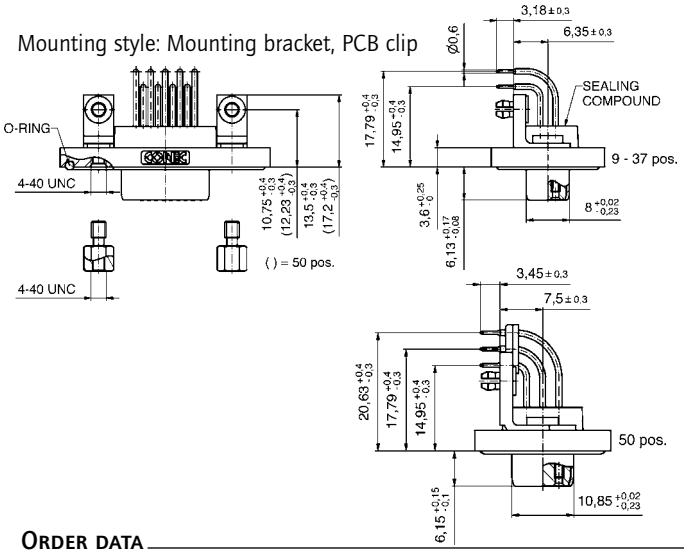
### Plug connector



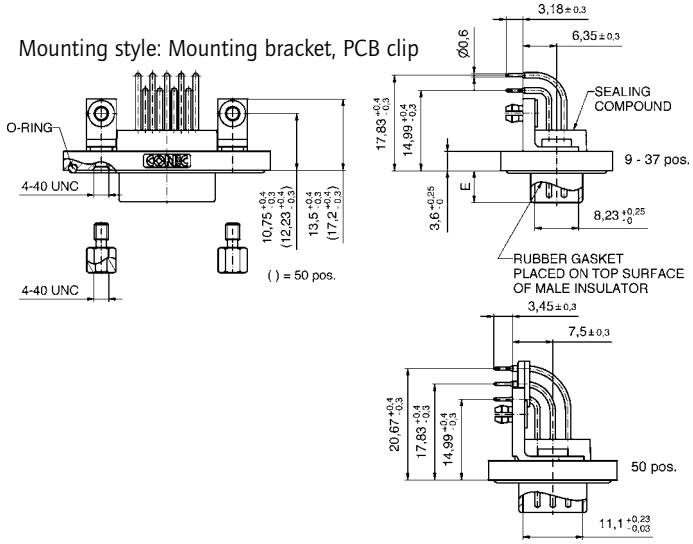

| No. of pos. | A | B1 | C | D | E |
|---|---|---|---|---|---|
| 09 | 39.4 $^{+0.30}_{-0.00}$ | 16.81 $^{+0.23}_{-0.02}$ | 25.00 $^{+0.12}_{-0.13}$ | 21.1 $^{+0.3}_{-0}$ | 6.00 $^{+0.12}_{-0.18}$ |
| 15 | 47.7 $^{+0.30}_{-0.00}$ | 25.14 $^{+0.23}_{-0.02}$ | 33.32 $^{+0.13}_{-0.12}$ | 21.1 $^{+0.3}_{-0}$ | 6.00 $^{+0.12}_{-0.18}$ |
| 25 | 61.4 $^{+0.30}_{-0.00}$ | 38.86 $^{+0.23}_{-0.02}$ | 47.04 $\pm 0.13$ | 21.1 $^{+0.3}_{-0}$ | 5.99 $^{+0}_{-0.3}$ |
| 37 | 78.0 $^{+0.30}_{-0.01}$ | 55.32 $^{+0.23}_{-0.02}$ | 63.50 $\pm 0.13$ | 21.1 $^{+0.3}_{-0}$ | 5.99 $^{+0}_{-0.3}$ |
| 50 | 75.6 $^{+0.30}_{-0.10}$ | 52.80 $^{+0.13}_{-0.12}$ | 61.10 $^{+0.14}_{-0.11}$ | 23.9 $^{+0.3}_{-0.1}$ | 5.99 $^{+0}_{-0.3}$ |

PCB-Layout: Kat1kGPA

Mounting style: Mounting bracket, PCB clip




Mounting style: Mounting bracket, PCB clip




### Order data

**Socket connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Mounting bracket/PCB clip | 15-000853 |
| 15 | Mounting bracket/PCB clip | 15-000863 |
| 25 | Mounting bracket/PCB clip | 15-000873 |
| 37 | Mounting bracket/PCB clip | 15-000883 |
| 50 | Mounting bracket/PCB clip | 15-002163 |

**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Mounting bracket/PCB clip | 15-000813 |
| 15 | Mounting bracket/PCB clip | 15-000823 |
| 25 | Mounting bracket/PCB clip | 15-000833 |
| 37 | Mounting bracket/PCB clip | 15-000843 |
| 50 | Mounting bracket/PCB clip | 15-002153 |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# IP67 D-SUB High Density Solid Body

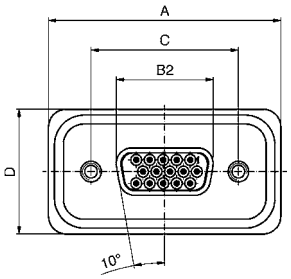
## Solder cup – Precision machined contacts – For wire size AWG 22

RoHS compliant - UL listed, File No. E202784

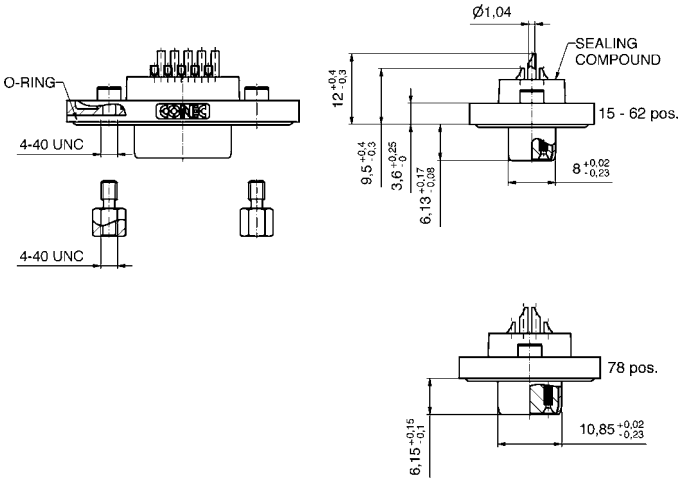
### Description

- Suitable for wire size **AWG 22**
- Mounting style:
  4-40 UNC threaded insert including hex locking bolt
- Quality class 3 (also available in quality class 1)
- One-piece zinc die-cast nickel plated shell
- IP67 for harsh environments, pressure-proof up to 1.45 PSI
- Higher protection on request

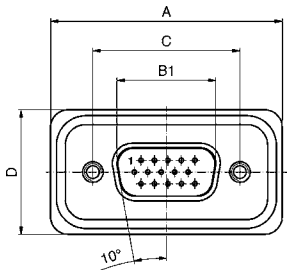
### Socket connector



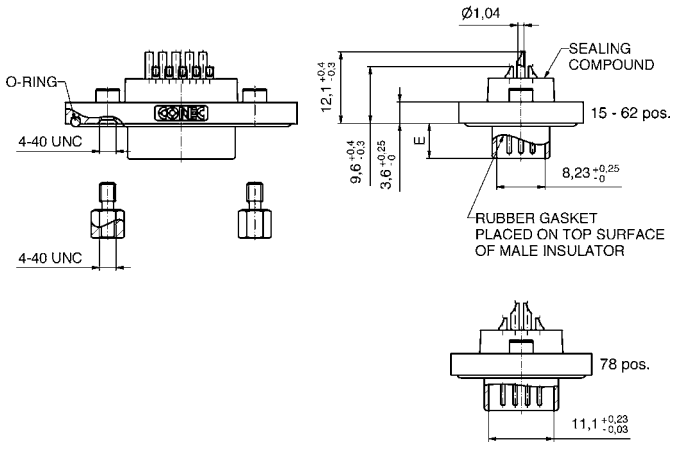

| No. of pos. | A | B2 $^{+0}_{-0.25}$ | C | D |
|---|---|---|---|---|
| 15 | $39.40^{+0.30}_{-0.00}$ | 16.46 | $25.00^{+0.12}_{-0.13}$ | $21.10^{+0.3}_{-0}$ |
| 26 | $47.70^{+0.30}_{-0.00}$ | 24.79 | $33.32^{+0.13}_{-0.12}$ | $21.10^{+0.3}_{-0}$ |
| 44 | $61.40^{+0.30}_{-0.00}$ | 38.50 | $47.04^{\pm 0.13}$ | $21.10^{+0.3}_{-0}$ |
| 62 | $78.00^{+0.30}_{-0.00}$ | 54.96 | $63.50^{\pm 0.13}$ | $21.10^{+0.3}_{-0}$ |
| 78 | $75.60^{+0.30}_{-0.10}$ | 52.55 | $61.10^{+0.14}_{-0.11}$ | $23.90^{+0.3}_{-0.1}$ |




### Plug connector




| No. of pos. | A | B1 | C | D | E |
|---|---|---|---|---|---|
| 15 | $39.4^{+0.30}_{-0.00}$ | $16.81^{+0.23}_{-0.02}$ | $25.00^{+0.12}_{-0.13}$ | $21.1^{+0.3}_{-0}$ | $6.00^{+0.12}_{-0.18}$ |
| 26 | $47.7^{+0.30}_{-0.00}$ | $25.14^{+0.23}_{-0.02}$ | $33.32^{+0.13}_{-0.12}$ | $21.1^{+0.3}_{-0}$ | $6.00^{+0.12}_{-0.18}$ |
| 44 | $61.4^{+0.30}_{-0.00}$ | $38.86^{+0.23}_{-0.02}$ | $47.04^{\pm 0.13}$ | $21.1^{+0.3}_{-0}$ | $5.99^{+0.0}_{-0.3}$ |
| 62 | $78.0^{+0.30}_{-0.01}$ | $55.32^{+0.23}_{-0.02}$ | $63.50^{\pm 0.13}$ | $21.1^{+0.3}_{-0}$ | $5.99^{+0.0}_{-0.3}$ |
| 78 | $75.6^{+0.30}_{-0.10}$ | $52.80^{+0.13}_{-0.12}$ | $61.10^{+0.14}_{-0.11}$ | $23.9^{+0.3}_{-0.1}$ | $5.99^{+0.0}_{-0.3}$ |




### Order data

**Socket connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 15 | Threaded insert | 15-000693 |
| 26 | Threaded insert | 15-000703 |
| 44 | Threaded insert | 15-000713 |
| 62 | Threaded insert | 15-000723 |
| 78 | Threaded insert | 15-002123 |

**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 15 | Threaded insert | 15-000653 |
| 26 | Threaded insert | 15-000663 |
| 44 | Threaded insert | 15-000673 |
| 62 | Threaded insert | 15-000683 |
| 78 | Threaded insert | 15-002113 |

# IP67 D-SUB High Density Solid Body

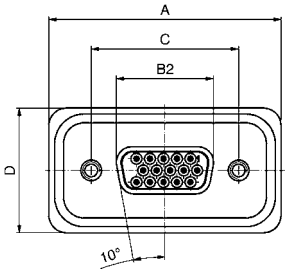
## Solder pin – Straight – Precision machined contacts

RoHS compliant - UL listed, File No. E202784

### Description

- Mounting style:
  4-40 UNC threaded rear spacer with PCB clip including hex locking bolt
- Quality class 3 (also available in quality class 1)
- One-piece zinc die-cast nickel plated shell
- IP67 for harsh environments, pressure-proof up to 1.45 PSI
- Higher protection on request

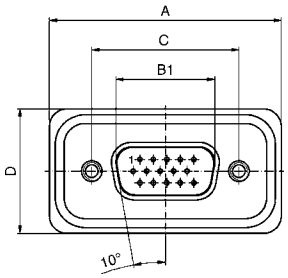
### Socket connector




| No. of pos. | A | B2 $^{+0}_{-0.25}$ | C | D |
|---|---|---|---|---|
| 15 | 39.40 $^{+0.30}_{-0.00}$ | 16.46 | 25.00 $^{+0.12}_{-0.13}$ | 21.10 $^{+0.3}_{-0}$ |
| 26 | 47.70 $^{+0.30}_{-0.00}$ | 24.79 | 33.32 $^{+0.13}_{-0.12}$ | 21.10 $^{+0.3}_{-0}$ |
| 44 | 61.40 $^{+0.30}_{-0.00}$ | 38.50 | 47.04 $\pm 0.13$ | 21.10 $^{+0.3}_{-0}$ |
| 62 | 78.00 $^{+0.30}_{-0.00}$ | 54.96 | 63.50 $\pm 0.13$ | 21.10 $^{+0.3}_{-0}$ |
| 78 | 75.60 $^{+0.30}_{-0.10}$ | 52.55 | 61.10 $^{+0.14}_{-0.11}$ | 23.90 $^{+0.3}_{-0.1}$ |

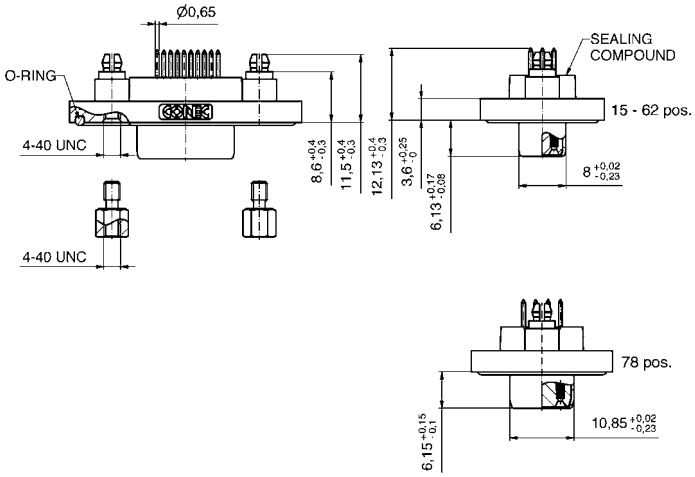
PCB-Layout: Kat1iT9A

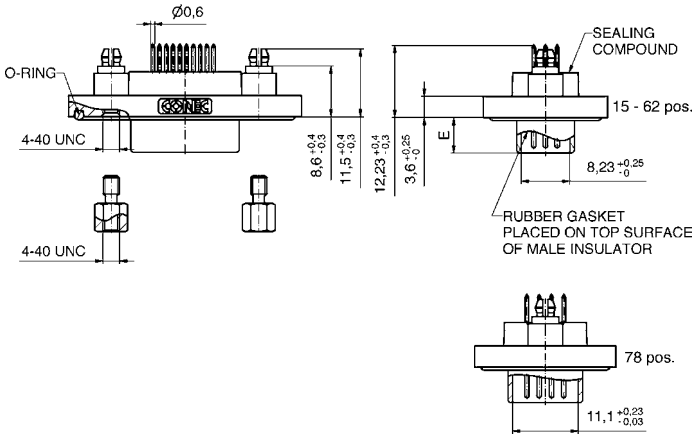
### Plug connector




| No. of pos. | A | B1 | C | D | E |
|---|---|---|---|---|---|
| 15 | 39.4 $^{+0.30}_{-0.00}$ | 16.81 $^{+0.23}_{-0.02}$ | 25.00 $^{+0.12}_{-0.13}$ | 21.1 $^{+0.3}_{-0}$ | 6.00 $^{+0.12}_{-0.18}$ |
| 26 | 47.7 $^{+0.30}_{-0.00}$ | 25.14 $^{+0.23}_{-0.02}$ | 33.32 $^{+0.13}_{-0.12}$ | 21.1 $^{+0.3}_{-0}$ | 6.00 $^{+0.12}_{-0.18}$ |
| 44 | 61.4 $^{+0.30}_{-0.00}$ | 38.86 $^{+0.23}_{-0.02}$ | 47.04 $\pm 0.13$ | 21.1 $^{+0.3}_{-0}$ | 5.99 $^{+0}_{-0.3}$ |
| 62 | 78.0 $^{+0.30}_{-0.01}$ | 55.32 $^{+0.23}_{-0.02}$ | 63.50 $\pm 0.13$ | 21.1 $^{+0.3}_{-0}$ | 5.99 $^{+0}_{-0.3}$ |
| 78 | 75.6 $^{+0.30}_{-0.10}$ | 52.80 $^{+0.13}_{-0.12}$ | 61.10 $^{+0.14}_{-0.11}$ | 23.9 $^{+0.3}_{-0.1}$ | 5.99 $^{+0}_{-0.3}$ |

PCB-Layout: Kat1iUOA




### Order data

**Socket connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 15 | Threaded rear spacer PCB clip | 15-000533 |
| 26 | Threaded rear spacer PCB clip | 15-000543 |
| 44 | Threaded rear spacer PCB clip | 15-000553 |
| 62 | Threaded rear spacer PCB clip | 15-000563 |
| 78 | Threaded rear spacer PCB clip | 15-002183 |

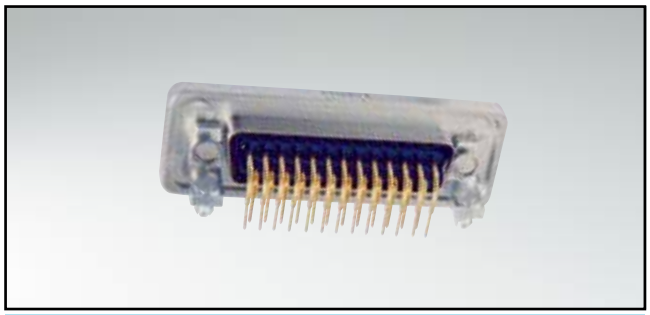
**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 15 | Threaded rear spacer PCB clip | 15-000493 |
| 26 | Threaded rear spacer PCB clip | 15-000503 |
| 44 | Threaded rear spacer PCB clip | 15-000513 |
| 62 | Threaded rear spacer PCB clip | 15-000523 |
| 78 | Threaded rear spacer PCB clip | 15-002073 |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# IP67 D-SUB High Density Solid Body

## Solder pin – Angled – .362"/9,2 mm – Precision machined contacts – Metal bracket

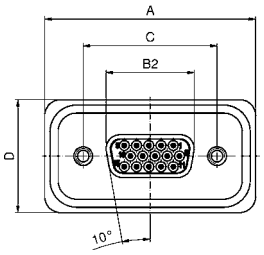


RoHS compliant - UL listed, File No. E202784

### Description

- Mounting style:
  Mounting bracket, 4-40 UNC PCB clip
  including hex locking bolt
- Quality class 3 (also available in quality class 1)
- One-piece zinc die-cast nickel plated shell
- IP67 for harsh environments, pressure-proof up to 1.45 PSI
- Higher protection on request

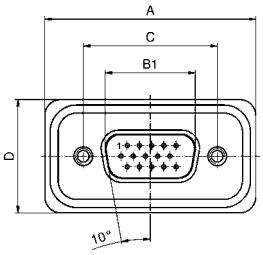
### Socket connector




| No. of pos. | A | B2 $^{+0}_{-0.25}$ | C | D |
|---|---|---|---|---|
| 15 | 39.40 $^{+0.30}_{-0.00}$ | 16.46 | 25.00 $^{+0.12}_{-0.13}$ | 21.10 $^{+0.3}_{-0}$ |
| 26 | 47.70 $^{+0.30}_{-0.00}$ | 24.79 | 33.32 $^{+0.13}_{-0.12}$ | 21.10 $^{+0.3}_{-0}$ |
| 44 | 61.40 $^{+0.30}_{-0.00}$ | 38.50 | 47.04 $\pm 0.13$ | 21.10 $^{+0.3}_{-0}$ |
| 62 | 78.00 $^{+0.30}_{-0.00}$ | 54.96 | 63.50 $\pm 0.13$ | 21.10 $^{+0.3}_{-0}$ |
| 78 | 75.60 $^{+0.30}_{-0.10}$ | 52.55 | 61.10 $^{+0.14}_{-0.11}$ | 23.90 $^{+0.3}_{-0.1}$ |

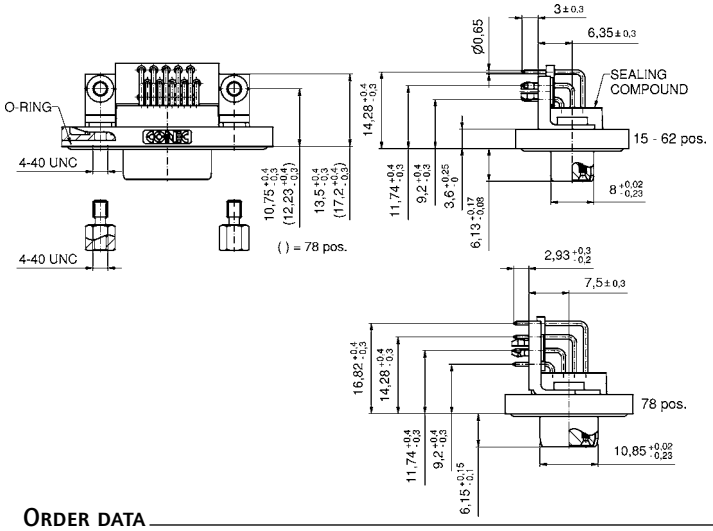
PCB-Layout: Kat1kHRA

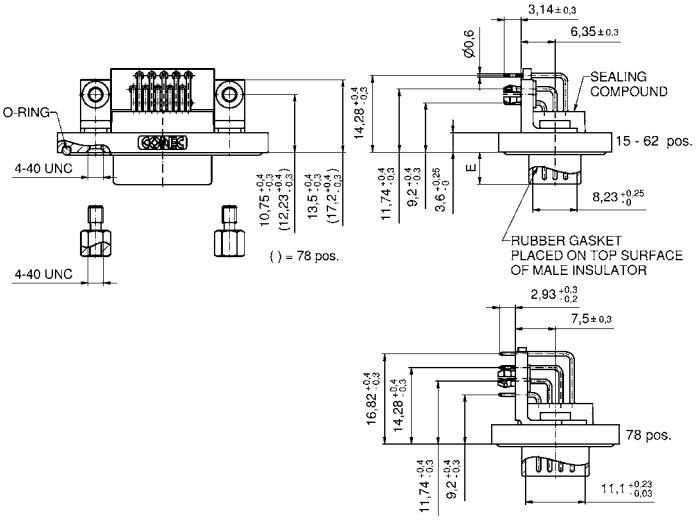
### Plug connector




| No. of pos. | A | B1 | C | D | E |
|---|---|---|---|---|---|
| 15 | 39.4 $^{+0.30}_{-0.00}$ | 16.81 $^{+0.23}_{-0.02}$ | 25.00 $^{+0.12}_{-0.13}$ | 21.1 $^{+0.3}_{-0}$ | 6.00 $^{+0.12}_{-0.18}$ |
| 26 | 47.7 $^{+0.30}_{-0.00}$ | 25.14 $^{+0.23}_{-0.02}$ | 33.32 $^{+0.13}_{-0.12}$ | 21.1 $^{+0.3}_{-0}$ | 6.00 $^{+0.12}_{-0.18}$ |
| 44 | 61.4 $^{+0.30}_{-0.00}$ | 38.86 $^{+0.23}_{-0.02}$ | 47.04 $\pm 0.13$ | 21.1 $^{+0.3}_{-0}$ | 5.99 $^{+0}_{-0.3}$ |
| 62 | 78.0 $^{+0.30}_{-0.01}$ | 55.32 $^{+0.23}_{-0.02}$ | 63.50 $\pm 0.13$ | 21.1 $^{+0.3}_{-0}$ | 5.99 $^{+0}_{-0.3}$ |
| 78 | 75.6 $^{+0.30}_{-0.10}$ | 52.80 $^{+0.13}_{-0.12}$ | 61.10 $^{+0.14}_{-0.11}$ | 23.9 $^{+0.3}_{-0.1}$ | 5.99 $^{+0}_{-0.3}$ |

PCB-Layout: Kat1kHQA




### Order data

**Socket connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 15 | Mounting bracket/PCB clip | 15-002243 |
| 26 | Mounting bracket/PCB clip | 15-002253 |
| 44 | Mounting bracket/PCB clip | 15-002263 |
| 62 | Mounting bracket/PCB clip | 15-002273 |
| 78 | Mounting bracket/PCB clip | 15-002283 |

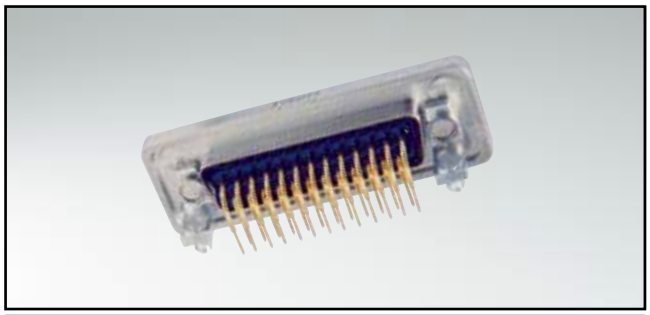
**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 15 | Mounting bracket/PCB clip | 15-002193 |
| 26 | Mounting bracket/PCB clip | 15-002203 |
| 44 | Mounting bracket/PCB clip | 15-002213 |
| 62 | Mounting bracket/PCB clip | 15-002223 |
| 78 | Mounting bracket/PCB clip | 15-002233 |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# IP67 D-SUB High Density Solid Body

## Solder pin – Angled – .484"/12,3 mm – Precision machined contacts – Metal bracket

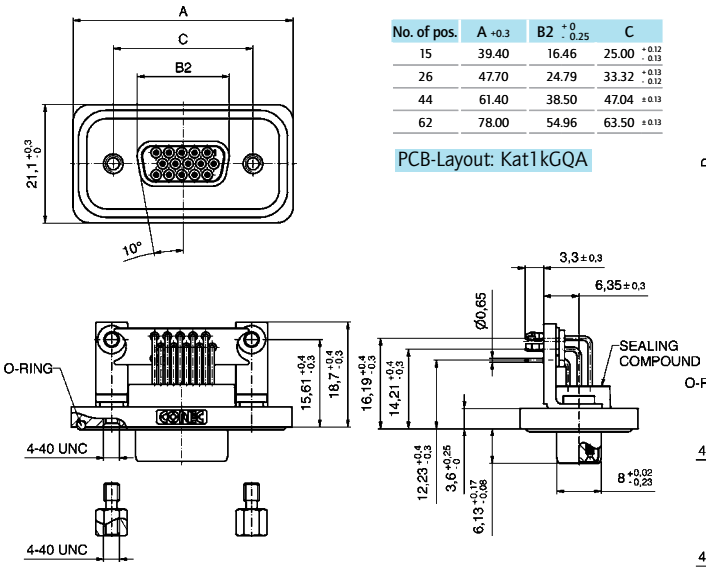


RoHS compliant - UL listed, File No. E202784

### Description

- Mounting style:
  Mounting bracket, 4-40 UNC PCB clip
  including hex locking bolt
- Quality class 3 (also available in quality class 1)
- One-piece zinc die-cast nickel plated shell
- IP67 for harsh environments, pressure-proof up to 1.45 PSI
- Higher protection on request

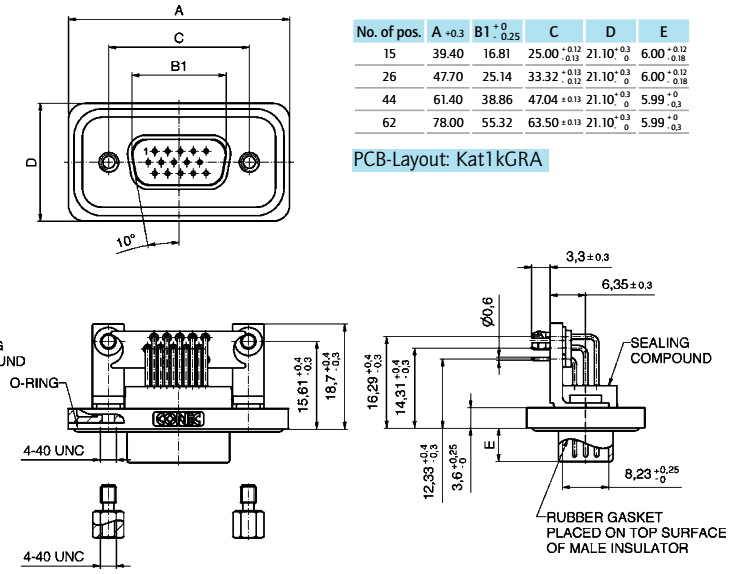
### Socket connector




| No. of pos. | A +0.3 | B2 +0 -0.25 | C |
|---|---|---|---|
| 15 | 39.40 | 16.46 | 25.00 +0.12 -0.13 |
| 26 | 47.70 | 24.79 | 33.32 +0.13 -0.12 |
| 44 | 61.40 | 38.50 | 47.04 ±0.13 |
| 62 | 78.00 | 54.96 | 63.50 ±0.13 |

PCB-Layout: Kat1kGQA

### Plug connector




| No. of pos. | A +0.3 | B1 +0 -0.25 | C | D | E |
|---|---|---|---|---|---|
| 15 | 39.40 | 16.81 | 25.00 +0.12 -0.13 | 21.10 +0.3 0 | 6.00 +0.12 -0.18 |
| 26 | 47.70 | 25.14 | 33.32 +0.13 -0.12 | 21.10 +0.3 0 | 6.00 +0.12 -0.18 |
| 44 | 61.40 | 38.86 | 47.04 ±0.13 | 21.10 +0.3 0 | 5.99 +0 -0.3 |
| 62 | 78.00 | 55.32 | 63.50 ±0.13 | 21.10 +0.3 0 | 5.99 +0 -0.3 |

PCB-Layout: Kat1kGRA

### Order data

**Socket connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 15 | Mounting bracket/PCB clip | 15-000933 |
| 26 | Mounting bracket/PCB clip | 15-000943 |
| 44 | Mounting bracket/PCB clip | 15-000953 |
| 62 | Mounting bracket/PCB clip | 15-000963 |

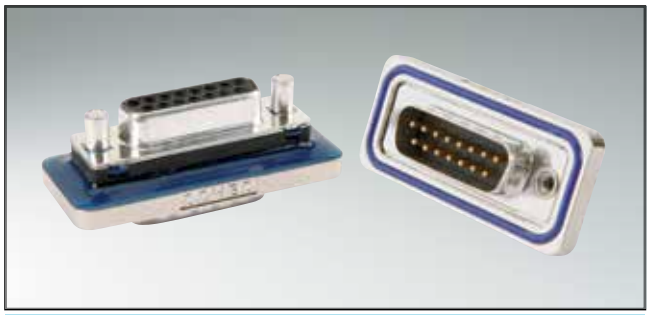
**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 15 | Mounting bracket/PCB clip | 15-000893 |
| 26 | Mounting bracket/PCB clip | 15-000903 |
| 44 | Mounting bracket/PCB clip | 15-000913 |
| 62 | Mounting bracket/PCB clip | 15-000923 |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# IP67 D-SUB Standard

## Interface adapter – Connector Saver

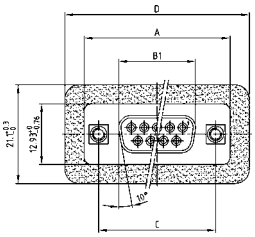


RoHS compliant - UL listed, File No. E202784

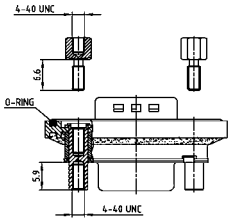
### Description

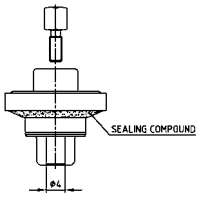
- Plug to socket adapter
- Mounting style:
  4-40 UNC threaded rear spacer including hex locking bolt
- Precision machined contacts
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated
- Nickel plated die-cast frame

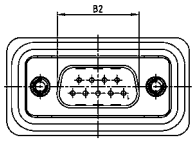
### Product drawing




| No. of Pos. | A -0.76 | B1 -0.25 | B2 +0.25 | C | D +0.3 |
|---|---|---|---|---|---|
| 9 | 31.19 | 16.46 | 16.79 | 25.00 +0.12 -0.13 | 39.40 |
| 15 | 39.52 | 24.79 | 25.12 | 33.30 +0.15 -0.10 | 47.70 |
| 25 | 53.42 | 38.50 | 38.84 | 47.04 ±0.13 | 61.40 |
| 37 | 69.70 | 54.96 | 55.30 | 63.50 ±0.13 | 77.90 |




### Order data

| Adapter Plug connector - Socket connector | | |
|---|---|---|
| **No. of pos.** | **Mounting style 4-40 UNC** | **Part Number** |
| 09 | Threaded rear spacer | 6STD09AAA99B90X |
| 15 | Threaded rear spacer | 6STD15AAA99B90X |
| 25 | Threaded rear spacer | 6STD25AAA99B90X |
| 37 | Threaded rear spacer | 6STD37AAA99B90X |

# Conversion table

| µm 1/1000 mm | µinch 1/1000 inch |
|---|---|
| 0,10 | 4 |
| 0,20 | 8 |
| 0,25 | 10 |
| 0,30 | 12 |
| 0,50 | 20 |
| 0,70 | 28 |
| 0,75 | 30 |
| 0,80 | 32 |
| 1,00 | 39 |
| 1,27 | 50 |
| 2,00 | 79 |
| 2,50 | 98 |
| 3,00 | 118 |
| 4,00 | 157 |
| 5,00 | 197 |

| mm | inch |
|---|---|
| 0,10 | .004 |
| 0,20 | .008 |
| 0,25 | .012 |
| 0,35 | .014 |
| 0,40 | .016 |
| 0,45 | .018 |
| 0,50 | .020 |
| 0,55 | .022 |
| 0,60 | .024 |
| 0,64 | .025 |
| 0,65 | .026 |
| 0,70 | .028 |
| 0,75 | .030 |
| 0,80 | .032 |
| 0,85 | .034 |
| 0,90 | .035 |
| 1,00 | .039 |
| 1,20 | .047 |
| 1,25 | .049 |
| 1,27 | .050 |
| 1,30 | .051 |
| 1,35 | .053 |
| 1,40 | .055 |
| 1,45 | .057 |
| 1,50 | .059 |
| 1,60 | .063 |
| 1,70 | .067 |
| 1,80 | .071 |
| 1,85 | .073 |
| 1,90 | .075 |
| 2,00 | .079 |
| 2,10 | .083 |
| 2,20 | .087 |
| 2,30 | .091 |
| 2,40 | .095 |
| 2,50 | .098 |
| 2,54 | .100 |
| 2,60 | .102 |
| 2,70 | .106 |
| 2,80 | .110 |
| 2,84 | .112 |
| 2,90 | .114 |
| 3,00 | .118 |
| 3,10 | .122 |
| 3,20 | .126 |

| mm | inch |
|---|---|
| 3,30 | .130 |
| 3,40 | .134 |
| 3,50 | .138 |
| 3,60 | .142 |
| 3,70 | .146 |
| 3,80 | .150 |
| 3,81 | .150 |
| 3,90 | .154 |
| 4,00 | .158 |
| 4,10 | .161 |
| 4,20 | .165 |
| 4,30 | .169 |
| 4,50 | .177 |
| 4,70 | .185 |
| 4,90 | .193 |
| 5,00 | .197 |
| 5,08 | .200 |
| 5,10 | .201 |
| 5,20 | .205 |
| 5,30 | .209 |
| 5,40 | .213 |
| 5,50 | .217 |
| 5,60 | .220 |
| 5,70 | .224 |
| 5,80 | .228 |
| 6,00 | .236 |
| 6,10 | .240 |
| 6,40 | .252 |
| 6,50 | .256 |
| 6,60 | .260 |
| 6,70 | .264 |
| 6,80 | .268 |
| 6,90 | .272 |
| 7,00 | .276 |
| 7,10 | .280 |
| 7,20 | .283 |
| 7,40 | .291 |
| 7,50 | .295 |
| 7,60 | .299 |
| 7,62 | .300 |
| 7,70 | .303 |
| 7,80 | .307 |
| 7,98 | .314 |
| 8,00 | .315 |
| 8,18 | .318 |
| 8,20 | .323 |
| 8,30 | .327 |
| 8,40 | .331 |
| 8,50 | .335 |
| 8,60 | .339 |
| 8,90 | .350 |
| 9,00 | .354 |
| 9,10 | .358 |
| 9,20 | .362 |
| 9,30 | .366 |
| 9,40 | .370 |
| 9,50 | .374 |
| 9,60 | .378 |
| 9,70 | .382 |
| 9,90 | .390 |
| 10,00 | .395 |

| mm | inch |
|---|---|
| 10,16 | .400 |
| 10,26 | .402 |
| 10,36 | .406 |
| 10,56 | .413 |
| 10,66 | .417 |
| 10,76 | .421 |
| 11,00 | .433 |
| 11,20 | .441 |
| 11,40 | .449 |
| 11,50 | .453 |
| 11,60 | .457 |
| 11,90 | .469 |
| 12,00 | .472 |
| 12,20 | .480 |
| 12,30 | .484 |
| 12,40 | .488 |
| 12,50 | .492 |
| 12,70 | .500 |
| 12,90 | .508 |
| 13,00 | .512 |
| 13,10 | .516 |
| 13,20 | .520 |
| 13,50 | .532 |
| 13,60 | .535 |
| 13,70 | .539 |
| 13,90 | .547 |
| 14,00 | .551 |
| 14,30 | .563 |
| 14,40 | .567 |
| 14,50 | .571 |
| 14,70 | .579 |
| 14,80 | .583 |
| 14,90 | .587 |
| 14,98 | .590 |
| 15,00 | .591 |
| 15,20 | .598 |
| 15,24 | .600 |
| 15,40 | .606 |
| 15,50 | .610 |
| 15,60 | .614 |
| 15,90 | .626 |
| 16,00 | .630 |
| 16,20 | .638 |
| 16,50 | .650 |
| 16,60 | .654 |
| 16,80 | .661 |
| 17,00 | .669 |
| 17,20 | .677 |
| 17,30 | .681 |
| 17,50 | .689 |
| 17,60 | .693 |
| 17,70 | .697 |
| 17,78 | .700 |
| 17,80 | .701 |
| 17,90 | .705 |
| 18,00 | .709 |
| 18,10 | .713 |
| 18,30 | .721 |
| 18,60 | .732 |
| 19,00 | .748 |
| 19,20 | .756 |

| mm | inch |
|---|---|
| 19,50 | .768 |
| 19,70 | .776 |
| 19,80 | .780 |
| 19,90 | .783 |
| 20,00 | .787 |
| 20,10 | .791 |
| 20,30 | .799 |
| 20,32 | .800 |
| 20,50 | .807 |
| 21,00 | .827 |
| 21,10 | .831 |
| 21,70 | .854 |
| 22,00 | .866 |
| 22,10 | .870 |
| 22,20 | .874 |
| 22,30 | .878 |
| 22,40 | .882 |
| 22,50 | .886 |
| 22,60 | .890 |
| 22,80 | .898 |
| 22,86 | .900 |
| 22,90 | .902 |
| 23,00 | .906 |
| 23,10 | .909 |
| 23,30 | .917 |
| 23,50 | .925 |
| 24,00 | .945 |
| 24,30 | .957 |
| 24,60 | .969 |
| 24,90 | .980 |
| 25,00 | .984 |
| 25,10 | .998 |
| 25,40 | 1.000 |
| 25,60 | 1.008 |
| 25,90 | 1.020 |
| 26,00 | 1.024 |
| 26,30 | 1.035 |
| 26,60 | 1.047 |
| 26,70 | 1.051 |
| 27,00 | 1.063 |
| 27,20 | 1.071 |
| 27,40 | 1.079 |
| 27,50 | 1.093 |
| 27,90 | 1.098 |
| 27,94 | 1.100 |
| 28,00 | 1.102 |
| 28,20 | 1.110 |
| 28,50 | 1.122 |
| 28,70 | 1.130 |
| 29,00 | 1.142 |
| 29,20 | 1.150 |
| 29,40 | 1.158 |
| 29,50 | 1.161 |
| 29,70 | 1.169 |
| 29,90 | 1.177 |
| 30,00 | 1.181 |
| 30,20 | 1.189 |
| 30,40 | 1.197 |
| 30,48 | 1.200 |
| 30,50 | 1.201 |
| 30,80 | 1.213 |

| mm | inch |
|---|---|
| 30,90 | 1.217 |
| 31,00 | 1.220 |
| 31,20 | 1.228 |
| 31,50 | 1.240 |
| 31,70 | 1.248 |
| 32,00 | 1.260 |
| 32,20 | 1.268 |
| 32,30 | 1.272 |
| 32,50 | 1.280 |
| 32,80 | 1.291 |
| 33,00 | 1.299 |
| 33,10 | 1.303 |
| 33,30 | 1.311 |
| 33,80 | 1.331 |
| 34,00 | 1.339 |
| 34,20 | 1.346 |
| 34,40 | 1.354 |
| 35,00 | 1.378 |
| 35,40 | 1.394 |
| 35,50 | 1.398 |
| 35,56 | 1.400 |
| 35,60 | 1.402 |
| 36,00 | 1.417 |
| 36,50 | 1.437 |
| 36,60 | 1.441 |
| 36,70 | 1.445 |
| 37,00 | 1.457 |
| 37,30 | 1.469 |
| 37,50 | 1.476 |
| 37,60 | 1.480 |
| 37,70 | 1.484 |
| 37,90 | 1.492 |
| 38,00 | 1.496 |
| 38,10 | 1.500 |
| 39,00 | 1.535 |
| 39,20 | 1.543 |
| 39,30 | 1.547 |
| 39,90 | 1.571 |
| 40,00 | 1.575 |
| 40,30 | 1.587 |
| 40,40 | 1.591 |
| 40,60 | 1.598 |
| 41,00 | 1.614 |
| 41,60 | 1.638 |
| 42,70 | 1.681 |
| 43,18 | 1.700 |
| 44,20 | 1.740 |
| 44,80 | 1.764 |
| 45,80 | 1.803 |
| 46,30 | 1.823 |
| 46,70 | 1.839 |
| 47,00 | 1.850 |
| 47,20 | 1.858 |
| 47,30 | 1.862 |
| 47,50 | 1.870 |
| 47,80 | 1.882 |
| 48,00 | 1.890 |
| 48,10 | 1.894 |
| 48,26 | 1.900 |
| 48,80 | 1.921 |
| 49,10 | 1.933 |

| mm | inch |
|---|---|
| 49,50 | 1.949 |
| 49,90 | 1.965 |
| 50,10 | 1.972 |
| 50,30 | 1.980 |
| 50,50 | 1.988 |
| 50,70 | 1.996 |
| 50,80 | 2.000 |
| 51,40 | 2.024 |
| 51,50 | 2.028 |
| 52,00 | 2.047 |
| 52,30 | 2.059 |
| 52,80 | 2.079 |
| 53,00 | 2.087 |
| 53,20 | 2.095 |
| 53,80 | 2.118 |
| 54,00 | 2.126 |
| 54,20 | 2.134 |
| 54,90 | 2.161 |
| 55,00 | 2.165 |
| 55,40 | 2.181 |
| 55,70 | 2.193 |
| 56,60 | 2.228 |
| 57,40 | 2.260 |
| 57,80 | 2.276 |
| 57,90 | 2.280 |
| 58,42 | 2.300 |
| 59,00 | 2.323 |
| 59,20 | 2.331 |
| 59,80 | 2.354 |
| 59,90 | 2.358 |
| 60,00 | 2.362 |
| 60,96 | 2.400 |
| 61,10 | 2.406 |
| 62,00 | 2.441 |
| 63,00 | 2.480 |
| 63,50 | 2.500 |
| 64,00 | 2.520 |
| 65,00 | 2.560 |
| 67,00 | 2.638 |
| 68,00 | 2.677 |
| 69,00 | 2.717 |
| 70,00 | 2.756 |
| 71,00 | 2.795 |
| 74,00 | 2.913 |
| 75,00 | 2.953 |
| 76,20 | 3.000 |
| 77,00 | 3.032 |
| 78,74 | 3.100 |
| 80,00 | 3.150 |
| 81,28 | 3.200 |
| 84,00 | 3.307 |
| 85,00 | 3.346 |
| 86,36 | 3.400 |
| 88,90 | 3.500 |
| 90,00 | 3.543 |
| 91,44 | 3.600 |
| 94,00 | 3.701 |
| 95,00 | 3.740 |
| 100,00 | 3.937 |
| 110,00 | 4.331 |
| 120,00 | 4.724 |

# IP-Code figure definitions

| 1. Code figure | Definition | Remark |
|---|---|---|
| 0 | Not protected | |
| 1 | Protected against access to hazardous parts by the back of the hand.<br>Protected against fixed foreign objects Ø ≥ 1.969"/50 mm. | |
| 2 | Protected against access to hazardous parts with a finger.<br>Protected against fixed foreign objects Ø ≥ .492"/12.5 mm. | |
| 3 | Protected against access to hazardous parts with a tool.<br>Protected against fixed foreign objects Ø ≥ .098"/2.5 mm. | |
| 4 | Protected against access to hazardous parts with a wire.<br>Protected against fixed foreign objects Ø ≥ .039"/1 mm. | |
| 5 | Protected against access to hazardous parts with a wire.<br>Dust protected. | Ingress of dust is not completely blocked. But dust may not penetrate to the extent that satisfactory operation of the device or safety is impaired. |
| 6 | Protected against access to hazardous parts with a wire.<br>Dustproof. No ingress of dust. | |

| 2. Code figure | Definition | Remark |
|---|---|---|
| 0 | Not protected | |
| 1 | Protected against dropper. | |
| 2 | Protected against dropper when the shell is tipped as much as 15°. | |
| 3 | Protected against spray water | Up to 60° of either side of the vertical, such spray water shall have no harmful effects. |
| 4 | Protected against splash water | On the shell from all directions, no harmful effects shall be incurred. |
| 5 | Protected against jets of water. | |
| 6 | Protected against strong jets of water. | |
| 7 | Protected against the effects of temporary submersion in water. | Water may not ingress in a volume that would cause harmful effects when the shell is submerged in water for 30 min at a depth of 1 m. |
| 8 | Protected against the effects of continuous submersion in water. | Water may not ingress in a volume that would cause harmful effects when the shell is continuously submerged in water under conditions agreed between manufacturer and user.<br>However, these conditions must be more stringent than those described under code figure 7. |
| 9k | Protected against water from high-pressure or steam cleaning. | |

**Explanation to spray water protected (IP) systems and their environment.**

This system, described in IEC 60529, was developed to represent standard values for respective protection:

a) Contact with, and ingress of, fixed foreign objects
b) The ingress of liquids to which the inside is to be exposed.

The first digit describes the level of protection for life, contacting objects and the intrusion of foreign bodies. The second digit describes the level of protection against the ingress of liquids. The larger the first and second digits are, the greater afforded protection is, e.g. IP55 must also meet the requirements of all lower protection levels, such as IP22, IP23, IP34 and IP54.

# Technical Data

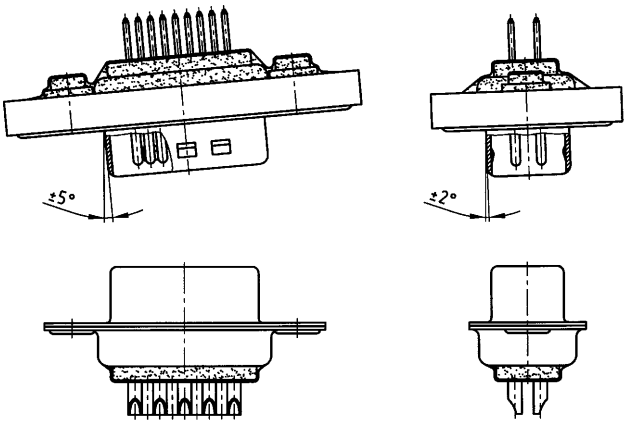
| Materials | D-Subminiature, Standard<br>9, 15, 25, 37 and 50 position | D-Subminiature, High Density<br>15, 26, 44, 62 and 78 position |
|---|---|---|
| Insulator | Polyester GF UL94 V-0 | |
| Contacts | CU alloy | |
| Contact plating | Gold plated over nickel | |
| Shell | Brass tin plated (Standard)<br>Stainless steel on request | |
| **Mechanical and electrical characteristics** | | |
| Test voltage U eff/NN | 1000 V | |
| Working voltage | 125 V ≈ | 60 V ≈ |
| | depending on isolation coordination (refer to DIN VDE 0110/IEC 664-1) | |
| Current rating | 7.5 A (UL) / 5 A (CSA,VDE) | 3 A (UL,VDE) / 2.5 A (CSA) |
| Contact resistance | max. 10 mΩ prior to stressing, Δ R max. 10 mΩ after stressing<br>per DIN 41652, Part 2 | |
| Insulation resistance | ≥ 5 GΩ | |
| Clearance and creepage distance | contact – contact ≥ .04" / 1.0 mm<br>contact – earth ≥ .047"/1.2 mm | ≥ .024"/0.6 mm |
| Operating temperature | – 25 °C to + 105 °C | |
| Mating and unmating forces | 9 pos. ≤ 30 N<br>15 pos. ≤ 50 N<br>25 pos. ≤ 83 N<br>37 pos. ≤ 123 N<br>50 pos. ≤ 167 N | 15 pos. ≤ 50 N<br>26 pos. ≤ 84 N<br>44 pos. ≤ 120 N<br>62 pos. ≤ 170 N<br>78 pos. ≤ 200 N |
| Quality class | A = Quality class 3 = 50 mating cycles<br>B = Quality class 2 = 200 mating cycles<br>C = Quality class 1 = 500 mating cycles | |

| Recommended wave-solder parameters | Preheating | | Solder terminal dipping parameters | |
|---|---|---|---|---|
| | max. Temperature | Duration | max. Solder bath Temperature | max. Terminal Immersion Time |
| D-SUB Water Resistant | 120°C | 120s | 240°C | 5s |
| D-SUB Solid Body Type Water Resistant | 150°C | 180s | 265°C | 8s |

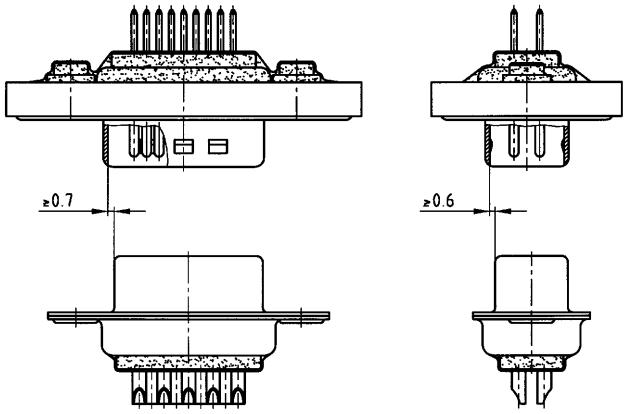
Technical specifications are subject to change without notice.

# Mating conditions

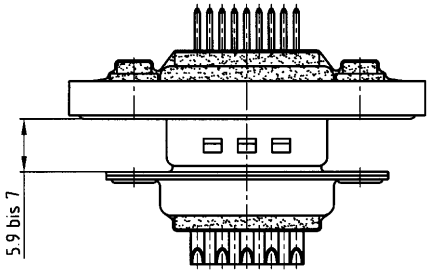
Float mount tolerance guide




Rigid mount tolerance guide

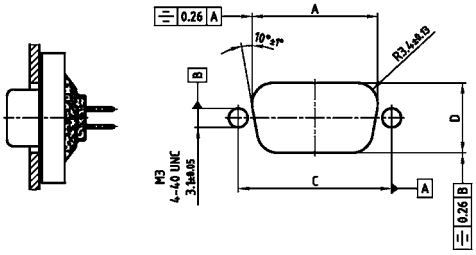



Rigid mount vertical to tolerance guide

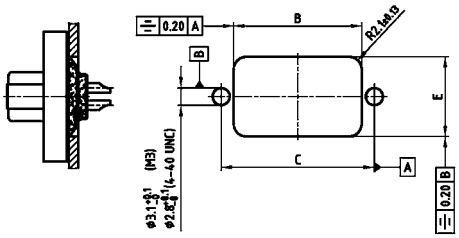



## Panel cut-out

Rear panel mounting IP67 D-SUB Connectors




Front panel mounting IP67 D-SUB Connectors

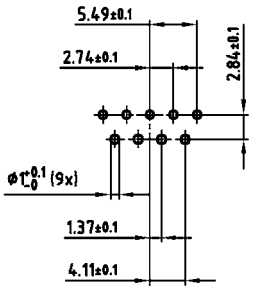



| Shell size | A ±0.1 | B ±0.1 | C ±0.1 | D ±0.1 | E ±0.1 |
|---|---|---|---|---|---|
| 1 | 20.50 | 20.90 | 25.00 | 11.40 | 13.00 |
| 2 | 28.80 | 29.20 | 33.30 | 11.40 | 13.00 |
| 3 | 42.50 | 42.90 | 47.04 | 11.40 | 13.00 |
| 4 | 59.10 | 59.40 | 63.50 | 11.40 | 13.00 |
| 5 | 56.30 | 57.00 | 61.10 | 14.10 | 15.80 |

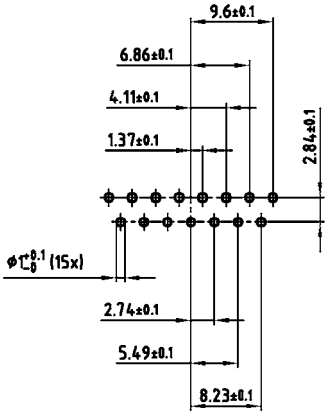
# PCB layout D-SUB Standard

Solder pin, straight – without rear spacer PCB clip – Plug and Socket connector

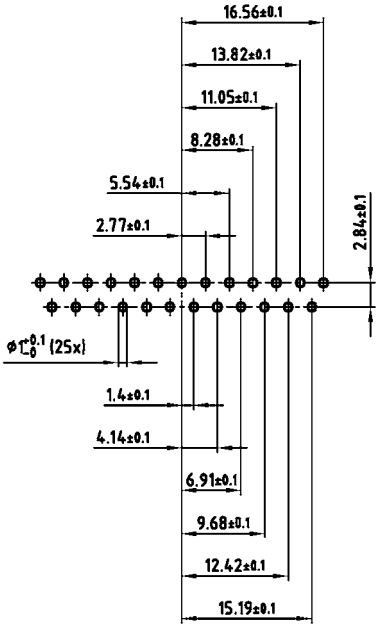
9 pos.



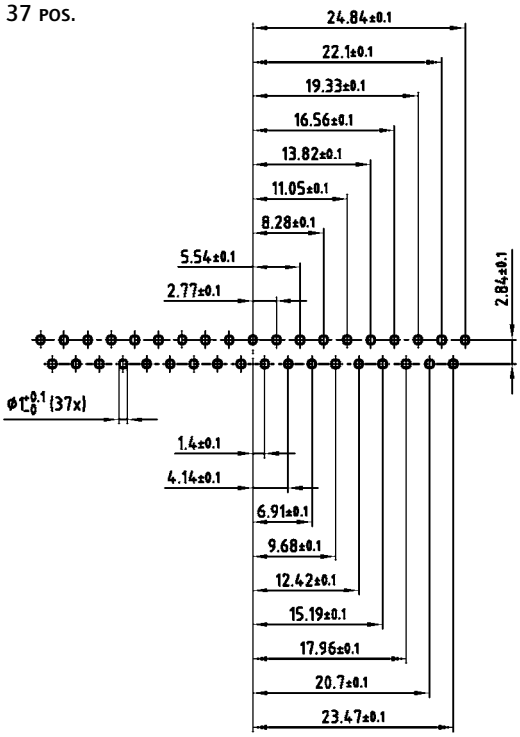

15 pos.



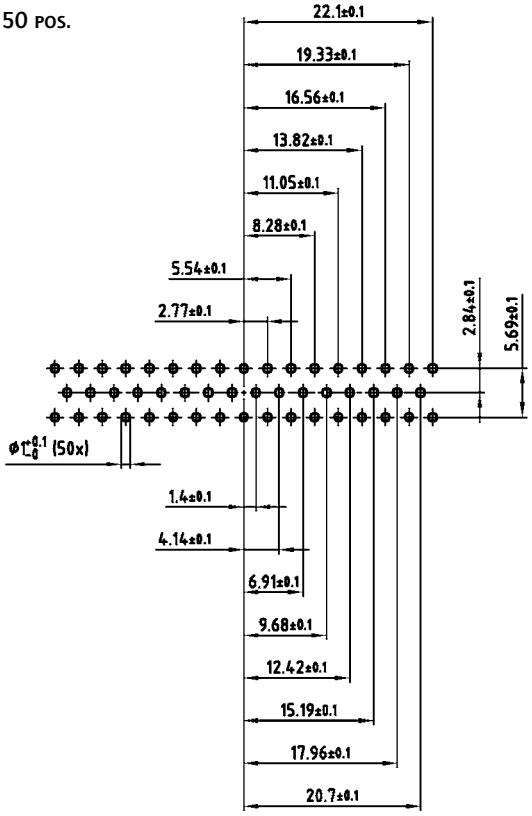

25 pos.




37 pos.




50 pos.

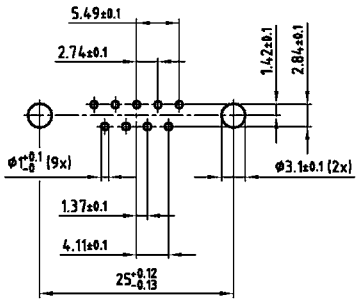



PCB layout Kat1kFVA (View: component side)

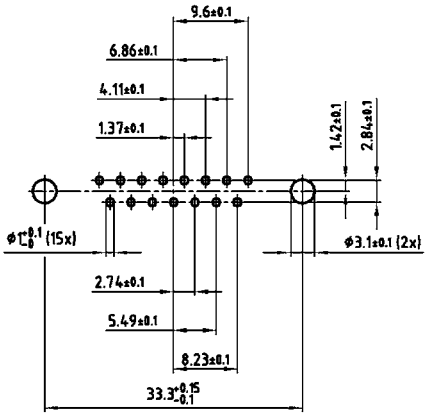
# PCB layout D-SUB Standard

## Solder pin, straight – With rear spacer PCB clip – Plug and Socket connector

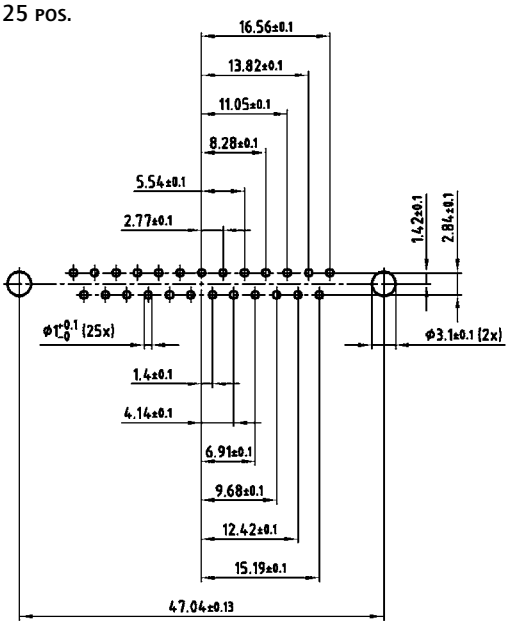
9 pos.



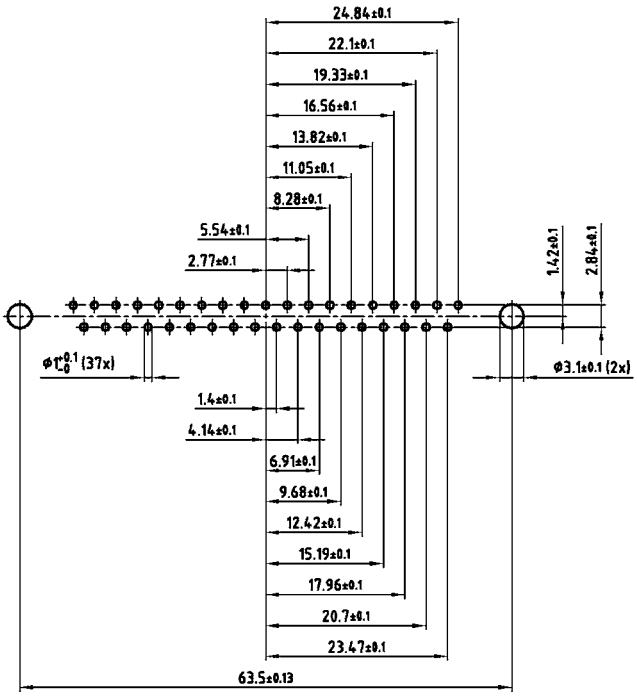

15 pos.



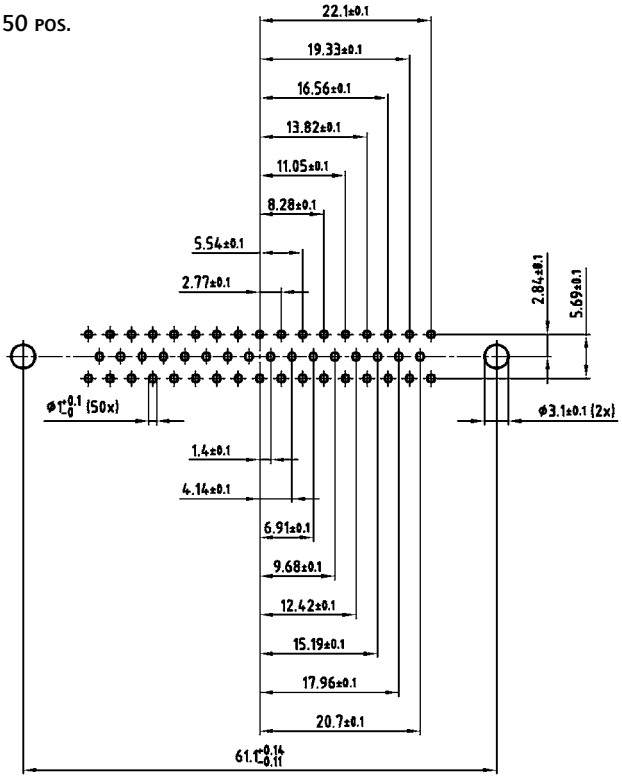

25 pos.




37 pos.




50 pos.

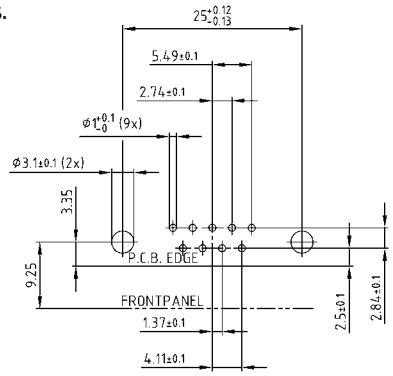



PCB layout Kat1kFUA (View: component side)

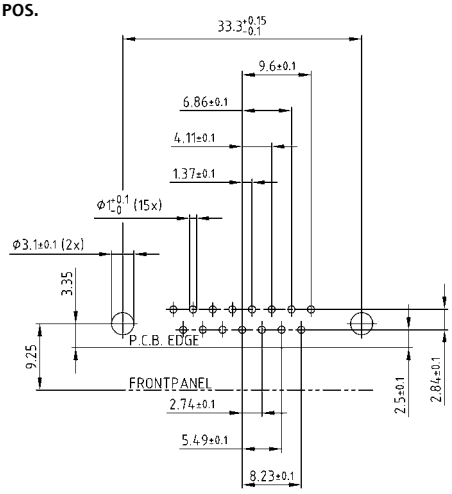
# PCB layout D-SUB Standard

## Solder pin, angled, .189"/4.8 mm – Plug and Socket connector

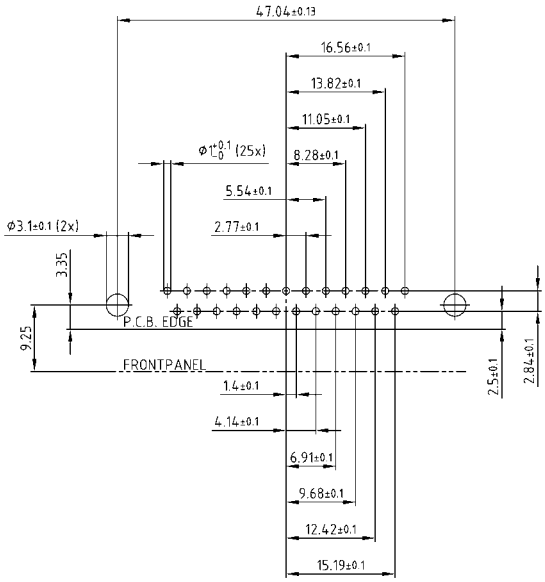
9 pos.



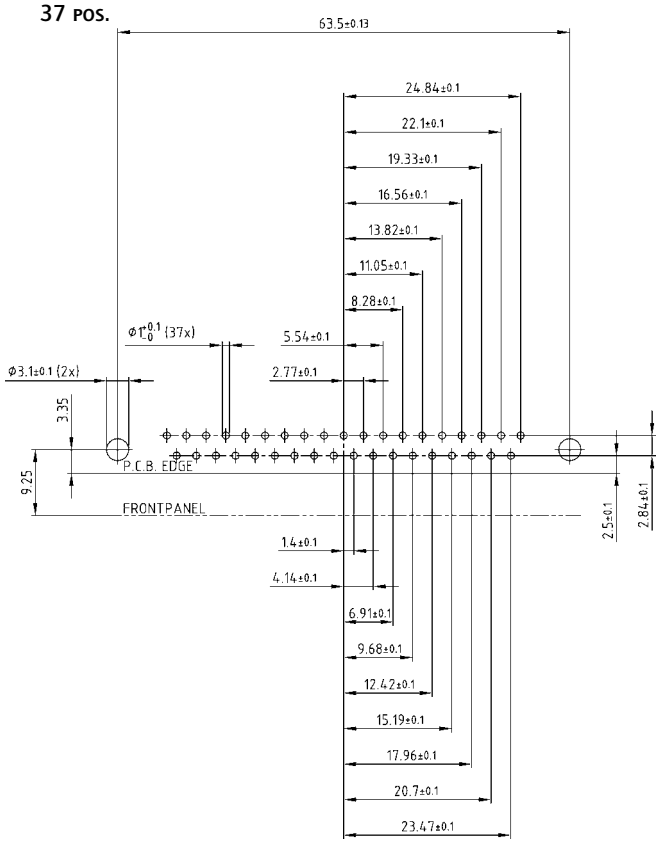

15 pos.



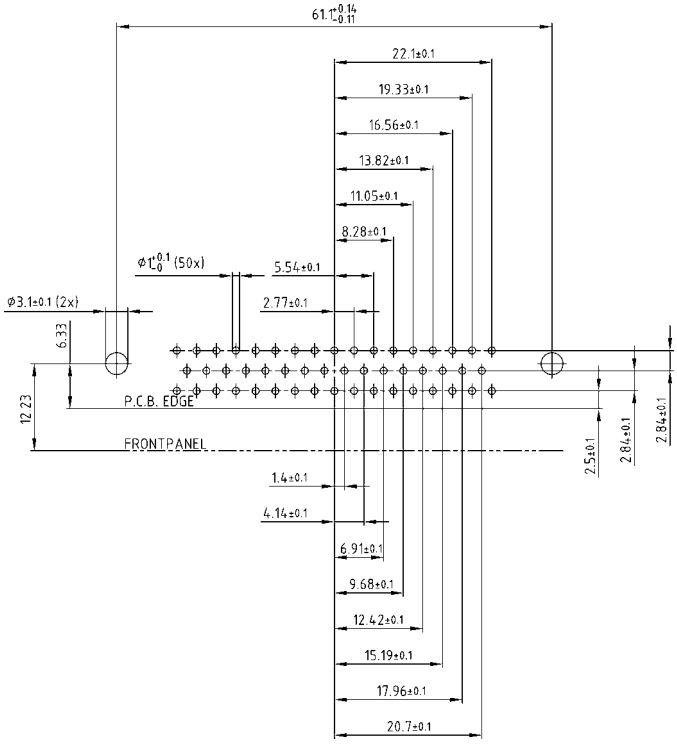

25 pos.




37 pos.




50 pos.

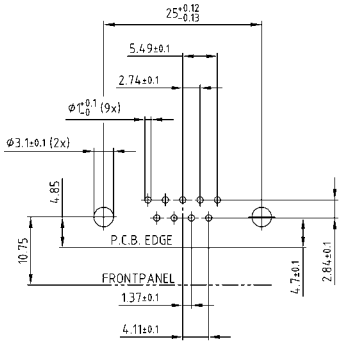



PCB layout Kat1kGSA (View: component side)

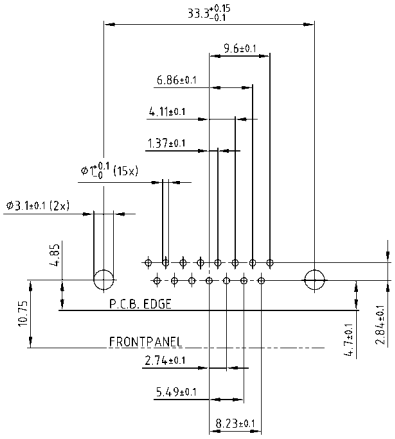
# PCB layout D-SUB Standard

## Solder pin, angled, .276" / 7.0 mm – Plug and Socket connector

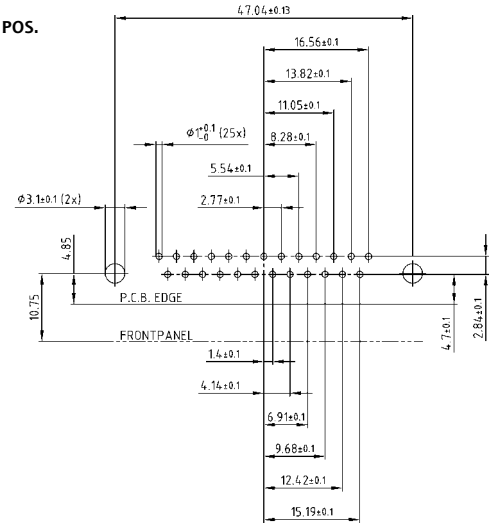
**9 pos.**



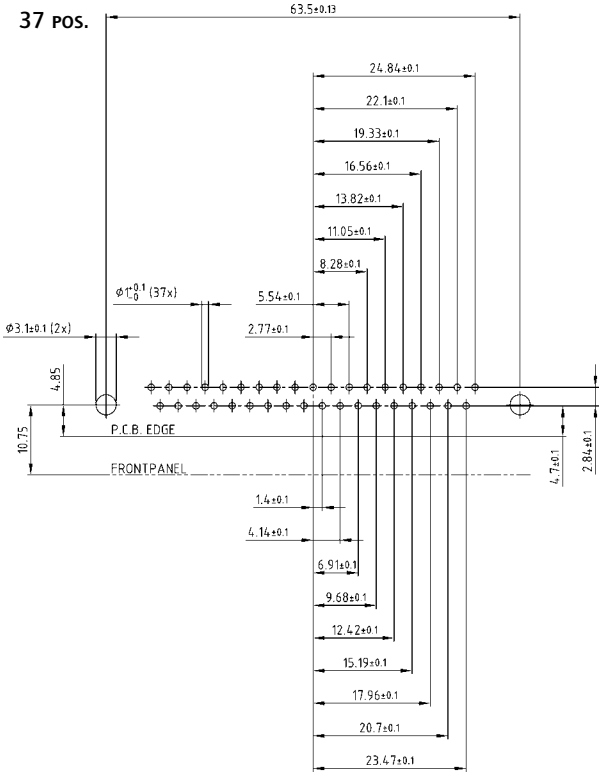

**15 pos.**



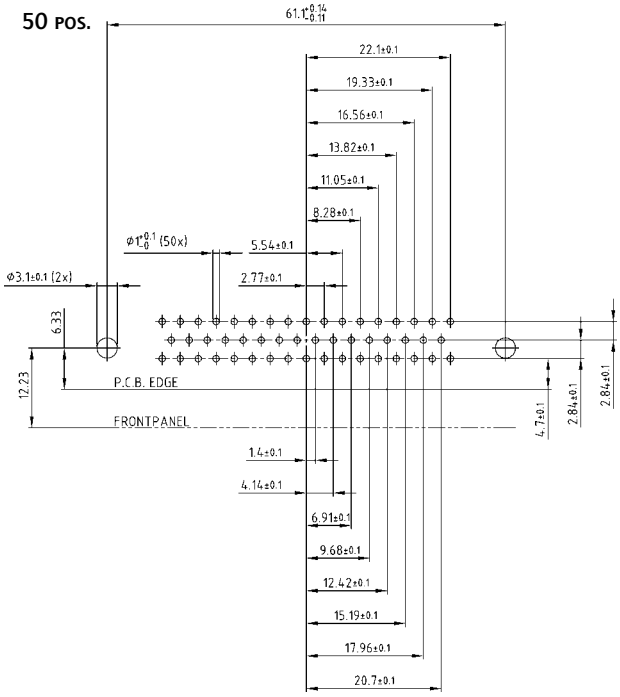

**25 pos.**




**37 pos.**




**50 pos.**

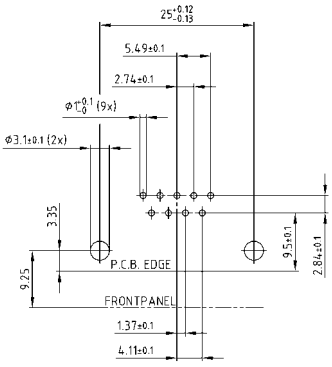



PCB layout Kat1kGTA (View: component side)

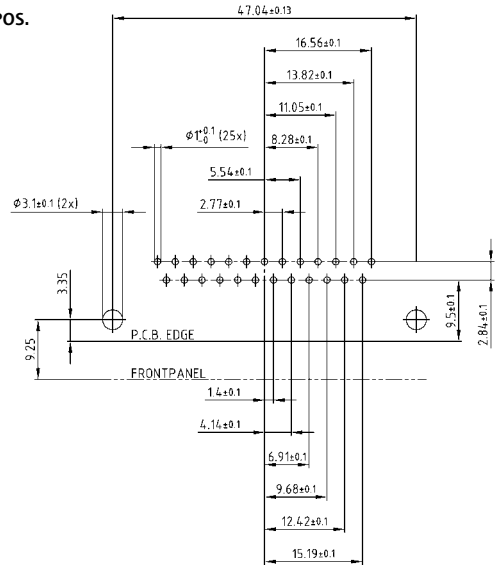
# PCB layout D-SUB Standard

## Solder pin, angled, .464" / 11.8 mm – Plug and Socket connector

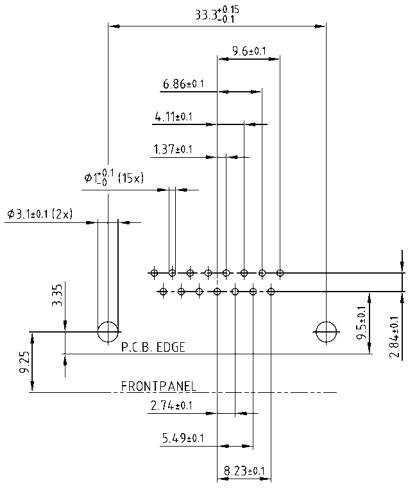
**9 pos.**



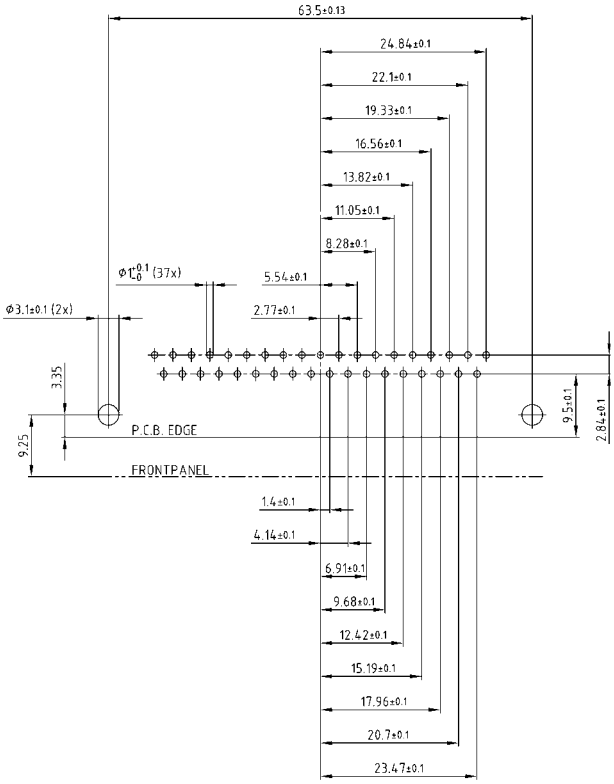

**25 pos.**




**15 pos.**




**37 pos.**

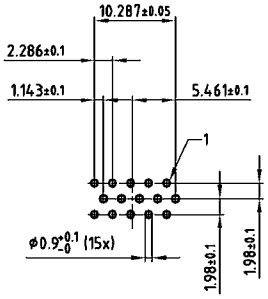



PCB layout Kat1kGUA (View: component side)

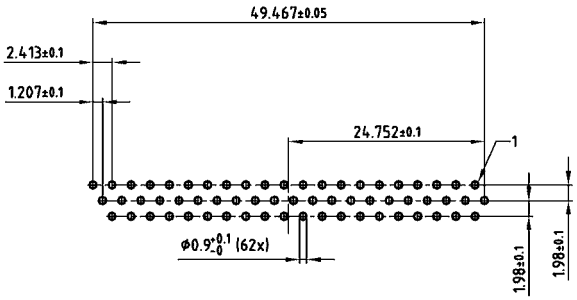
# PCB layout D-SUB High Density

## Solder pin, straight – without rear spacer PCB clip – Socket connector

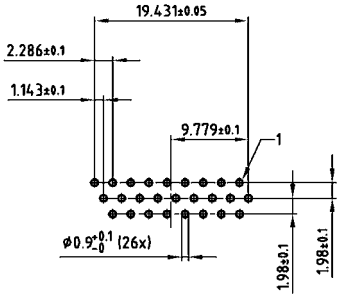
15 pos.



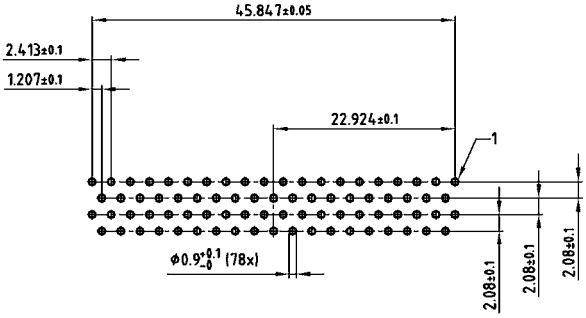

62 pos.



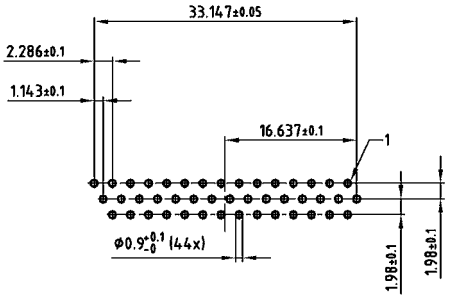

26 pos.




78 pos.




44 pos.

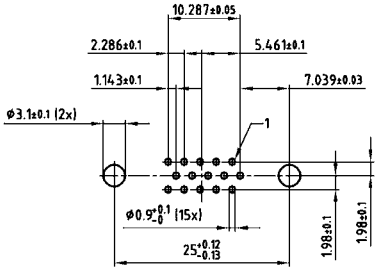



PCB layout Kat1kGDA (View: component side)

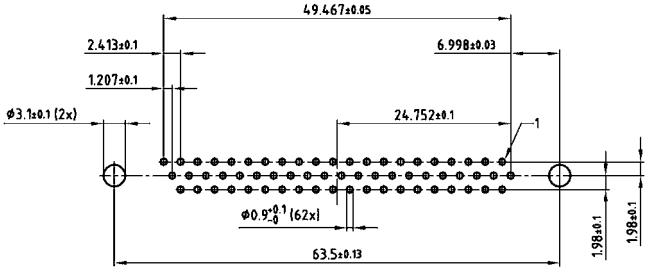
# PCB layout D-SUB High Density

## Solder pin, straight – With rear spacer PCB clip – Socket connector

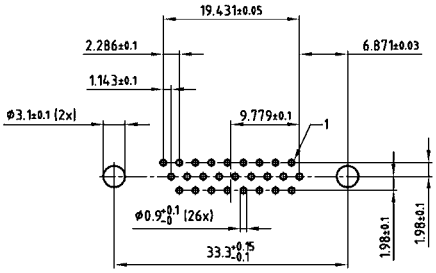
15 pos.



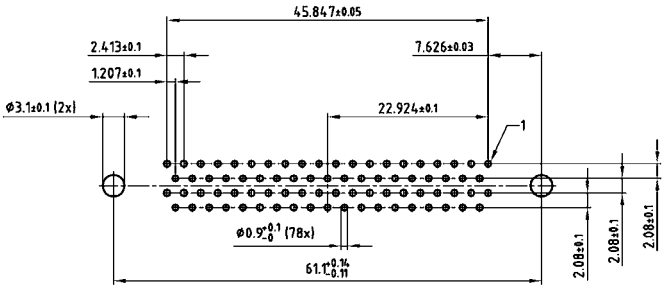

62 pos.



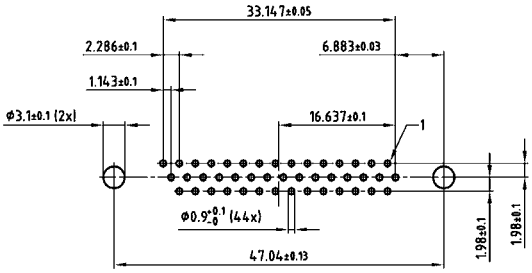

26 pos.




78 pos.




44 pos.

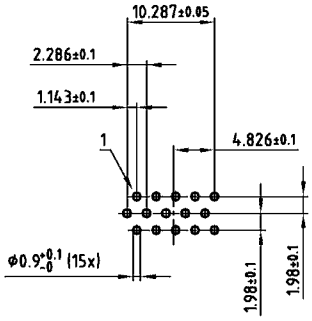



PCB layout Kat1iT9A (View: component side)

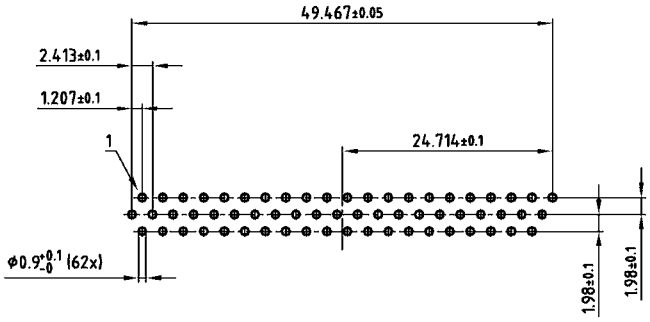
# PCB layout D-SUB High Density

## Solder pin, straight – Without rear spacer PCB clip – Plug connector

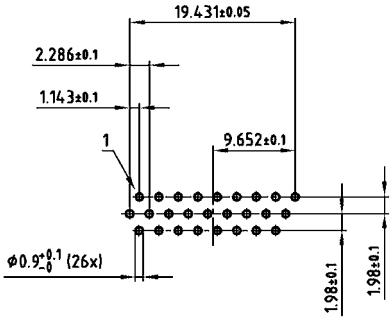
15 pos.



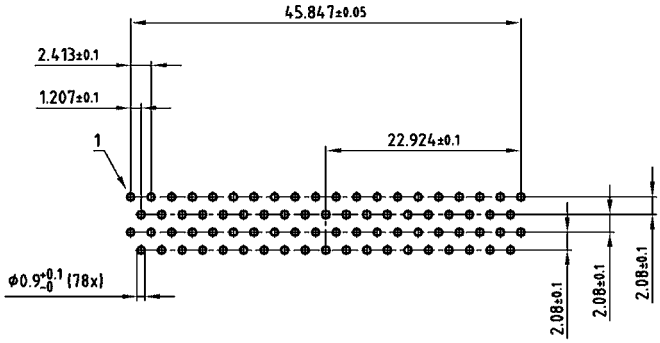

62 pos.



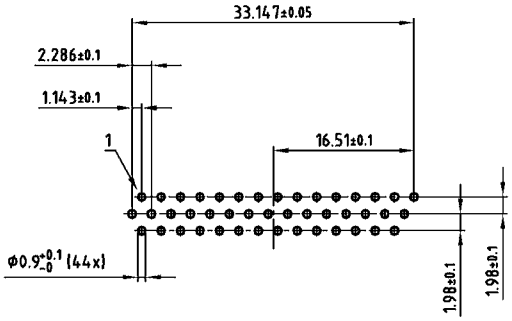

26 pos.




78 pos.




44 pos.

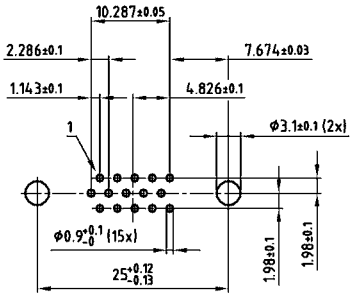



PCB layout Kat1kFWA (View: component side)

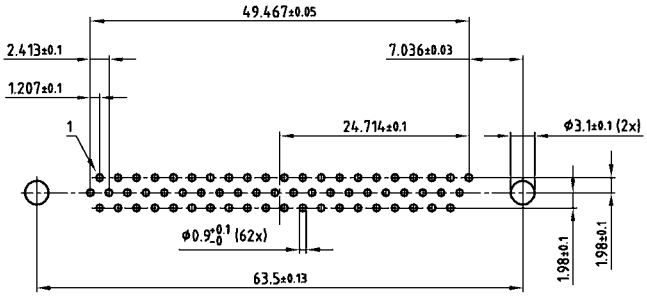
# PCB layout D-SUB High Density

## Solder pin, straight – With rear spacer PCB clip – Plug connector

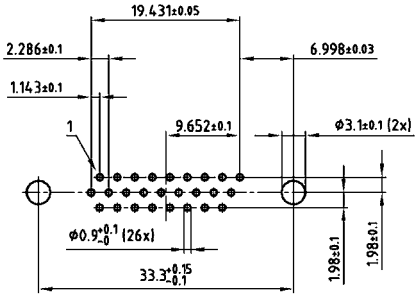
15 pos.



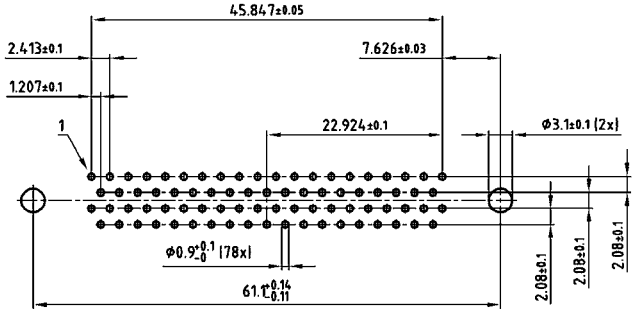

62 pos.



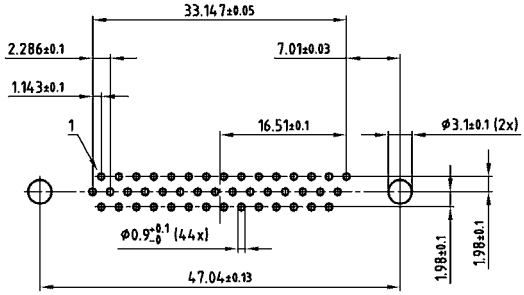

26 pos.




78 pos.




44 pos.

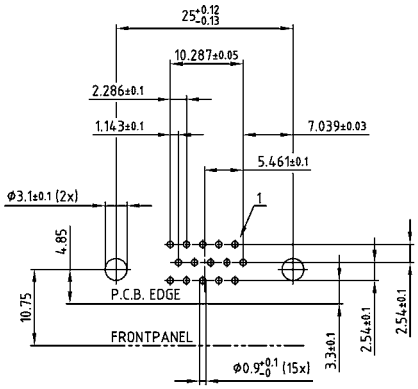



PCB layout Kat1iU0A (View: component side)

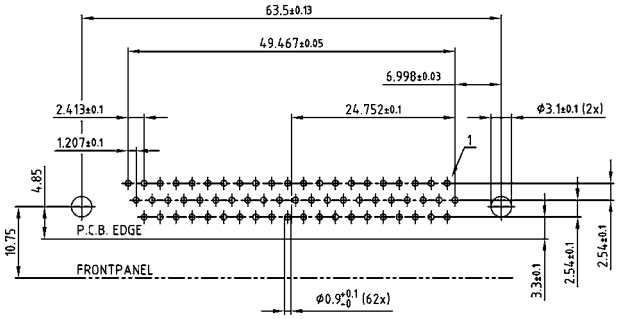
# PCB layout D-SUB High Density

## Solder pin, angled, .220"/5.6 mm – Socket connector

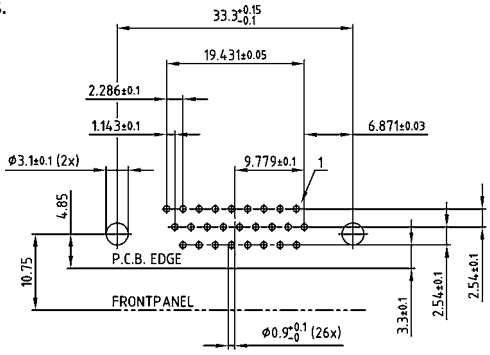
15 pos.



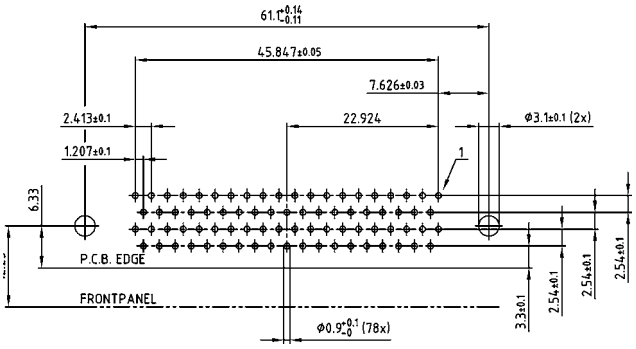

62 pos.



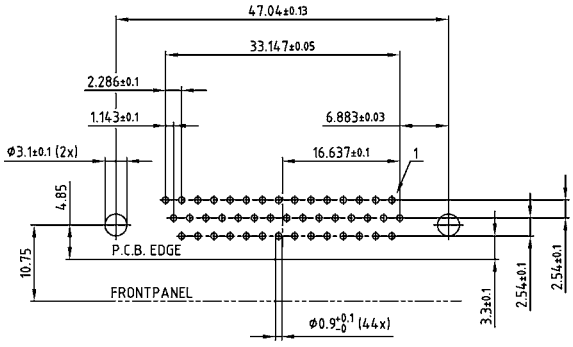

26 pos.




78 pos.




44 pos.

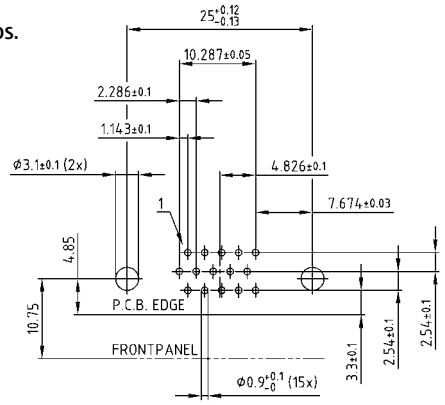



PCB layout Kat1kGVA (View: component side)

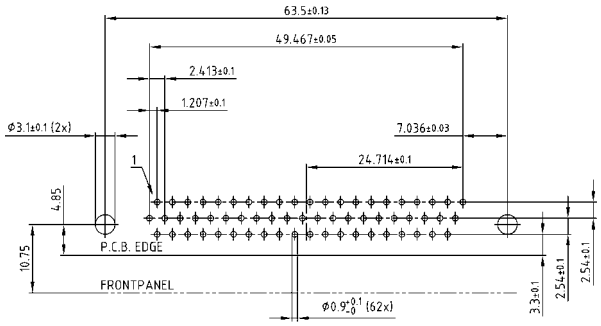
# PCB layout D-SUB High Density

## Solder pin, angled, .220"/5.6 mm – Plug connector

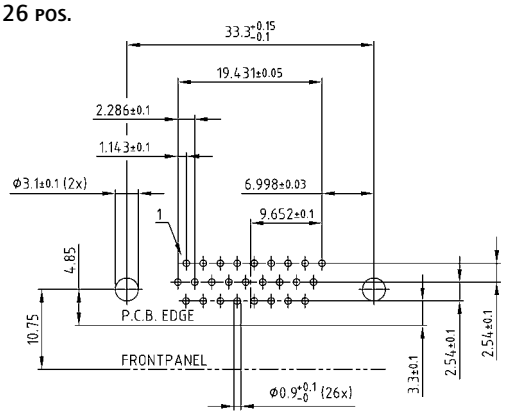
**15 pos.**



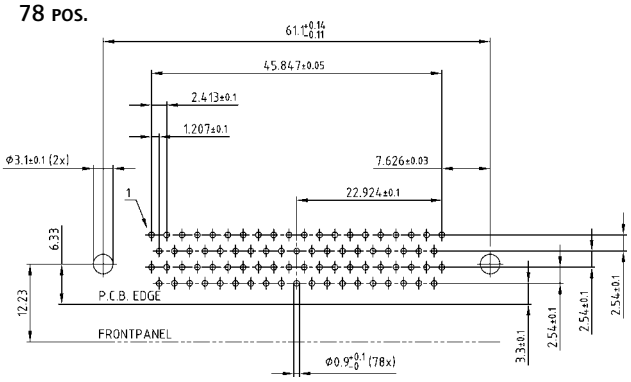

**62 pos.**



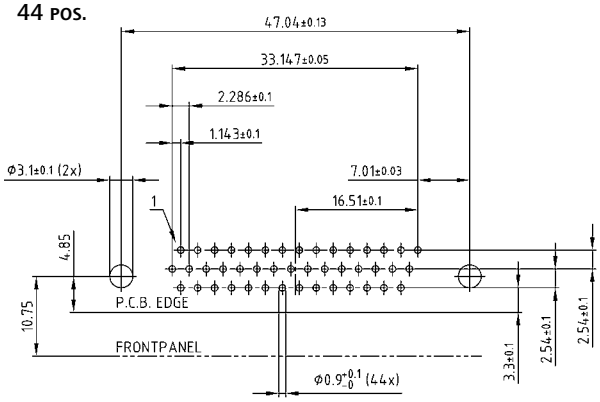

**26 pos.**




**78 pos.**




**44 pos.**

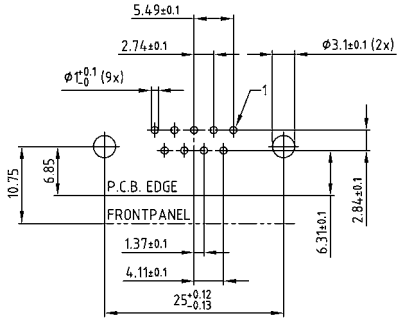



PCB layout Kat1kGWA (View: component side)

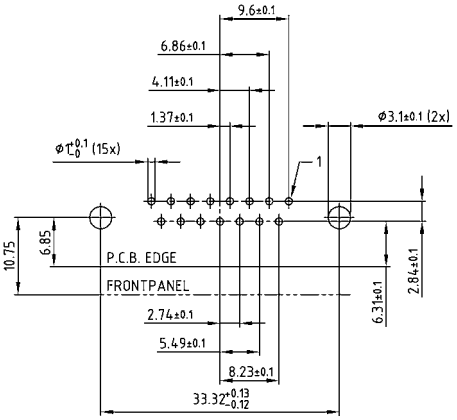
# PCB layout D-SUB Solid Body

## Solder pin, angled, .402" / 10.2 mm – Socket connector

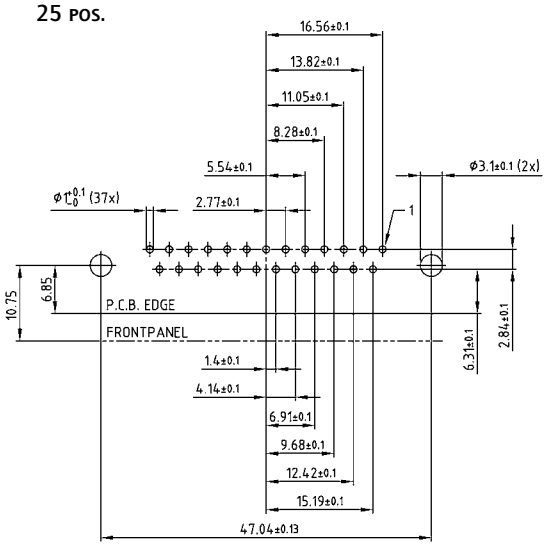
### 9 pos.



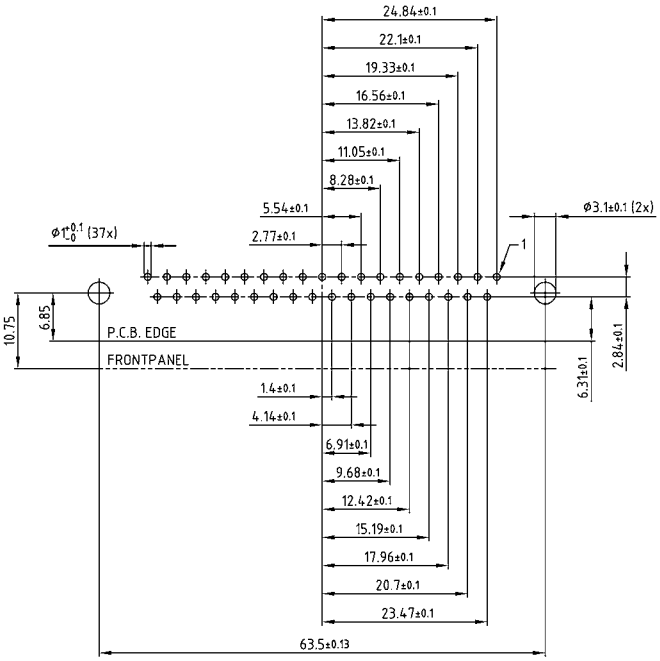

### 15 pos.



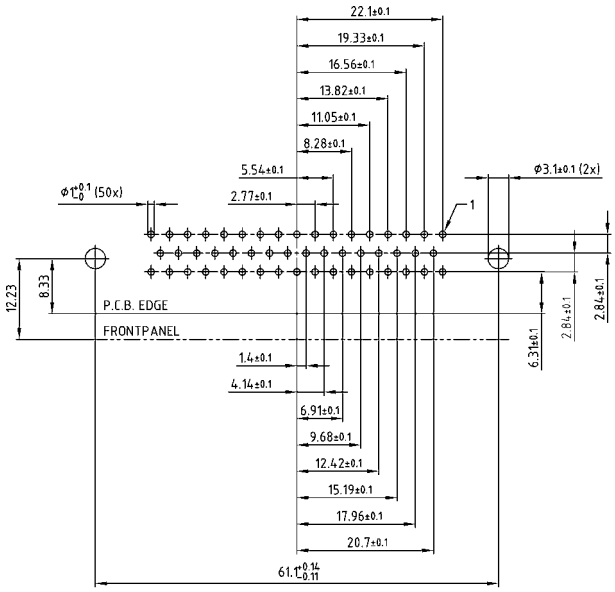

### 25 pos.




### 37 pos.




### 50 pos.

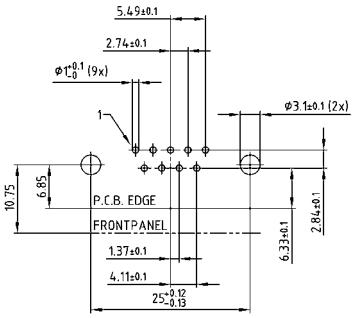



PCB layout Kat1kGMA (View: component side)

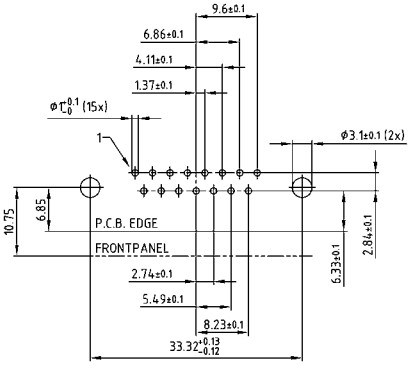
# PCB layout D-SUB Solid Body

## Solder pin, angled, .402" / 10.2 mm – Plug connector

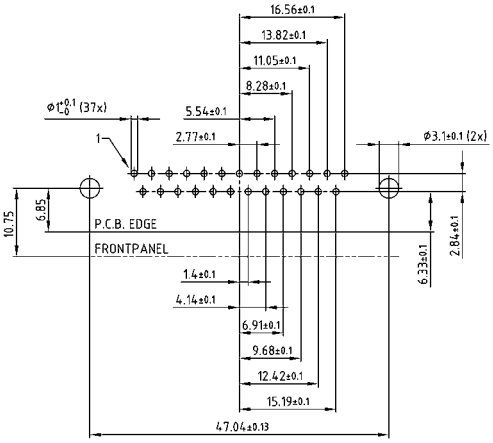
### 9 pos.



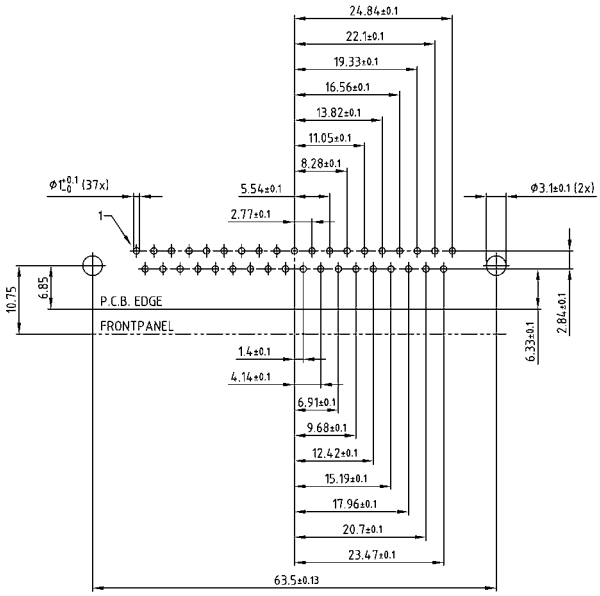

### 15 pos.



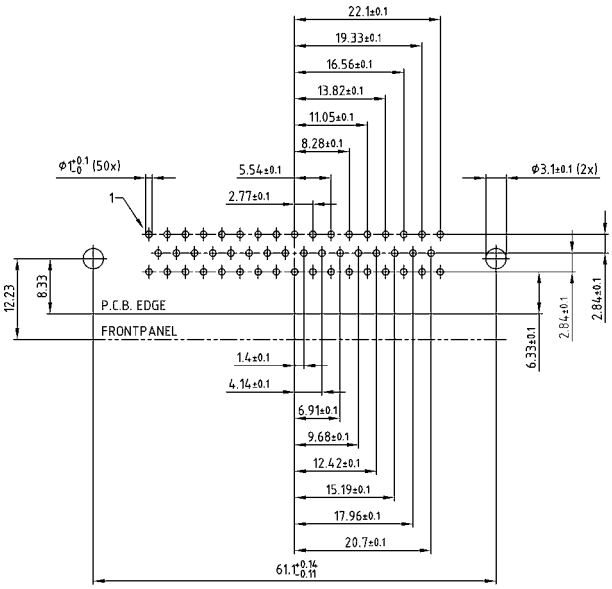

### 25 pos.




### 37 pos.




### 50 pos.

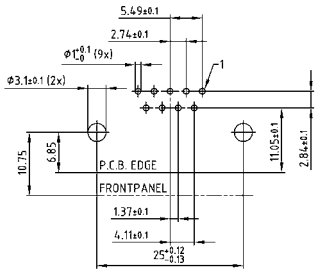



PCB layout Kat1kGNA (View: component side)

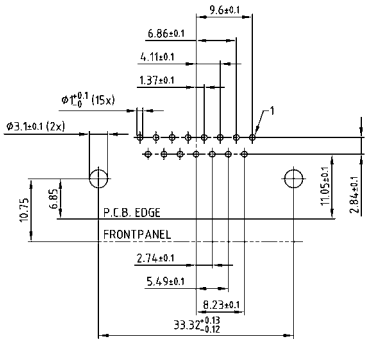
# PCB layout D-SUB Solid Body

## Solder pin, angled, .587" / 14.9 mm – Socket connector

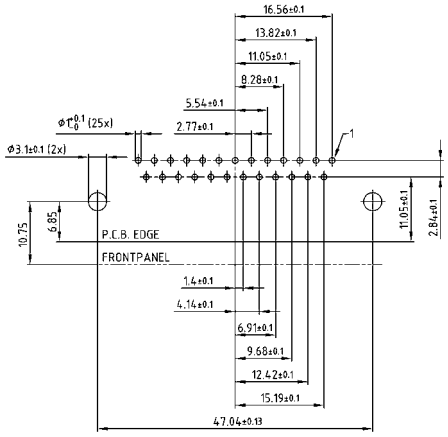
**9 pos.**



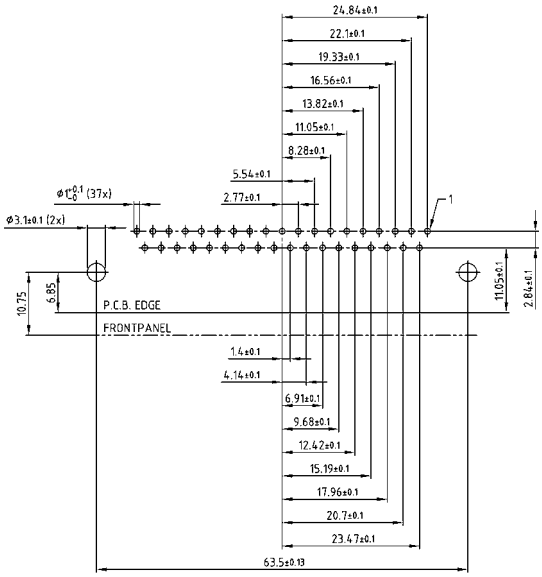

**15 pos.**



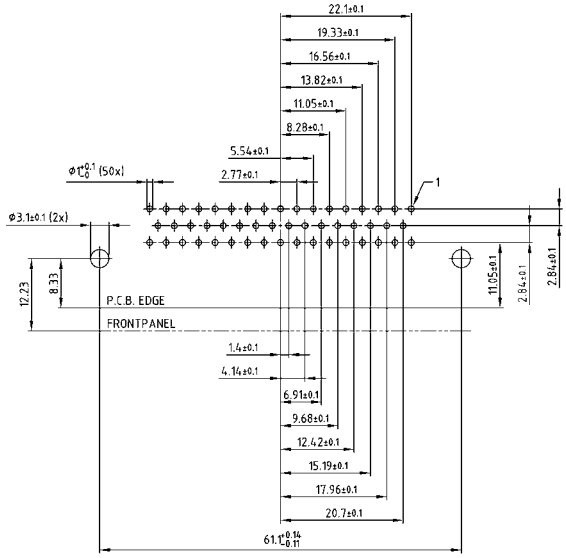

**25 pos.**




**37 pos.**




**37 pos.**

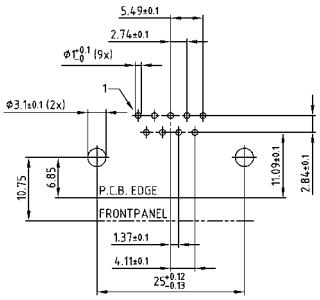



PCB layout Kat1kGOA (View: component side)

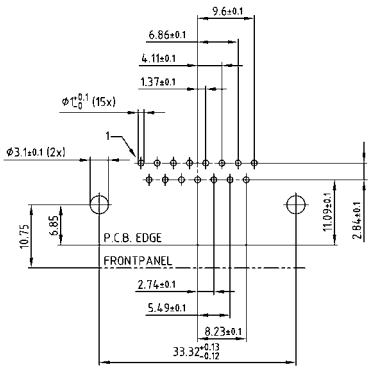
# PCB layout D-SUB Solid Body

## Solder pin, angled, .587" / 14.9 mm – Plug connector

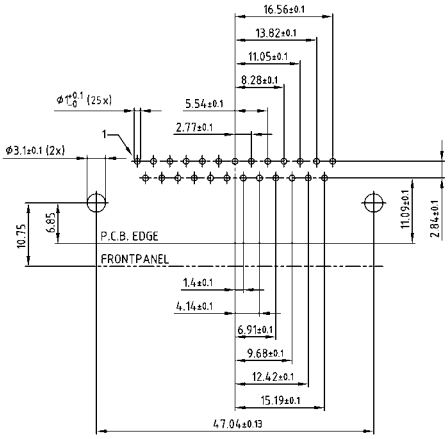
### 9 pos.



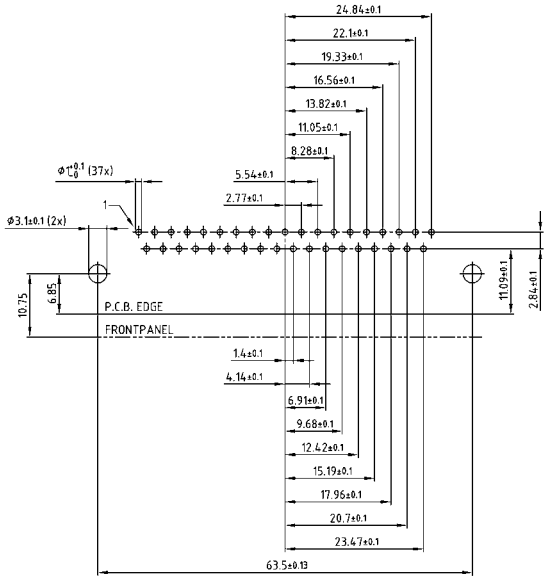

### 15 pos.



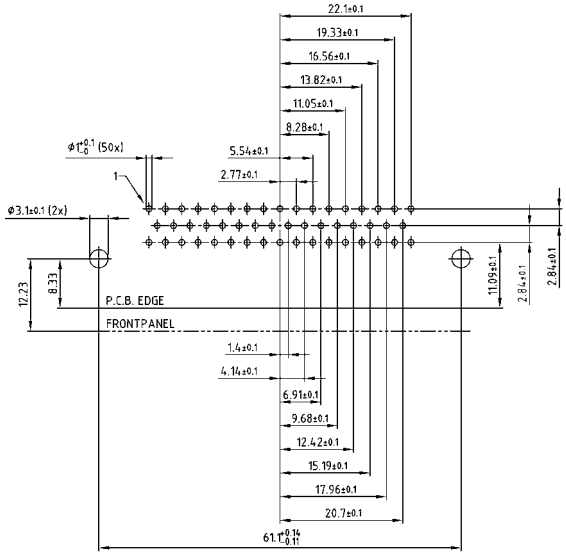

### 25 pos.




### 37 pos.




### 50 pos.

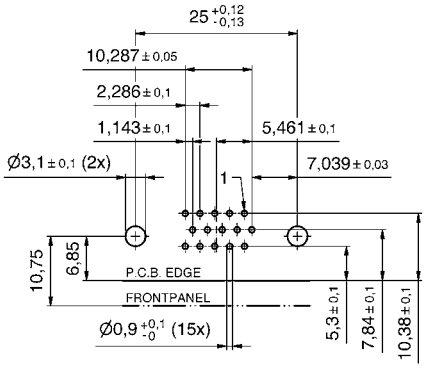



PCB layout Kat1kGPA (View: component side)

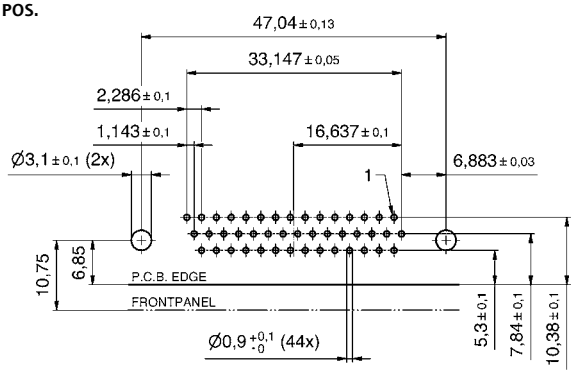
# PCB layout D-SUB High Density Solid Body

## Solder pin, angled, .484" / 12.3 mm – Socket connector

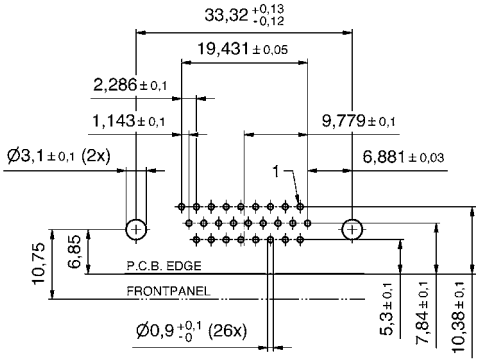
**15 pos.**



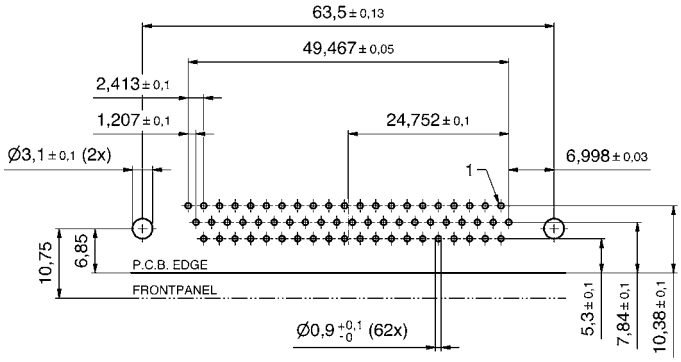

**44 pos.**




**26 pos.**




**62 pos.**

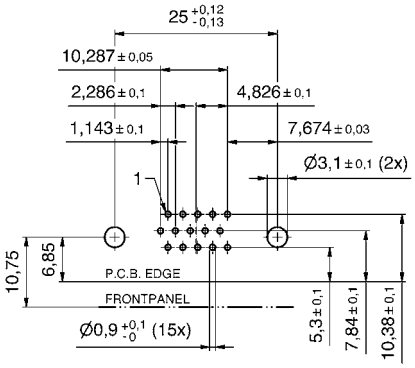



PCB layout Kat1kGQA (View: component side)

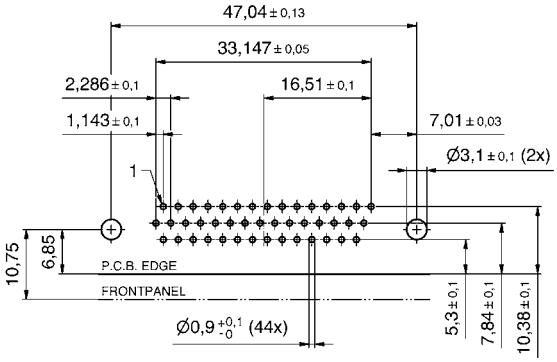
# PCB layout D-SUB High Density Solid Body

## Solder pin, angled, .484" / 12.3 mm – Plug connector

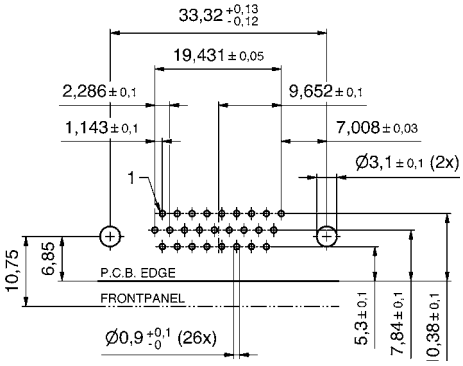
**15 pos.**



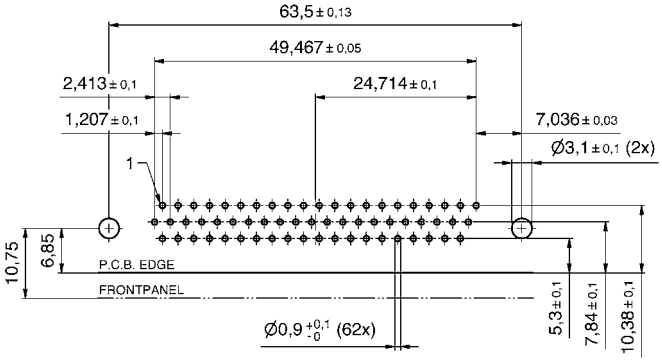

**44 pos.**




**26 pos.**




**62 pos.**

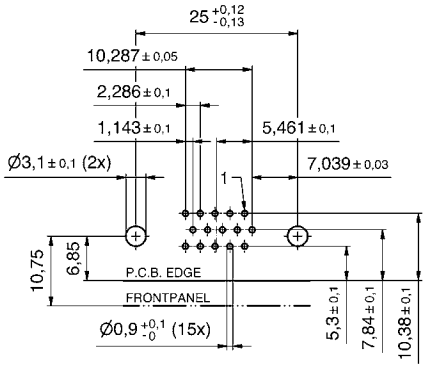



PCB layout Kat1kGRA (View: component side)

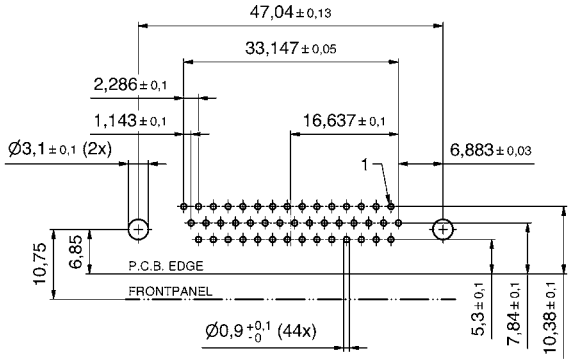
# PCB layout D-SUB High Density Solid Body

## Solder pin, angled, .362"/9,2 mm – Socket connector

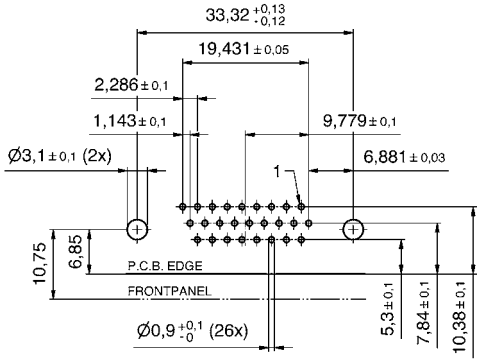
**15 pos.**



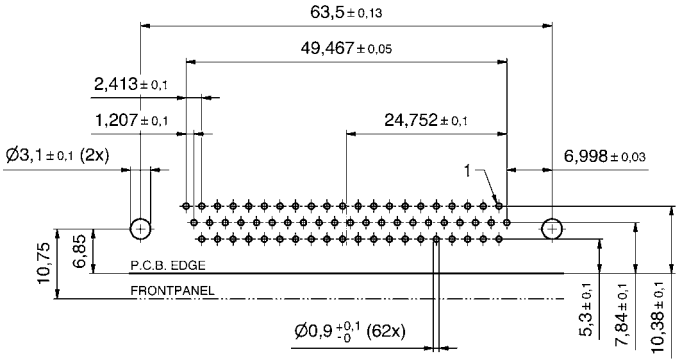

**44 pos.**



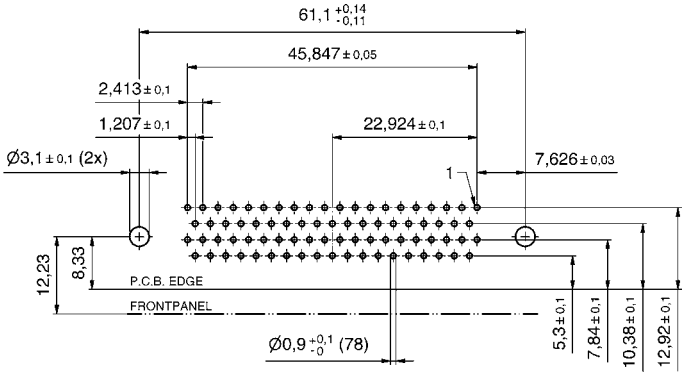

**26 pos.**




**62 pos.**




**78 pos.**

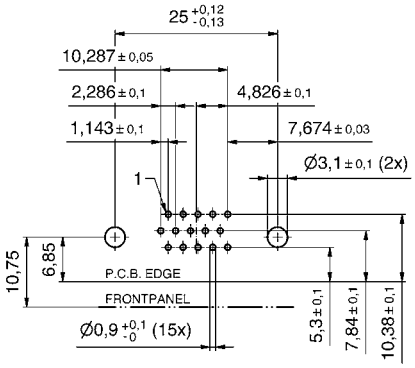



PCB layout Kat1kHRA (View: component side)

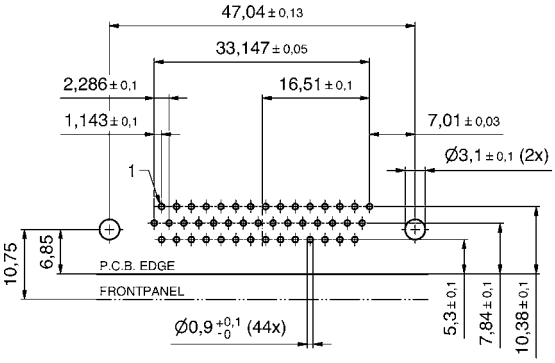
# PCB layout D-SUB High Density Solid Body

## Solder pin, angled, .362"/9,2 mm – Plug connector

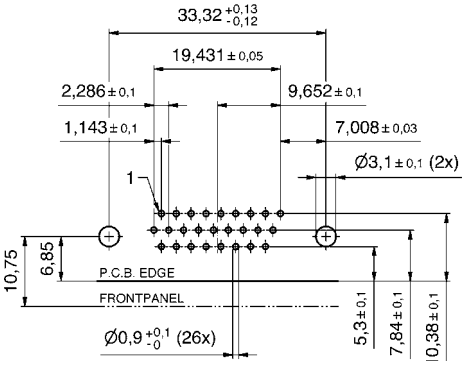
**15 pos.**



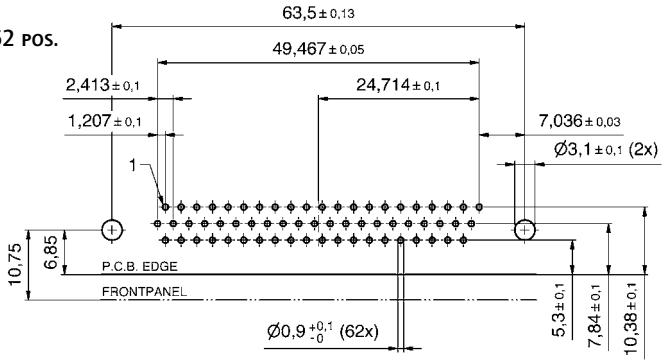

**44 pos.**



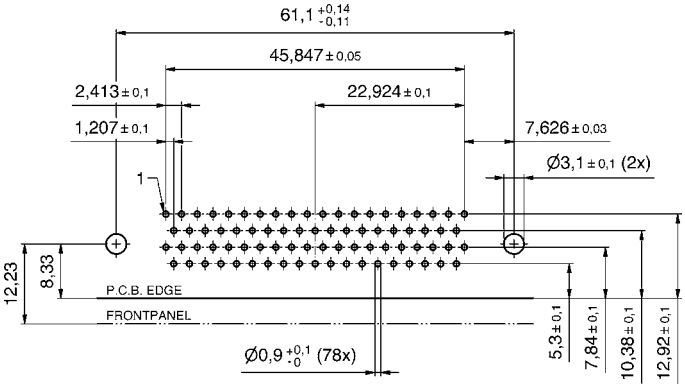

**26 pos.**




**62 pos.**




**78 pos.**

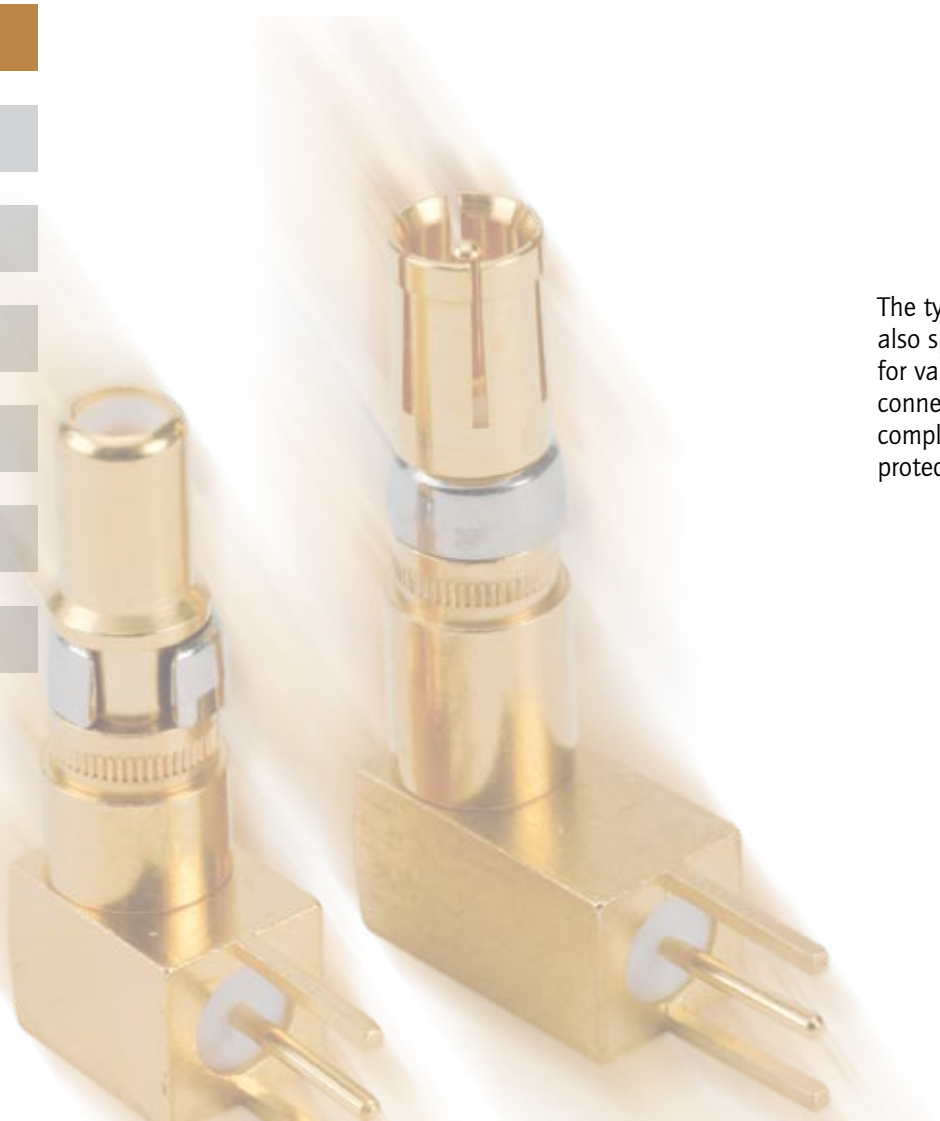



PCB layout Kat1kHQA (View: component side)

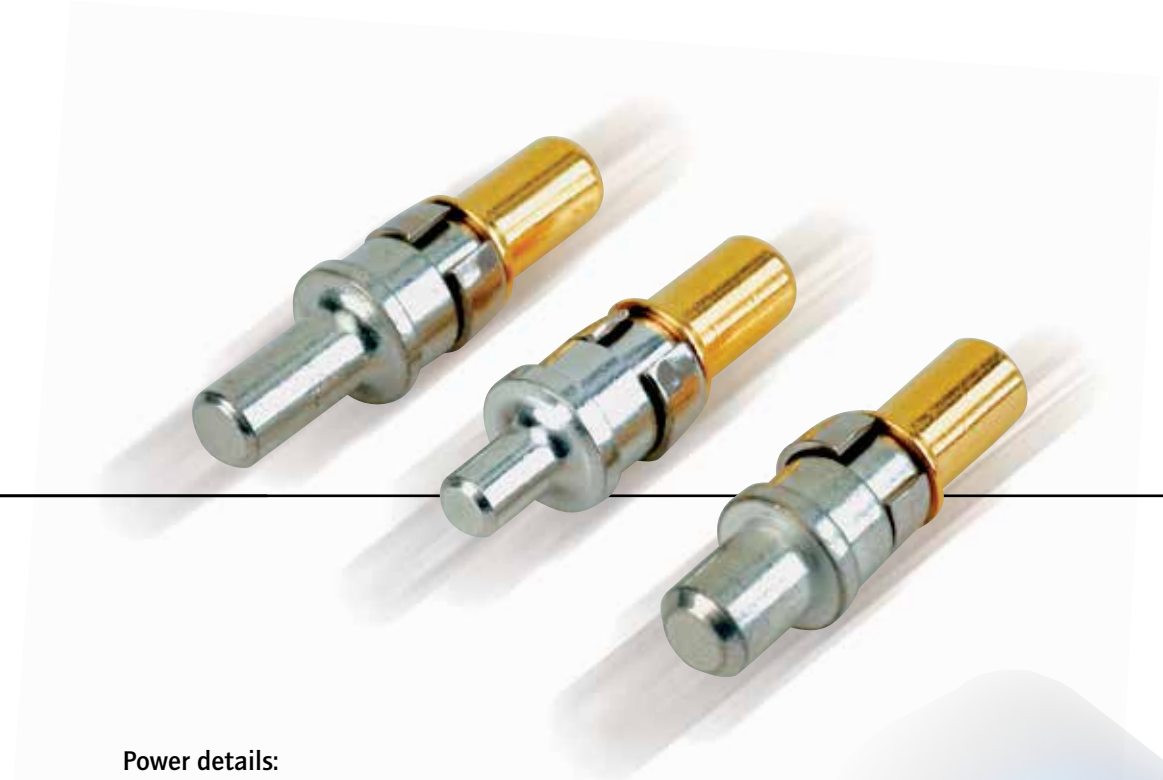
Section 9

# IP67 Combination D-SUB Connectors

CONEC Combination D-SUB Connectors with IP67-rating are suitable for use in environments where increased protection against moisture and contamination is necessary. All IP67 protected Combination D-SUB Connectors are supplied already populated with signal, high voltage, high power or coaxial contacts. This is necessary to provide factory assurance that the connector is properly sealed thus ensuring its reliable protection in harsh environments.



The type of protection is defined by IEC 60529 which also specifies the suitability of electrical components for various ambient conditions. CONEC water resistant connectors ensure a continuously secure connection compliant with the IP67 rating. They are dustproof and protected against temporary submersion into water.



**Power details:**

- Standard design with metal frame and O-ring
- One piece "solid body" design available for increased mechanical stresses
- Inside seal in the connector plug - water cannot penetrate into the housing
- Available for front or rear panel mounting on the enclosure
- Connector without frame for cable mounting
- 4-40 UNC or M 3 threaded insert
- Plastic materials comply with UL 94 V0
- Machined precision contacts for heavy duty usage
- Various gold plating options available
- Basic connector dimensions - without frame - in compliance with DIN 41652 / MIL-C-24308
- Special accessories, including waterproof hoods and sealing caps

# Part Number Creator

6 0 0 7 W 2 S A M 6 2 B 3 O X

**Product Line**

| | |
|---|---|
| 6 | = Shell: Brass tin plated with die-cast frame |
| 4* | = Shell: Brass tin plated with or without plastic frame |
| 8* | = Shell: Stainless steel with or without die-cast frame |
| 9* | = Shell: Stainless steel with plastic frame |
| | * on request |

**Variations**

| | |
|---|---|
| Shellsize 1 | = 5W1, 2W2C |
| Shellsize 2 | = 3W3, 7W2, 11W1, 3W3C |
| Shellsize 3 | = 5W5, 9W4, 13W3, 17W2, 21W1 |
| Shellsize 4 | = 8W8, 13W6, 17W5, 21WA4, 25W3, 27W2 |
| Shellsize 5 | = 24W7, 36W4, 43W2, 47W1 |

Empty positions ADD „0“ for example 007W2

**Contact type**

| | |
|---|---|
| P | = Plug connector |
| S | = Socket connector |

**Plating code/Quality class for signal contacts**

| | |
|---|---|
| A | = Quality class 3 = 50 mating cycles |
| B* | = Quality class 2 =200 mating cycles |
| C | = Quality class 1 =500 mating cycles |
| X | = without signal contact |

* on request

**Termination applies to signal contacts only**

| | |
|---|---|
| M | = Solder cup |
| R | = Solder pin – Straight |
| T | = Solder pin – Angled, .189"/4.80 mm |
| U | = Solder pin – Angled, .276"/7.00 mm |
| Z | = Solder pin – Angled, .465"/11.80 mm |
| X | = 3W3, 5W5, 8W8, 2W2C, 3W3C |

**Termination for high power or coaxial contacts**

| Quality class 3 /Quality class 1 | | Quality class 3 /Quality class 1 | | Quality class 3 /Quality class 1 | |
|---|---|---|---|---|---|
| 61 / 41 | = Solder cup 10 A | 85 / 65 | = Solder pin – Angled 30 A | G9 / 78 | = 3 solder pins angled 50 Ω |
| 62 / 42 | = Solder cup 20 A | 81 / 66 | = Solder pin – Angled 20 A | H1 / 79 | = 3 solder pins angled 50 Ω |
| 68 / 48 | = Solder pin – Straight 20 A, D= .077"/1.95 mm | 82 / 67 | = Solder pin – Angled 30 A | H2 / 88 | = 3 solder pins angled 75 Ω |
| 69 / 49 | = Solder pin – Straight 20 A, D= .102"/2.60 mm | F9 / H4 | = Cable connection straight 75 Ω | H3 / 89 | = 3 solder pins angled 75 Ω |
| 70 / 50 | = Solder pin – Straight 20 A, D= .112"/2.85 mm | G1 / H5 | = Cable connection straight 75 Ω | R1 | = Screw/Crimp 10 A |
| 71 / 51 | = Solder pin – Straight 30 A, D= .125"/3.18 mm | G2 / H6 | = Cable connection straight 50 Ω | R2 | = Screw/Crimp 20 A |
| 72 / 52 | = Solder pin – Straight 40 A, D= .148"/3.75 mm | G3 / H7 | = Cable connection straight 50 Ω | R3 | = Screw/Crimp 30 A |
| 59 / 55 | = Solder pin – Angled 15 A | G4 / H8 | = Cable connection straight 50 Ω | R4 | = Screw/Crimp 40 A |
| 73 / 56 | = Solder pin – Angled 20 A | G5 / H9 | = Cable connection straight 50 Ω | | |
| 74 / 57 | = Solder pin – Angled 30 A | G6 / K1 | = Cable connection straight 50 Ω | | |
| 75 / 58 | = Solder pin – Angled 40 A | G7 / 76 | = 3 solder pins straight 50 Ω | | |
| 77 / 60 | = Solder pin – Angled 40 A | G8 / 86 | = 3 solder pins straight 75 Ω | | |

**Mounting style**

| | | | |
|---|---|---|---|
| A1 | = Riveted through hole for hood assembly | S1 | = Metal bracket, M3 threaded insert |
| B2 | = M3 threaded insert | S2 | = Metal bracket, 4-40 UNC threaded insert |
| B3 | = 4-40 UNC threaded insert | S3 | = Metal bracket, M3 threaded insert and PCB clip |
| B4 | = M3 front spacer | S4 | = Metal bracket, 4-40 UNC threaded insert and PCB clip |
| B5 | = 4-40 UNC front spacer | R1 | = Metal bracket, M3 threaded insert |
| E1 | = M3 threaded rear spacer with PCB clip, PCB .063"/1.60 mm | R2 | = Metal bracket, 4-40 UNC threaded insert |
| E2 | = 4-40 UNC threaded rear spacer with PCB clip, PCB .063"/1.60 mm | R3 | = Metal bracket, M3 threaded insert/PCB clip |
| | | R4 | = Metal bracket, 4-40 UNC threaded insert/PCB clip |

| | |
|---|---|
| OX | = Standard |

# Technical data

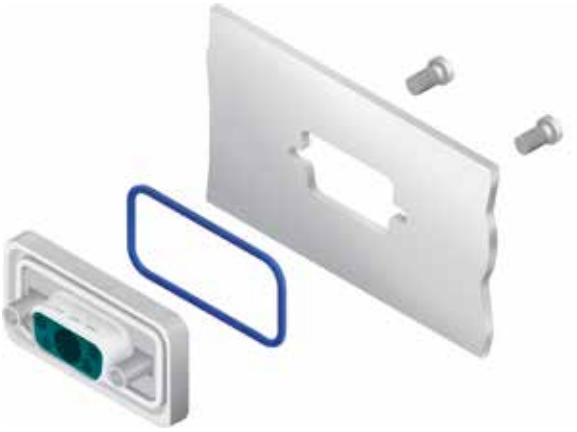
| Mechanical and electrical characteristics | Signal contacts | Coaxial contacts | High power contacts |
|---|---|---|---|
| Insulator | Polyester GF (UL 94V-0) | PTFE | |
| Shell | Brass tin plated | | |
| Contact plating | Gold plated over nickel | | |
| Contact material | CU alloy | | |
| Retaining clip | | CU alloy | CU alloy |
| Current rating | 7.5 A (UL) / 5 A (CSA, VDE) | | |
| Test voltage between 2 contacts<br>shell and contact | 1000 V, 50Hz<br>1 min. | | |
| Resistance between mated contacts | ≤ 2.7mΩ | | |
| Insulation resistance | 5GΩ | ≤ 1GΩ | 5GΩ |
| Volume resistivity | $10^{16}$Ωcm | | |
| Dielectric with standing voltage | 50KV/mm | | |
| Impedance | | 50/75Ω | |
| Contact resistance inner- /outer conductor | ≤ 2.7mΩ | ≤ 2.7mΩ | ≤ 1mΩ |
| VSWR-value at according MIL-C-39012 1.2GHz<br>1.5GHz<br>2.0GHz | | ≤ 1.2<br>≤ 1.3<br>≤ 1.5 | |
| Dielectric with standing voltage | | 750 V 50Hz | |
| Frequency range | | 0-2GHz | |
| Working voltage | 250 V | 250 V | |
| Temperature range | -25°C to +105°C | | |
| Degree of protection | Requirements according to IEC 60529 – IP67 | | |
| Insertion force per signal contact | ≤ 3.4N | ≤ 7N | ≤ 7N |
| Extracction force per signal contact | ≤ 0.2N | ≤ 7N | ca. 5N |
| Quality class | A = Quality class 3 = 50 mating cycles<br>B = Quality class 2 = 200 mating cycles<br>C = Quality class 1 = 500 mating cycles | | |

| Solder parameter | Preheating | | Solder terminal dipping parameters | |
|---|---|---|---|---|
| | max. Temperature | Duration | max. Solder bath Temperature | max. Terminal Immersion Time |
| Recommended wave-solder parameters | 120°C | 120s | 240°C | 5s |

Technical specifications are subject to change without notice.

# Panel Mounting

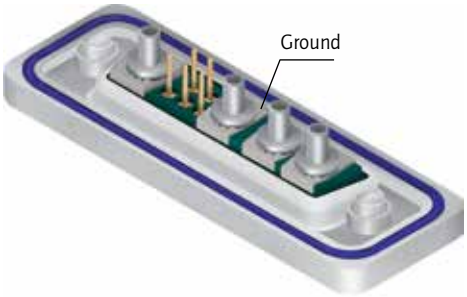
**Front panel mounting**



**Rear panel mounting**

**Grounding for Coaxial contacts**

To optimize a perfect ground connection from the coaxial outer conductor to the metal shell (Factory installed).



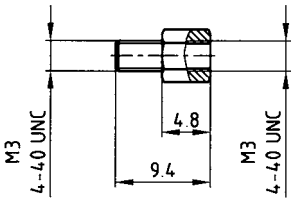

**Hole plug**

The hole plug can be used for both male and female connector. The assembly is implemented from the mating side. The hole plug is used to plug unwanted holes in the insulator. (Factory installed)

**Threaded insert**

Suitable hex bolts with either 4-40 UNC or M3 thread are supplied with the IP67 rated connectors.

Hex bolt material: Stainless steel



# IP-Code figure definitions

| 1. Code figure | Definition | Remark |
|---|---|---|
| 0 | Not protected | |
| 1 | Protected against access to hazardous parts by the back of the hand.<br>Protected against fixed foreign objects Ø ≥ 1.969"/50 mm. | |
| 2 | Protected against access to hazardous parts with a finger.<br>Protected against fixed foreign objects Ø ≥ .492"/12.5 mm. | |
| 3 | Protected against access to hazardous parts with a tool.<br>Protected against fixed foreign objects Ø ≥ .098"/2.5 mm. | |
| 4 | Protected against access to hazardous parts with a wire.<br>Protected against fixed foreign objects Ø ≥ .039"/1 mm. | |
| 5 | Protected against access to hazardous parts with a wire.<br>Dust protected. | Ingress of dust is not completely blocked. But dust may not penetrate to the extent that satisfactory operation of the device or safety is impaired. |
| 6 | Protected against access to hazardous parts with a wire.<br>Dustproof. No ingress of dust. | |

| 2. Code figure | Definition | Remark |
|---|---|---|
| 0 | Not protected | |
| 1 | Protected against dropper. | |
| 2 | Protected against dropper when the shell is tipped as much as 15°. | |
| 3 | Protected against spray water | Up to 60° of either side of the vertical, such spray water shall have no harmful effects. |
| 4 | Protected against splash water | On the shell from all directions, no harmful effects shall be incurred. |
| 5 | Protected against jets of water. | |
| 6 | Protected against strong jets of water. | |
| 7 | Protected against the effects of temporary submersion in water. | Water may not ingress in a volume that would cause harmful effects when the shell is submerged in water for 30 min at a depth of 1 m. |
| 8 | Protected against the effects of continuous submersion in water. | Water may not ingress in a volume that would cause harmful effects when the shell is continuously submerged in water under conditions agreed between manufacturer and user.<br>However, these conditions must be more stringent than those described under code figure 7. |
| 9k | Protected against water from high-pressure or steam cleaning. | |

**Explanation to spray water protected (IP) systems and their environment.**

This system, described in IEC 60529, was developed to represent standard values for respective protection:

a) Contact with, and ingress of, fixed foreign objects
b) The ingress of liquids to which the inside is to be exposed.

The first digit describes the level of protection for life, contacting objects and the intrusion of foreign bodies. The second digit describes the level of protection against the ingress of liquids. The larger the first and second digits are, the greater afforded protection is, e.g. IP55 must also meet the requirements of all lower protection levels, such as IP22, IP23, IP34 and IP54.

# Technical informations

## Skin effect

Alternating currents do not uniformly occupy the entire cross section of the conductor, rather inductance effect in the conductor deflects the current towards the surface of the conductor, whereby this deflection increases with the frequency.
The resistive attenuation of a transmission line increases with the frequency as a result of this skin effect.
The skin depth (equivalent thickness of the layer in which current flows) can be determined using

$$\delta = \frac{1}{\sqrt{f \pi \sigma \mu_0 \mu_r}}$$

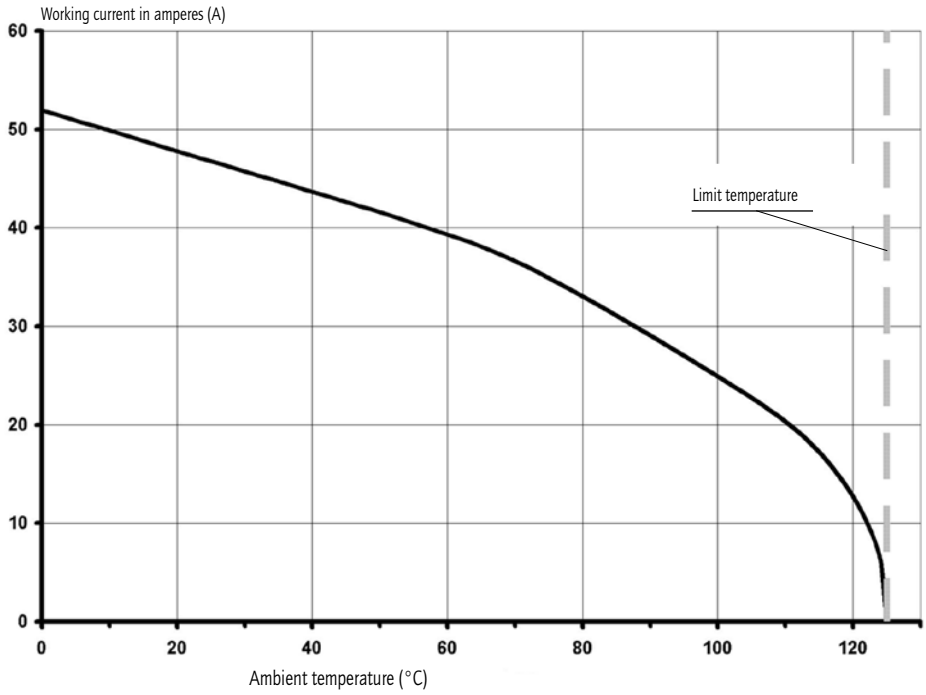
f = frequency
$\sigma$ = conductivity of the conductor material
$\sigma_{Ag}$ = 62 x $10^6$ S/m
$\sigma_{Cu}$ = 58 x $10^6$ S/m
$\mu_0$ = 1,256 $10^6$ Vs / Am
$\mu_r$ ... relative permeability constant for the employed material

## VSWR-Value

The ratio between the value of the largest and the smallest voltages on a loss-free line is known as the ripple or voltage standing wave ratio s (where 1 m 1 ∞). The reciprocal value of the VSWR is known as the inverse voltage standing wave ratio m (where 0 m 1).
(VSWR = Voltage standing ware ratio)
The value of is linked with the → reflection coefficient r on s transmission line according to the equation

$$s = \frac{(1 + |r|)}{(1 - |r|)}$$

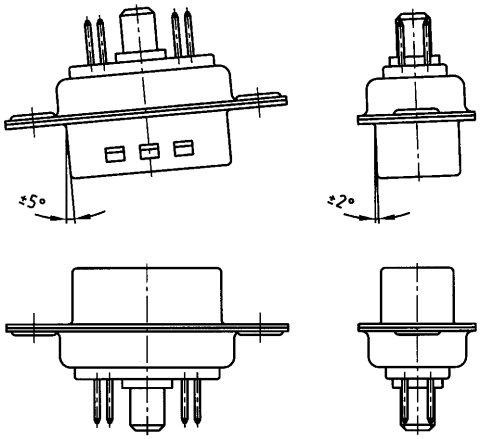
## DeRating Curve



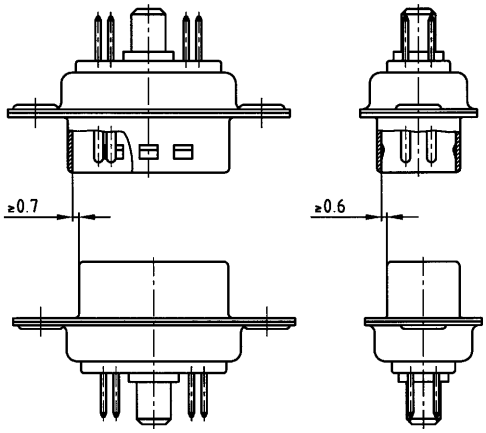

All connectors in the Water Resistant Combination D-Subminiature series are fully loaded with contacts.
They are equipped with either signal, high voltage, high power or coaxial contacts according to requirements.
Our production standard requires that all connectors are fully loaded.
Connectors 3W3, 5W5 and 8W8 female: Socket contacts are fingerprobe safe according to UL1950 and CSA 22.2.950 specifications.

# Mating conditions

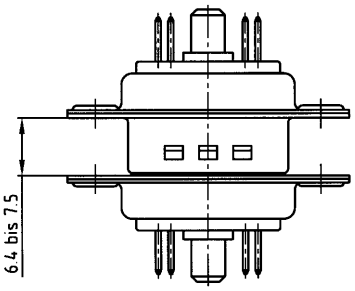
Float mount tolerance guide




Rigid mount tolerance guide

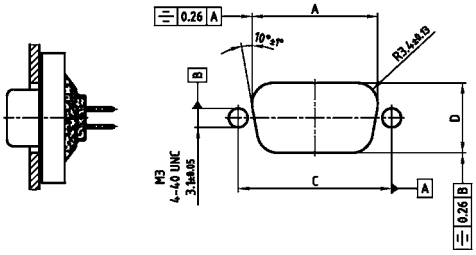



Rigid mount vertical to tolerance guide

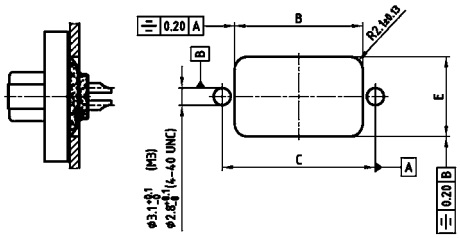



## Panel cut-out

Rear panel mounting




Front panel mounting




| Shellsize | A ±0.1 | B ±0.1 | C ±0.1 | D ±0.1 | E ±0.1 |
|---|---|---|---|---|---|
| 1 | 20.50 | 20.90 | 25.00 | 11.40 | 13.00 |
| 2 | 28.80 | 29.20 | 33.30 | 11.40 | 13.00 |
| 3 | 42.50 | 42.90 | 47.04 | 11.40 | 13.00 |
| 4 | 59.10 | 59.40 | 63.50 | 11.40 | 13.00 |
| 5 | 56.30 | 57.00 | 61.10 | 14.10 | 15.80 |

# IP67 Combination D-SUB

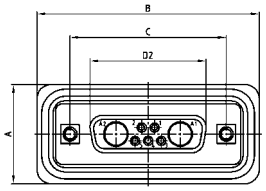
## Solder cup – Precision machined contacts – For wire size AWG 20

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

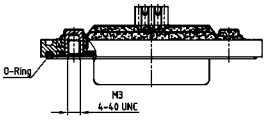
### Description

- Signal contacts for wire size **AWG 20**
- Contacts: high power or coaxial contacts
- Mounting style:
  with 4-40 UNC or M3 threaded insert
- Quality class 3 (Also available in quality class 1)
- Shell: Brass tin plated (Stainless steel on request)
- Nickel plated die-cast frame
  (Black plastic frame on request)
- Stainless steel hex bolts are supplied loose

### Socket connector

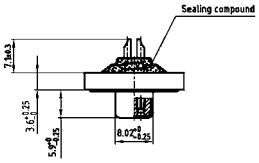


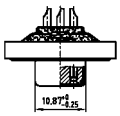

| Shellsize | A +0.3 | B +0.3 | C | D2 +0.25 |
|---|---|---|---|---|
| 1 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.46 |
| 2 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 24.79 |
| 3 | 21.10 | 61.40 | 47.04 ±0.13 | 38.50 |
| 4 | 21.10 | 77.90 | 63.50 ±0.13 | 54.96 |
| 5 | 23.90 | 75.50 | 61.10 $^{+0.14}_{-0.11}$ | 52.55 |



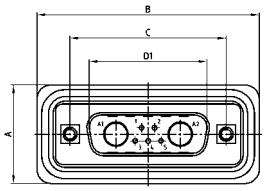

Shellsize 1-4

Shellsize 5

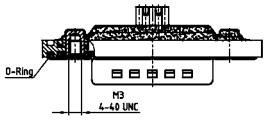



### Plug connector

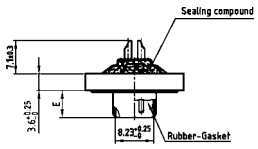


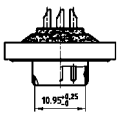

| Shellsize | A +0.3 | B +0.3 | C | D1 +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 1 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.79 | 5.82 |
| 2 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 25.12 | 5.82 |
| 3 | 21.10 | 61.40 | 47.04 ±0.13 | 38.84 | 5.69 |
| 4 | 21.10 | 77.90 | 63.50 ±0.13 | 55.30 | 5.69 |
| 5 | 23.90 | 75.50 | 61.10 $^{+0.14}_{-0.11}$ | 52.68 | 5.69 |




Shellsize 1-4

Shellsize 5




### Order data

| Socket connector | | | |
|---|---|---|---|
| Design | Mounting style 4-40 UNC | High power contact | Part Number |
| 5W1 | Threaded insert | 10 A | 6005W1SAM 61 B30X |
| 7W2 | Threaded insert | 10 A | 6007W2SAM 61 B30X |
| 11W1 | Threaded insert | 10 A | 6011W1SAM 61 B30X |
| 9W4 | Threaded insert | 10 A | 6009W4SAM 61 B30X |
| 13W3 | Threaded insert | 10 A | 6013W3SAM 61 B30X |
| 17W2 | Threaded insert | 10 A | 6017W2SAM 61 B30X |
| 21W1 | Threaded insert | 10 A | 6021W1SAM 61 B30X |
| 13W6 | Threaded insert | 10 A | 6013W6SAM 61 B30X |
| 17W5 | Threaded insert | 10 A | 6017W5SAM 61 B30X |
| 21WA4 | Threaded insert | 10 A | 621WA4SAM 61 B30X |
| 25W3 | Threaded insert | 10 A | 6025W3SAM 61 B30X |
| 27W2 | Threaded insert | 10 A | 6027W2SAM 61 B30X |
| 24W7 | Threaded insert | 10 A | 6024W7SAM 61 B30X |
| 36W4 | Threaded insert | 10 A | 6036W4SAM 61 B30X |
| 43W2 | Threaded insert | 10 A | 6043W2SAM 61 B30X |
| 47W1 | Threaded insert | 10 A | 6047W1SAM 61 B30X |

For other contacs prefer to page 6|32 to 6|37

| Plug connector | | | |
|---|---|---|---|
| Design | Mounting style 4-40 UNC | High power contact | Part Number |
| 5W1 | Threaded insert | 10 A | 6005W1PAM 61 B30X |
| 7W2 | Threaded insert | 10 A | 6007W2PAM 61 B30X |
| 11W1 | Threaded insert | 10 A | 6011W1PAM 61 B30X |
| 9W4 | Threaded insert | 10 A | 6009W4PAM 61 B30X |
| 13W3 | Threaded insert | 10 A | 6013W3PAM 61 B30X |
| 17W2 | Threaded insert | 10 A | 6017W2PAM 61 B30X |
| 21W1 | Threaded insert | 10 A | 6021W1PAM 61 B30X |
| 13W6 | Threaded insert | 10 A | 6013W6PAM 61 B30X |
| 17W5 | Threaded insert | 10 A | 6017W5PAM 61 B30X |
| 21WA4 | Threaded insert | 10 A | 621WA4PAM 61 B30X |
| 25W3 | Threaded insert | 10 A | 6025W3PAM 61 B30X |
| 27W2 | Threaded insert | 10 A | 6027W2PAM 61 B30X |
| 24W7 | Threaded insert | 10 A | 6024W7PAM 61 B30X |
| 36W4 | Threaded insert | 10 A | 6036W4PAM 61 B30X |
| 43W2 | Threaded insert | 10 A | 6043W2PAM 61 B30X |
| 47W1 | Threaded insert | 10 A | 6047W1PAM 61 B30X |

| Contact | | Code |
|---|---|---|
| High power 10 A | = | 61 |
| High power 20 A | = | 62 |

# IP67 Combination D-SUB

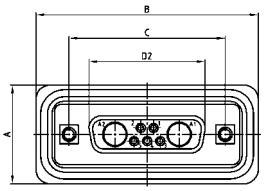
## Solder pin – Straight – Precision machined contacts

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

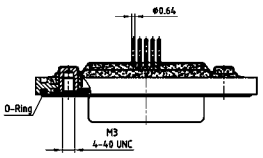
### Description

- Contacts: high power or coaxial contacts
- Mounting style:
  with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (Stainless steel on request)
- Nickel plated die-cast frame
  (Black plastic frame on request)
- Stainless steel hex bolts are supplied loose

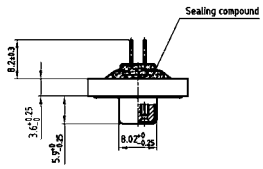
### Socket connector



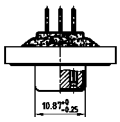
| Shellsize | A +0.3 | B +0.3 | C | D2 +0.25 |
|---|---|---|---|---|
| 1 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.46 |
| 2 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 24.79 |
| 3 | 21.10 | 61.40 | 47.04 ±0.13 | 38.50 |
| 4 | 21.10 | 77.90 | 63.50 ±0.13 | 54.96 |
| 5 | 23.90 | 75.50 | 61.10 $^{+0.14}_{-0.11}$ | 52.55 |



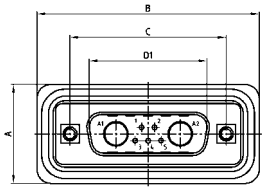

Shellsize 1-4



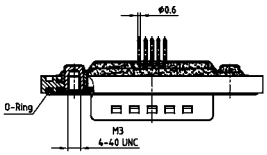

Shellsize 5



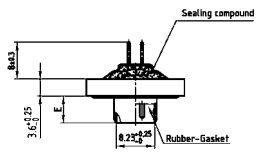
### Plug connector



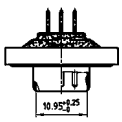
| Shellsize | A +0.3 | B +0.3 | C | D1 +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 1 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.79 | 5.82 |
| 2 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 25.12 | 5.82 |
| 3 | 21.10 | 61.40 | 47.04 ±0.13 | 38.84 | 5.69 |
| 4 | 21.10 | 77.90 | 63.50 ±0.13 | 55.30 | 5.69 |
| 5 | 23.90 | 75.50 | 61.10 $^{+0.14}_{-0.11}$ | 52.68 | 5.69 |




Shellsize 1-4




Shellsize 5



### Order data

| Socket connector | | High | | |
|---|---|---|---|---|
| Design | Mounting style 4-40 UNC | power contact | Bestellnummer | |
| 5W1 | Threaded insert | 20 A | 6005W1SAR | 68 B30X |
| 7W2 | Threaded insert | 20 A | 6007W2SAR | 68 B30X |
| 11W1 | Threaded insert | 20 A | 6011W1SAR | 68 B30X |
| 9W4 | Threaded insert | 20 A | 6009W4SAR | 68 B30X |
| 13W3 | Threaded insert | 20 A | 6013W3SAR | 68 B30X |
| 17W2 | Threaded insert | 20 A | 6017W2SAR | 68 B30X |
| 21W1 | Threaded insert | 20 A | 6021W1SAR | 68 B30X |
| 13W6 | Threaded insert | 20 A | 6013W6SAR | 68 B30X |
| 17W5 | Threaded insert | 20 A | 6017W5SAR | 68 B30X |
| 21WA4 | Threaded insert | 20 A | 621WA4SAR | 68 B30X |
| 25W3 | Threaded insert | 20 A | 6025W3SAR | 68 B30X |
| 27W2 | Threaded insert | 20 A | 6027W2SAR | 68 B30X |
| 24W7 | Threaded insert | 20 A | 6024W7SAR | 68 B30X |
| 36W4 | Threaded insert | 20 A | 6036W4SAR | 68 B30X |
| 43W2 | Threaded insert | 20 A | 6043W2SAR | 68 B30X |
| 47W1 | Threaded insert | 20 A | 6047W1SAR | 68 B30X |

For other contacs prefer to page 6|32 to 6|37

| Plug connector | | High | | |
|---|---|---|---|---|
| Design | Mounting style 4-40 UNC | power contact | Part Number | |
| 5W1 | Threaded insert | 20 A | 6005W1PAR | 68 B30X |
| 7W2 | Threaded insert | 20 A | 6007W2PAR | 68 B30X |
| 11W1 | Threaded insert | 20 A | 6011W1PAR | 68 B30X |
| 9W4 | Threaded insert | 20 A | 6009W4PAR | 68 B30X |
| 13W3 | Threaded insert | 20 A | 6013W3PAR | 68 B30X |
| 17W2 | Threaded insert | 20 A | 6017W2PAR | 68 B30X |
| 21W1 | Threaded insert | 20 A | 6021W1PAR | 68 B30X |
| 13W6 | Threaded insert | 20 A | 6013W6PAR | 68 B30X |
| 17W5 | Threaded insert | 20 A | 6017W5PAR | 68 B30X |
| 21WA4 | Threaded insert | 20 A | 621WA4PAR | 68 B30X |
| 25W3 | Threaded insert | 20 A | 6025W3PAR | 68 B30X |
| 27W2 | Threaded insert | 20 A | 6027W2PAR | 68 B30X |
| 24W7 | Threaded insert | 20 A | 6024W7PAR | 68 B30X |
| 36W4 | Threaded insert | 20 A | 6036W4PAR | 68 B30X |
| 43W2 | Threaded insert | 20 A | 6043W2PAR | 68 B30X |
| 47W1 | Threaded insert | 20 A | 6047W1PAR | 68 B30X |

| Contact | Code |
|---|---|
| High power 20 A; D=.080/1.95 mm = | 68 |
| High power 20 A; D=.102/2.60 mm = | 69 |
| High power 20 A; D=.110/2.85 mm = | 70 |
| High power 30 A; D=.130/3.18 mm = | 71 |
| High power 40 A; D=.150/3.75 mm = | 72 |

# IP67 Combination D-SUB

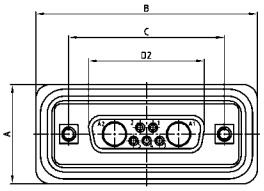
## Solder pin – Straight – Precision machined contacts – Threaded rear spacer with PCB clip

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

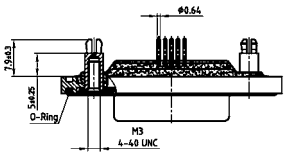
### Description

- Contacts: high power or coaxial contacts
- Mounting style:
  with 4-40 UNC or M3 threaded rear spacer with PCB clip
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (Stainless steel on request)
- Nickel plated die-cast frame
  (Black plastic frame on request)
- Stainless steel hex bolts are supplied loose

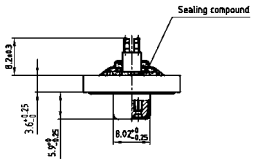
### Socket connector



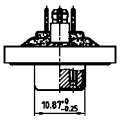
| Shellsize | A +0.3 | B +0.3 | C | D2 +0.25 |
|---|---|---|---|---|
| 1 | 21.10 | 39.40 | 25.00 +0.12 -0.13 | 16.46 |
| 2 | 21.10 | 47.70 | 33.30 +0.15 -0.10 | 24.79 |
| 3 | 21.10 | 61.40 | 47.04 ±0.13 | 38.50 |
| 4 | 21.10 | 77.90 | 63.50 ±0.13 | 54.96 |
| 5 | 23.90 | 75.50 | 61.10 +0.14 -0.11 | 52.55 |



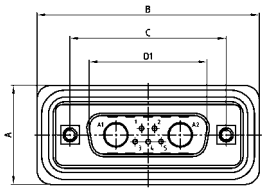

Shellsize 1-4



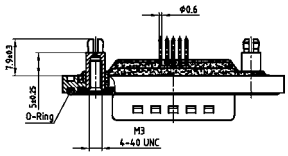

Shellsize 5



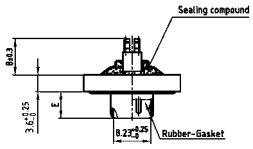

### Plug connector



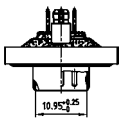
| Shellsize | A +0.3 | B +0.3 | C | D1 +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 1 | 21.10 | 39.40 | 25.00 +0.12 -0.13 | 16.79 | 5.82 |
| 2 | 21.10 | 47.70 | 33.30 +0.15 -0.10 | 25.12 | 5.82 |
| 3 | 21.10 | 61.40 | 47.04 ±0.13 | 38.84 | 5.69 |
| 4 | 21.10 | 77.90 | 63.50 ±0.13 | 55.30 | 5.69 |
| 5 | 23.90 | 75.50 | 61.10 +0.14 -0.11 | 52.68 | 5.69 |




Shellsize 1-4




Shellsize 5




### Order data

| Socket connector Design | Mounting style 4-40 UNC | High power contact | Part Number | |
|---|---|---|---|---|
| 5W1 | Threaded rear spacer PCB clip | 20 A | 6005W1SAR | 68 E20X |
| 7W2 | Threaded rear spacer PCB clip | 20 A | 6007W2SAR | 68 E20X |
| 11W1 | Threaded rear spacer PCB clip | 20 A | 6011W1SAR | 68 E20X |
| 9W4 | Threaded rear spacer PCB clip | 20 A | 6009W4SAR | 68 E20X |
| 13W3 | Threaded rear spacer PCB clip | 20 A | 6013W3SAR | 68 E20X |
| 17W2 | Threaded rear spacer PCB clip | 20 A | 6017W2SAR | 68 E20X |
| 21W1 | Threaded rear spacer PCB clip | 20 A | 6021W1SAR | 68 E20X |
| 13W6 | Threaded rear spacer PCB clip | 20 A | 6013W6SAR | 68 E20X |
| 17W5 | Threaded rear spacer PCB clip | 20 A | 6017W5SAR | 68 E20X |
| 21WA4 | Threaded rear spacer PCB clip | 20 A | 621WA4SAR | 68 E20X |
| 25W3 | Threaded rear spacer PCB clip | 20 A | 6025W3SAR | 68 E20X |
| 27W2 | Threaded rear spacer PCB clip | 20 A | 6027W2SAR | 68 E20X |
| 24W7 | Threaded rear spacer PCB clip | 20 A | 6024W7SAR | 68 E20X |
| 36W4 | Threaded rear spacer PCB clip | 20 A | 6036W4SAR | 68 E20X |
| 43W2 | Threaded rear spacer PCB clip | 20 A | 6043W2SAR | 68 E20X |
| 47W1 | Threaded rear spacer PCB clip | 20 A | 6047W1SAR | 68 E20X |

| Plug connector Design | Mounting style 4-40 UNC | High power contact | Part Number | |
|---|---|---|---|---|
| 5W1 | Threaded rear spacer PCB clip | 20 A | 6005W1PAR | 68 E20X |
| 7W2 | Threaded rear spacer PCB clip | 20 A | 6007W2PAR | 68 E20X |
| 11W1 | Threaded rear spacer PCB clip | 20 A | 6011W1PAR | 68 E20X |
| 9W4 | Threaded rear spacer PCB clip | 20 A | 6009W4PAR | 68 E20X |
| 13W3 | Threaded rear spacer PCB clip | 20 A | 6013W3PAR | 68 E20X |
| 17W2 | Threaded rear spacer PCB clip | 20 A | 6017W2PAR | 68 E20X |
| 21W1 | Threaded rear spacer PCB clip | 20 A | 6021W1PAR | 68 E20X |
| 13W6 | Threaded rear spacer PCB clip | 20 A | 6013W6PAR | 68 E20X |
| 17W5 | Threaded rear spacer PCB clip | 20 A | 6017W5PAR | 68 E20X |
| 21WA4 | Threaded rear spacer PCB clip | 20 A | 621WA4PAR | 68 E20X |
| 25W3 | Threaded rear spacer PCB clip | 20 A | 6025W3PAR | 68 E20X |
| 27W2 | Threaded rear spacer PCB clip | 20 A | 6027W2PAR | 68 E20X |
| 24W7 | Threaded rear spacer PCB clip | 20 A | 6024W7PAR | 68 E20X |
| 36W4 | Threaded rear spacer PCB clip | 20 A | 6036W4PAR | 68 E20X |
| 43W2 | Threaded rear spacer PCB clip | 20 A | 6043W2PAR | 68 E20X |
| 47W1 | Threaded rear spacer PCB clip | 20 A | 6047W1PAR | 68 E20X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness.

For other contacs prefer to page 6|32 to 6|37

| Contact | Code |
|---|---|
| High power 20 A; D=.080/1.95 mm = | 68 |
| High power 20 A; D=.102/2.60 mm = | 69 |
| High power 20 A; D=.110/2.85 mm = | 70 |
| High power 30 A; D=.130/3.18 mm = | 71 |
| High power 40 A; D=.150/3.75 mm = | 72 |

# IP67 Combination D-SUB

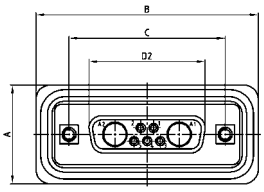
## Solder pin – Angled – .189"/4.8 mm – Precision machined contacts – Metal bracket

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

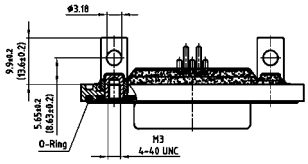
### Description

- Contacts: high power or coaxial contacts
- Mounting style:
  metal bracket with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (Stainless steel on request)
- Nickel plated die-cast frame
  (Black plastic frame on request)
- Stainless steel hex bolts are supplied loose

### Socket connector

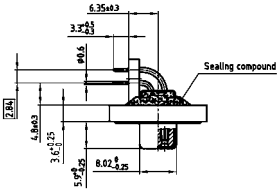


| Shellsize | A +0.3 | B +0.3 | C | D2 +0.25 |
|---|---|---|---|---|
| 1 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.46 |
| 2 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 24.79 |
| 3 | 21.10 | 61.40 | 47.04 ±0.13 | 38.50 |
| 4 | 21.10 | 77.90 | 63.50 ±0.13 | 54.96 |
| 5 | 23.90 | 75.50 | 61.10 $^{+0.14}_{-0.11}$ | 52.55 |

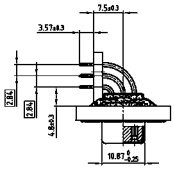



Dim. in (_ _) = Shellsize 5

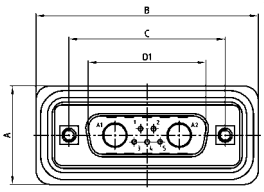
Shellsize 1-4



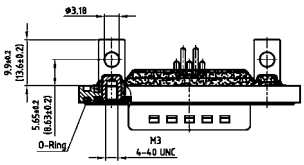

Shellsize 5



### Plug connector

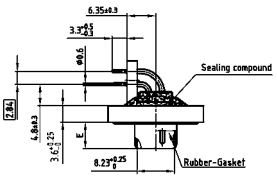


| Shellsize | A +0.3 | B +0.3 | C | D1 +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 1 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.79 | 5.82 |
| 2 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 25.12 | 5.82 |
| 3 | 21.10 | 61.40 | 47.04 ±0.13 | 38.84 | 5.69 |
| 4 | 21.10 | 77.90 | 63.50 ±0.13 | 55.30 | 5.69 |
| 5 | 23.90 | 75.50 | 61.10 $^{+0.14}_{-0.11}$ | 52.68 | 5.69 |

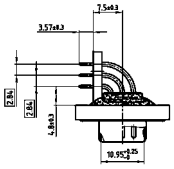



Dim. in (_ _) = Shellsize 5

Shellsize 1-4




Shellsize 5



### Order data

| Socket connector<br>Design | Mounting style 4-40 UNC | High power contact | Part Number |
|---|---|---|---|
| 5W1 | Threaded insert | 15 A | 6005W1SAT59S20X |
| 7W2 | Threaded insert | 15 A | 6007W2SAT59S20X |
| 11W1 | Threaded insert | 15 A | 6011W1SAT59S20X |
| 9W4 | Threaded insert | 15 A | 6009W4SAT59S20X |
| 13W3 | Threaded insert | 15 A | 6013W3SAT59S20X |
| 17W2 | Threaded insert | 15 A | 6017W2SAT59S20X |
| 21W1 | Threaded insert | 15 A | 6021W1SAT59S20X |
| 13W6 | Threaded insert | 15 A | 6013W6SAT59S20X |
| 17W5 | Threaded insert | 15 A | 6017W5SAT59S20X |
| 21WA4 | Threaded insert | 15 A | 621WA4SAT59S20X |
| 25W3 | Threaded insert | 15 A | 6025W3SAT59S20X |
| 27W2 | Threaded insert | 15 A | 6027W2SAT59S20X |
| 24W7 | Threaded insert | 20 A | 6024W7SAT81S20X |
| 36W4 | Threaded insert | 20 A | 6036W4SAT81S20X |
| 43W2 | Threaded insert | 20 A | 6043W2SAT81S20X |
| 47W1 | Threaded insert | 20 A | 6047W1SAT81S20X |

For other contacs prefer to page 6|32 to 6|37

| Plug connector<br>Design | Mounting style 4-40 UNC | High power contact | Part Number |
|---|---|---|---|
| 5W1 | Threaded insert | 15 A | 6005W1PAT59S20X |
| 7W2 | Threaded insert | 15 A | 6007W2PAT59S20X |
| 11W1 | Threaded insert | 15 A | 6011W1PAT59S20X |
| 9W4 | Threaded insert | 15 A | 6009W4PAT59S20X |
| 13W3 | Threaded insert | 15 A | 6013W3PAT59S20X |
| 17W2 | Threaded insert | 15 A | 6017W2PAT59S20X |
| 21W1 | Threaded insert | 15 A | 6021W1PAT59S20X |
| 13W6 | Threaded insert | 15 A | 6013W6PAT59S20X |
| 17W5 | Threaded insert | 15 A | 6017W5PAT59S20X |
| 21WA4 | Threaded insert | 15 A | 621WA4PAT59S20X |
| 25W3 | Threaded insert | 15 A | 6025W3PAT59S20X |
| 27W2 | Threaded insert | 15 A | 6027W2PAT59S20X |
| 24W7 | Threaded insert | 20 A | 6024W7PAT81S20X |
| 36W4 | Threaded insert | 20 A | 6036W4PAT81S20X |
| 43W2 | Threaded insert | 20 A | 6043W2PAT81S20X |
| 47W1 | Threaded insert | 20 A | 6047W1PAT81S20X |

| Contact for shellsize 1-4 | | Code |
|---|---|---|
| High power 15 A; E=.075/1.90 mm | = | 59 |
| High power 20 A; E=.110/2.85 mm | = | 73 |
| High power 30 A; E=.126/3.20 mm | = | 74 |
| High power 40 A; E=.150/3.75 mm | = | 75 |

| Contact for shellsize 5 | | Code |
|---|---|---|
| High power 20 A; E=.110/2.85 mm | = | 81 |
| High power 30 A; E=.150/3.75 mm | = | 85 |
| High power 30 A; E=.126/3.20 mm | = | 82 |
| High power 40 A; E=.150/3.75 mm | = | 77 |

# IP67 Combination D-SUB

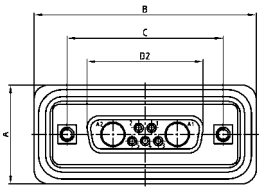
## Solder pin – Angled – .189"/4.8 mm – Precision machined contacts – Metal bracket with PCB clip

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

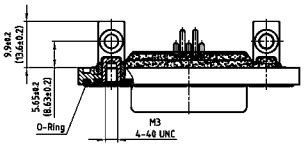
### Description

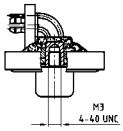
- Contacts: high power or coaxial contacts
- Mounting style:
  metal bracket, threaded insert and 4-40 UNC or M3 PCB clip
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (Stainless steel on request)
- Nickel plated die-cast frame
  (Black plastic frame on request)
- Stainless steel hex bolts are supplied loose

### Socket connector



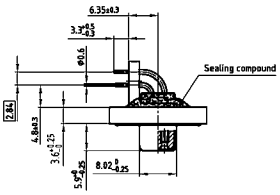
| Shellsize | A +0.3 | B +0.3 | C | D2 +0.25 |
|---|---|---|---|---|
| 1 | 21.10 | 39.40 | 25.00 +0.12 -0.13 | 16.46 |
| 2 | 21.10 | 47.70 | 33.30 +0.15 -0.10 | 24.79 |
| 3 | 21.10 | 61.40 | 47.04 ±0.13 | 38.50 |
| 4 | 21.10 | 77.90 | 63.50 ±0.13 | 54.96 |
| 5 | 23.90 | 75.50 | 61.10 +0.14 -0.11 | 52.55 |



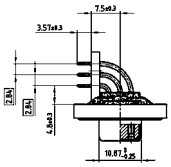

Dim. in (_ _) = Shellsize 5

Shellsize 1-4



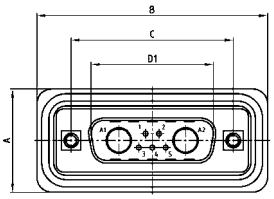

View without clip

Shellsize 5

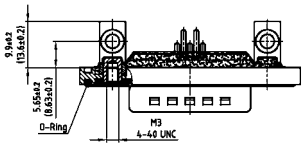


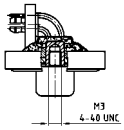
View without clip

### Plug connector



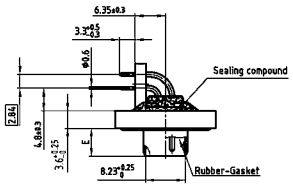
| Shellsize | A +0.3 | B +0.3 | C | D1 +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 1 | 21.10 | 39.40 | 25.00 +0.12 -0.13 | 16.79 | 5.82 |
| 2 | 21.10 | 47.70 | 33.30 +0.15 -0.10 | 25.12 | 5.82 |
| 3 | 21.10 | 61.40 | 47.04 ±0.13 | 38.84 | 5.69 |
| 4 | 21.10 | 77.90 | 63.50 ±0.13 | 55.30 | 5.69 |
| 5 | 23.90 | 75.50 | 61.10 +0.14 -0.11 | 52.68 | 5.69 |



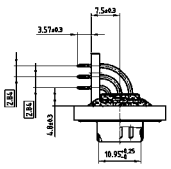

Dim. in (_ _) = Shellsize 5

Shellsize 1-4




View without clip

Shellsize 5



View without clip

### Order data

| Socket connector<br>Design | Mounting style 4-40 UNC | High power contact | Part Number |
|---|---|---|---|
| 5W1 | PCB clip/Thread | 15 A | 6005W1SAT 59 S40X |
| 7W2 | PCB clip/Thread | 15 A | 6007W2SAT 59 S40X |
| 11W1 | PCB clip/Thread | 15 A | 6011W1SAT 59 S40X |
| 9W4 | PCB clip/Thread | 15 A | 6009W4SAT 59 S40X |
| 13W3 | PCB clip/Thread | 15 A | 6013W3SAT 59 S40X |
| 17W2 | PCB clip/Thread | 15 A | 6017W2SAT 59 S40X |
| 21W1 | PCB clip/Thread | 15 A | 6021W1SAT 59 S40X |
| 13W6 | PCB clip/Thread | 15 A | 6013W6SAT 59 S40X |
| 17W5 | PCB clip/Thread | 15 A | 6017W5SAT 59 S40X |
| 21WA4 | PCB clip/Thread | 15 A | 621WA4SAT 59 S40X |
| 25W3 | PCB clip/Thread | 15 A | 6025W3SAT 59 S40X |
| 27W2 | PCB clip/Thread | 15 A | 6027W2SAT 59 S40X |
| 24W7 | PCB clip/Thread | 20 A | 6024W7SAT 81 S40X |
| 36W4 | PCB clip/Thread | 20 A | 6036W4SAT 81 S40X |
| 43W2 | PCB clip/Thread | 20 A | 6043W2SAT 81 S40X |
| 47W1 | PCB clip/Thread | 20 A | 6047W1SAT 81 S40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness.

For other contacs prefer to page 6|32 to 6|37

| Plug connector<br>Design | Mounting style 4-40 UNC | High power contact | Part Number |
|---|---|---|---|
| 5W1 | PCB clip/Thread | 15 A | 6005W1PAT 59 S40X |
| 7W2 | PCB clip/Thread | 15 A | 6007W2PAT 59 S40X |
| 11W1 | PCB clip/Thread | 15 A | 6011W1PAT 59 S40X |
| 9W4 | PCB clip/Thread | 15 A | 6009W4PAT 59 S40X |
| 13W3 | PCB clip/Thread | 15 A | 6013W3PAT 59 S40X |
| 17W2 | PCB clip/Thread | 15 A | 6017W2PAT 59 S40X |
| 21W1 | PCB clip/Thread | 15 A | 6021W1PAT 59 S40X |
| 13W6 | PCB clip/Thread | 15 A | 6013W6PAT 59 S40X |
| 17W5 | PCB clip/Thread | 15 A | 6017W5PAT 59 S40X |
| 21WA4 | PCB clip/Thread | 15 A | 621WA4PAT 59 S40X |
| 25W3 | PCB clip/Thread | 15 A | 6025W3PAT 59 S40X |
| 27W2 | PCB clip/Thread | 15 A | 6027W2PAT 59 S40X |
| 24W7 | PCB clip/Thread | 20 A | 6024W7PAT 81 S40X |
| 36W4 | PCB clip/Thread | 20 A | 6036W4PAT 81 S40X |
| 43W2 | PCB clip/Thread | 20 A | 6043W2PAT 81 S40X |
| 47W1 | PCB clip/Thread | 20 A | 6047W1PAT 81 S40X |

| Contact for shellsize 1-4 | | Code |
|---|---|---|
| High power 15 A; E=.075/1.90 mm | = | 59 |
| High power 20 A; E=.110/2.85 mm | = | 73 |
| High power 30 A; E=.126/3.20 mm | = | 74 |
| High power 40 A; E=.150/3.75 mm | = | 75 |

| Contact for shellsize 5 | | Code |
|---|---|---|
| High power 20 A; E=.110/2.85 mm | = | 81 |
| High power 30 A; E=.150/3.75 mm | = | 85 |
| High power 30 A; E=.126/3.20 mm | = | 82 |
| High power 40 A; E=.150/3.75 mm | = | 77 |

# IP67 Combination D-SUB

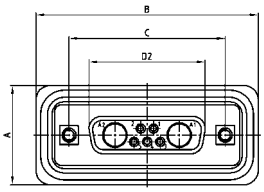
## Solder pin – Angled – .276"/7.0 mm – Precision machined contacts – Metal bracket

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

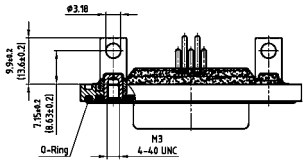
### Description

- Contacts: high power or coaxial contacts
- Mounting style:
  Metal bracket with 4-40 UNC threaded insert (M3 on request)
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (Stainless steel on request)
- Nickel plated die-cast frame
  (Black plastic frame on request)
- Stainless steel hex bolts are supplied loose

### Socket connector

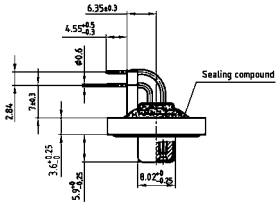


| Shellsize | A +0.3 | B +0.3 | C | D2 +0.25 |
|---|---|---|---|---|
| 1 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.46 |
| 2 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 24.79 |
| 3 | 21.10 | 61.40 | 47.04 ±0.13 | 38.50 |
| 4 | 21.10 | 77.90 | 63.50 ±0.13 | 54.96 |
| 5 | 23.90 | 75.50 | 61.10 $^{+0.14}_{-0.11}$ | 52.55 |

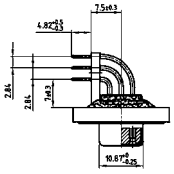



Dim. in (_ _) = Shellsize 5

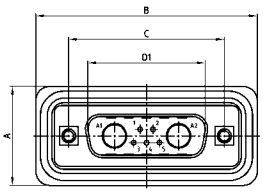
Shellsize 1-4



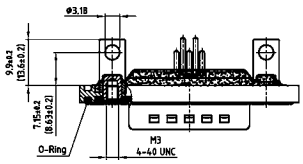

Shellsize 5



### Plug connector

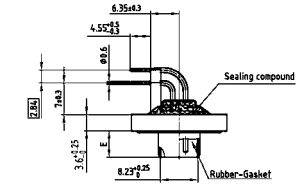


| Shellsize | A +0.3 | B +0.3 | C | D1 +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 1 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.79 | 5.82 |
| 2 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 25.12 | 5.82 |
| 3 | 21.10 | 61.40 | 47.04 ±0.13 | 38.84 | 5.69 |
| 4 | 21.10 | 77.90 | 63.50 ±0.13 | 55.30 | 5.69 |
| 5 | 23.90 | 75.50 | 61.10 $^{+0.14}_{-0.11}$ | 52.68 | 5.69 |

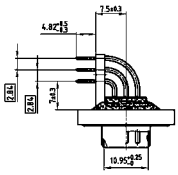



Dim. in (_ _) = Shellsize 5

Shellsize 1-4




Shellsize 5



### Order data

| Socket connector<br>Design | Mounting style 4-40 UNC | High power contact | Part Number |
|---|---|---|---|
| 5W1 | PCB clip/Threaded insert | 15 A | 6005W1SAU 59 R20X |
| 7W2 | PCB clip/Threaded insert | 15 A | 6007W2SAU 59 R20X |
| 11W1 | PCB clip/Threaded insert | 15 A | 6011W1SAU 59 R20X |
| 9W4 | PCB clip/Threaded insert | 15 A | 6009W4SAU 59 R20X |
| 13W3 | PCB clip/Threaded insert | 15 A | 6013W3SAU 59 R20X |
| 17W2 | PCB clip/Threaded insert | 15 A | 6017W2SAU 59 R20X |
| 21W1 | PCB clip/Threaded insert | 15 A | 6021W1SAU 59 R20X |
| 13W6 | PCB clip/Threaded insert | 15 A | 6013W6SAU 59 R20X |
| 17W5 | PCB clip/Threaded insert | 15 A | 6017W5SAU 59 R20X |
| 21WA4 | PCB clip/Threaded insert | 15 A | 621WA4SAU 59 R20X |
| 25W3 | PCB clip/Threaded insert | 15 A | 6025W3SAU 59 R20X |
| 27W2 | PCB clip/Threaded insert | 15 A | 6027W2SAU 59 R20X |
| 24W7 | PCB clip/Threaded insert | 20 A | 6024W7SAU 81 R20X |
| 36W4 | PCB clip/Threaded insert | 20 A | 6036W4SAU 81 R20X |
| 43W2 | PCB clip/Threaded insert | 20 A | 6043W2SAU 81 R20X |
| 47W1 | PCB clip/Threaded insert | 20 A | 6047W1SAU 81 R20X |

For other contacs prefer to page 6|32 to 6|37

| Plug connector<br>Design | Mounting style 4-40 UNC | High power contact | Part Number |
|---|---|---|---|
| 5W1 | PCB clip/Threaded insert | 15 A | 6005W1PAU 59 R20X |
| 7W2 | PCB clip/Threaded insert | 15 A | 6007W2PAU 59 R20X |
| 11W1 | PCB clip/Threaded insert | 15 A | 6011W1PAU 59 R20X |
| 9W4 | PCB clip/Threaded insert | 15 A | 6009W4PAU 59 R20X |
| 13W3 | PCB clip/Threaded insert | 15 A | 6013W3PAU 59 R20X |
| 17W2 | PCB clip/Threaded insert | 15 A | 6017W2PAU 59 R20X |
| 21W1 | PCB clip/Threaded insert | 15 A | 6021W1PAU 59 R20X |
| 13W6 | PCB clip/Threaded insert | 15 A | 6013W6PAU 59 R20X |
| 17W5 | PCB clip/Threaded insert | 15 A | 6017W5PAU 59 R20X |
| 21WA4 | PCB clip/Threaded insert | 15 A | 621WA4PAU 59 R20X |
| 25W3 | PCB clip/Threaded insert | 15 A | 6025W3PAU 59 R20X |
| 27W2 | PCB clip/Threaded insert | 15 A | 6027W2PAU 59 R20X |
| 24W7 | PCB clip/Threaded insert | 20 A | 6024W7PAU 81 R20X |
| 36W4 | PCB clip/Threaded insert | 20 A | 6036W4PAU 81 R20X |
| 43W2 | PCB clip/Threaded insert | 20 A | 6043W2PAU 81 R20X |
| 47W1 | PCB clip/Threaded insert | 20 A | 6047W1PAU 81 R20X |

| Contact for shellsize 1-4 | | Code |
|---|---|---|
| High power 15 A; E=.075/1.90 mm | = | 59 |
| High power 20 A; E=.110/2.85 mm | = | 73 |
| High power 30 A; E=.126/3.20 mm | = | 74 |
| High power 40 A; E=.150/3.75 mm | = | 75 |

| Contact for shellsize 5 | | Code |
|---|---|---|
| High power 20 A; E=.110/2.85 mm | = | 81 |
| High power 30 A; E=.150/3.75 mm | = | 85 |
| High power 30 A; E=.126/3.20 mm | = | 82 |
| High power 40 A; E=.150/3.75 mm | = | 77 |

# IP67 Combination D-SUB

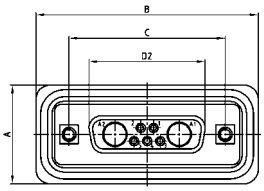
## Solder pin – Angled – .276"/7.0 mm – Precision machined contacts – Metal bracket with PCB clip

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

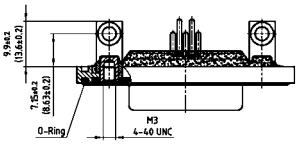
### Description

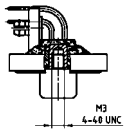
- Contacts: high power or coaxial contacts
- Mounting style:
  metal bracket, threaded insert and 4-40 UNC or M3 PCB clip
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (Stainless steel on request)
- Nickel plated die-cast frame
  (Black plastic frame on request)
- Stainless steel hex bolts are supplied loose

### Socket connector



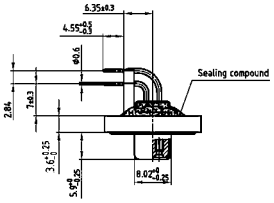
| Shellsize | A +0.3 | B +0.3 | C | D2 +0.25 |
|---|---|---|---|---|
| 1 | 21.10 | 39.40 | 25.00 +0.12 -0.13 | 16.46 |
| 2 | 21.10 | 47.70 | 33.30 +0.15 -0.10 | 24.79 |
| 3 | 21.10 | 61.40 | 47.04 ±0.13 | 38.50 |
| 4 | 21.10 | 77.90 | 63.50 ±0.13 | 54.96 |
| 5 | 23.90 | 75.50 | 61.10 +0.14 -0.11 | 52.55 |



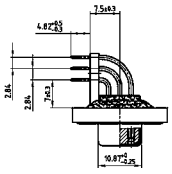

Dim. in (_ _) = Shellsize 5

Shellsize 1-4



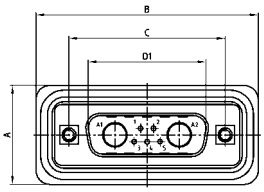

View without clip

Shellsize 5

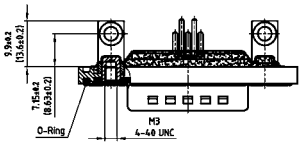


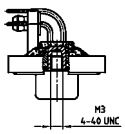
View without clip

### Plug connector



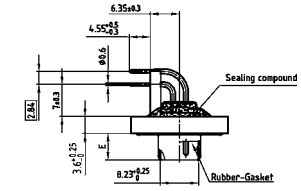
| Shellsize | A +0.3 | B +0.3 | C | D1 +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 1 | 21.10 | 39.40 | 25.00 +0.12 -0.13 | 16.79 | 5.82 |
| 2 | 21.10 | 47.70 | 33.30 +0.15 -0.10 | 25.12 | 5.82 |
| 3 | 21.10 | 61.40 | 47.04 ±0.13 | 38.84 | 5.69 |
| 4 | 21.10 | 77.90 | 63.50 ±0.13 | 55.30 | 5.69 |
| 5 | 23.90 | 75.50 | 61.10 +0.14 -0.11 | 52.68 | 5.69 |



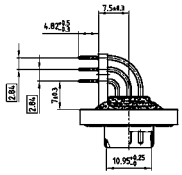

Dim. in (_ _) = Shellsize 5

Shellsize 1-4




View without clip

Shellsize 5



View without clip

### Order data

| Socket connector Design | Mounting style 4-40 UNC | High power contact | Part Number |
|---|---|---|---|
| 5W1 | PCB clip/Thread | 15 A | 6005W1SAU 59 R40X |
| 7W2 | PCB clip/Thread | 15 A | 6007W2SAU 59 R40X |
| 11W1 | PCB clip/Thread | 15 A | 6011W1SAU 59 R40X |
| 9W4 | PCB clip/Thread | 15 A | 6009W4SAU 59 R40X |
| 13W3 | PCB clip/Thread | 15 A | 6013W3SAU 59 R40X |
| 17W2 | PCB clip/Thread | 15 A | 6017W2SAU 59 R40X |
| 21W1 | PCB clip/Thread | 15 A | 6021W1SAU 59 R40X |
| 13W6 | PCB clip/Thread | 15 A | 6013W6SAU 59 R40X |
| 17W5 | PCB clip/Thread | 15 A | 6017W5SAU 59 R40X |
| 21WA4 | PCB clip/Thread | 15 A | 621WA4SAU 59 R40X |
| 25W3 | PCB clip/Thread | 15 A | 6025W3SAU 59 R40X |
| 27W2 | PCB clip/Thread | 15 A | 6027W2SAU 59 R40X |
| 24W7 | PCB clip/Thread | 20 A | 6024W7SAU 81 R40X |
| 36W4 | PCB clip/Thread | 20 A | 6036W4SAU 81 R40X |
| 43W2 | PCB clip/Thread | 20 A | 6043W2SAU 81 R40X |
| 47W1 | PCB clip/Thread | 20 A | 6047W1SAU 81 R40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness.

For other contacs prefer to page 6|32 to 6|37

| Plug connector Design | Mounting style 4-40 UNC | High power contact | Part Number |
|---|---|---|---|
| 5W1 | PCB clip/Thread | 15 A | 6005W1PAU 59 R40X |
| 7W2 | PCB clip/Thread | 15 A | 6007W2PAU 59 R40X |
| 11W1 | PCB clip/Thread | 15 A | 6011W1PAU 59 R40X |
| 9W4 | PCB clip/Thread | 15 A | 6009W4PAU 59 R40X |
| 13W3 | PCB clip/Thread | 15 A | 6013W3PAU 59 R40X |
| 17W2 | PCB clip/Thread | 15 A | 6017W2PAU 59 R40X |
| 21W1 | PCB clip/Thread | 15 A | 6021W1PAU 59 R40X |
| 13W6 | PCB clip/Thread | 15 A | 6013W6PAU 59 R40X |
| 17W5 | PCB clip/Thread | 15 A | 6017W5PAU 59 R40X |
| 21WA4 | PCB clip/Thread | 15 A | 621WA4PAU 59 R40X |
| 25W3 | PCB clip/Thread | 15 A | 6025W3PAU 59 R40X |
| 27W2 | PCB clip/Thread | 15 A | 6027W2PAU 59 R40X |
| 24W7 | PCB clip/Thread | 20 A | 6024W7PAU 81 R40X |
| 36W4 | PCB clip/Thread | 20 A | 6036W4PAU 81 R40X |
| 43W2 | PCB clip/Thread | 20 A | 6043W2PAU 81 R40X |
| 47W1 | PCB clip/Thread | 20 A | 6047W1PAU 81 R40X |

| Contact for shellsize 1-4 | | Code |
|---|---|---|
| High power 15 A; E=.075/1.90 mm | = | 59 |
| High power 20 A; E=.110/2.85 mm | = | 73 |
| High power 30 A; E=.126/3.20 mm | = | 74 |
| High power 40 A; E=.150/3.75 mm | = | 75 |

| Contact for shellsize 5 | | Code |
|---|---|---|
| High power 20 A; E=.110/2.85 mm | = | 81 |
| High power 30 A; E=.150/3.75 mm | = | 85 |
| High power 30 A; E=.126/3.20 mm | = | 82 |
| High power 40 A; E=.150/3.75 mm | = | 77 |

# IP67 Combination D-SUB

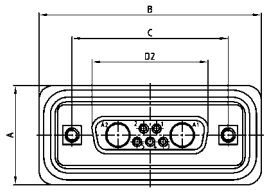
## Solder pin – Angled – .465"/11.8 mm – Precision machined contacts – Metal bracket

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

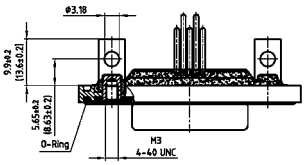
### Description

- Contacts: high power or coaxial contacts
- Mounting style:
  metal bracket with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (Stainless steel on request)
- Nickel plated die-cast frame
  (Black plastic frame on request)
- Shellsize 5 on request
- Stainless steel hex bolts are supplied loose

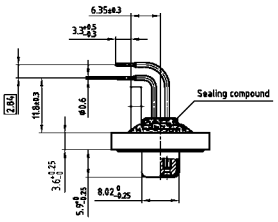
### Socket connector



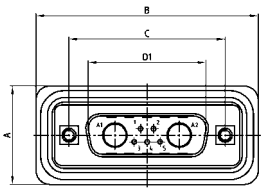

| Shellsize | A +0.3 | B +0.3 | C | D2 +0.25 |
|---|---|---|---|---|
| 1 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.46 |
| 2 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 24.79 |
| 3 | 21.10 | 61.40 | 47.04 ±0.13 | 38.50 |
| 4 | 21.10 | 77.90 | 63.50 ±0.13 | 54.96 |



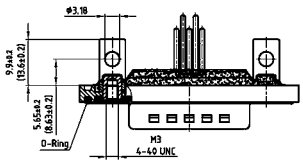

Shellsize 1-4



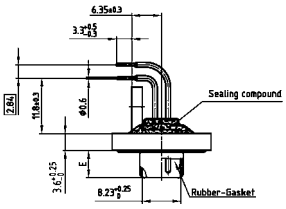

### Plug connector




| Shellsize | A +0.3 | B +0.3 | C | D1 +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 1 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.79 | 5.82 |
| 2 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 25.12 | 5.82 |
| 3 | 21.10 | 61.40 | 47.04 ±0.13 | 38.84 | 5.69 |
| 4 | 21.10 | 77.90 | 63.50 ±0.13 | 55.30 | 5.69 |




Shellsize 1-4




### Order data

| Socket connector | | | |
|---|---|---|---|
| Design | Mounting style 4-40 UNC | High power contact | Part Number |
| 5W1 | Threaded insert | 15 A | 6005W1SAZ 59S20X |
| 7W2 | Threaded insert | 15 A | 6007W2SAZ 59S20X |
| 11W1 | Threaded insert | 15 A | 6011W1SAZ 59S20X |
| 9W4 | Threaded insert | 15 A | 6009W4SAZ 59S20X |
| 13W3 | Threaded insert | 15 A | 6013W3SAZ 59S20X |
| 17W2 | Threaded insert | 15 A | 6017W2SAZ 59S20X |
| 21W1 | Threaded insert | 15 A | 6021W1SAZ 59S20X |
| 13W6 | Threaded insert | 15 A | 6013W6SAZ 59S20X |
| 17W5 | Threaded insert | 15 A | 6017W5SAZ 59S20X |
| 21WA4 | Threaded insert | 15 A | 621WA4SAZ 59S20X |
| 25W3 | Threaded insert | 15 A | 6025W3SAZ 59S20X |
| 27W2 | Threaded insert | 15 A | 6027W2SAZ 59S20X |

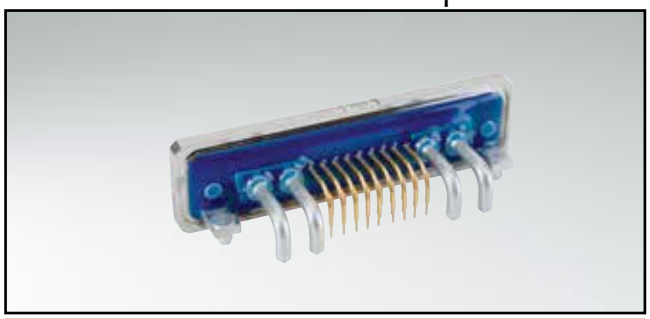
For other contacs prefer to page 6|32 to 6|37

| Plug connector | | | |
|---|---|---|---|
| Design | Mounting style 4-40 UNC | High power contact | Part Number |
| 5W1 | Threaded insert | 15 A | 6005W1PAZ 59S20X |
| 7W2 | Threaded insert | 15 A | 6007W2PAZ 59S20X |
| 11W1 | Threaded insert | 15 A | 6011W1PAZ 59S20X |
| 9W4 | Threaded insert | 15 A | 6009W4PAZ 59S20X |
| 13W3 | Threaded insert | 15 A | 6013W3PAZ 59S20X |
| 17W2 | Threaded insert | 15 A | 6017W2PAZ 59S20X |
| 21W1 | Threaded insert | 15 A | 6021W1PAZ 59S20X |
| 13W6 | Threaded insert | 15 A | 6013W6PAZ 59S20X |
| 17W5 | Threaded insert | 15 A | 6017W5PAZ 59S20X |
| 21WA4 | Threaded insert | 15 A | 621WA4PAZ 59S20X |
| 25W3 | Threaded insert | 15 A | 6025W3PAZ 59S20X |
| 27W2 | Threaded insert | 15 A | 6027W2PAZ 59S20X |

| Contact | Code |
|---|---|
| High power 15 A ; E= .075"/1.90 mm = | 59 |
| High power 20 A ; E= .110"/2.85 mm = | 73 |
| High power 30 A ; E= .126"/3.20 mm = | 74 |
| High power 40 A ; E= .150"/3.75 mm = | 75 |

# IP67 Combination D-SUB

## Solder pin – Angled – .465"/11.8 mm – Precision machined contacts – Metal bracket with PCB clip

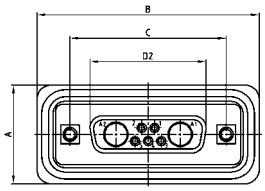


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

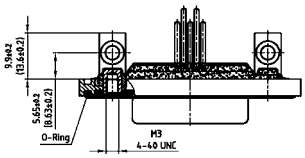
### Description

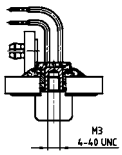
- Contacts: high power or coaxial contacts
- Mounting style:
  metal bracket, threaded insert and 4-40 UNC or M3 PCB clip
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (Stainless steel on request)
- Nickel plated die-cast frame
  (Black plastic frame on request)
- Shellsize 5 on request
- Stainless steel hex bolts are supplied loose

### Socket connector

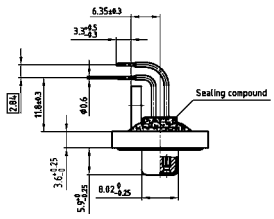



| Shellsize | A +0.3 | B +0.3 | C | D2 +0.25 |
|---|---|---|---|---|
| 1 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.46 |
| 2 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 24.79 |
| 3 | 21.10 | 61.40 | 47.04 ±0.13 | 38.50 |
| 4 | 21.10 | 77.90 | 63.50 ±0.13 | 54.96 |

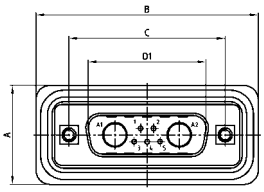


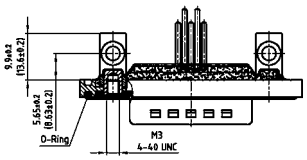

Shellsize 1-4

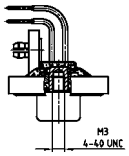



### Plug connector

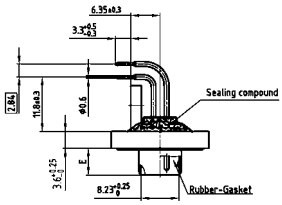



| Shellsize | A +0.3 | B +0.3 | C | D1 +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 1 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.79 | 5.82 |
| 2 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 25.12 | 5.82 |
| 3 | 21.10 | 61.40 | 47.04 ±0.13 | 38.84 | 5.69 |
| 4 | 21.10 | 77.90 | 63.50 ±0.13 | 55.30 | 5.69 |




Shellsize 1-4




### Order data

| Socket connector | | | | |
|---|---|---|---|---|
| Design | Mounting style 4-40 UNC | High power contact | Part Number | |
| 5W1 | PCB clip/Threaded insert | 15 A | 6005W1SAZ | 59 S40X |
| 7W2 | PCB clip/Threaded insert | 15 A | 6007W2SAZ | 59 S40X |
| 11W1 | PCB clip/Threaded insert | 15 A | 6011W1SAZ | 59 S40X |
| 9W4 | PCB clip/Threaded insert | 15 A | 6009W4SAZ | 59 S40X |
| 13W3 | PCB clip/Threaded insert | 15 A | 6013W3SAZ | 59 S40X |
| 17W2 | PCB clip/Threaded insert | 15 A | 6017W2SAZ | 59 S40X |
| 21W1 | PCB clip/Threaded insert | 15 A | 6021W1SAZ | 59 S40X |
| 13W6 | PCB clip/Threaded insert | 15 A | 6013W6SAZ | 59 S40X |
| 17W5 | PCB clip/Threaded insert | 15 A | 6017W5SAZ | 59 S40X |
| 21WA4 | PCB clip/Threaded insert | 15 A | 621WA4SAZ | 59 S40X |
| 25W3 | PCB clip/Threaded insert | 15 A | 6025W3SAZ | 59 S40X |
| 27W2 | PCB clip/Threaded insert | 15 A | 6027W2SAZ | 59 S40X |

| Plug connector | | | | |
|---|---|---|---|---|
| Design | Mounting style 4-40 UNC | High power contact | Part Number | |
| 5W1 | PCB clip/Threaded insert | 15 A | 6005W1PAZ | 59 S40X |
| 7W2 | PCB clip/Threaded insert | 15 A | 6007W2PAZ | 59 S40X |
| 11W1 | PCB clip/Threaded insert | 15 A | 6011W1PAZ | 59 S40X |
| 9W4 | PCB clip/Threaded insert | 15 A | 6009W4PAZ | 59 S40X |
| 13W3 | PCB clip/Threaded insert | 15 A | 6013W3PAZ | 59 S40X |
| 17W2 | PCB clip/Threaded insert | 15 A | 6017W2PAZ | 59 S40X |
| 21W1 | PCB clip/Threaded insert | 15 A | 6021W1PAZ | 59 S40X |
| 13W6 | PCB clip/Threaded insert | 15 A | 6013W6PAZ | 59 S40X |
| 17W5 | PCB clip/Threaded insert | 15 A | 6017W5PAZ | 59 S40X |
| 21WA4 | PCB clip/Threaded insert | 15 A | 621WA4PAZ | 59 S40X |
| 25W3 | PCB clip/Threaded insert | 15 A | 6025W3PAZ | 59 S40X |
| 27W2 | PCB clip/Threaded insert | 15 A | 6027W2PAZ | 59 S40X |

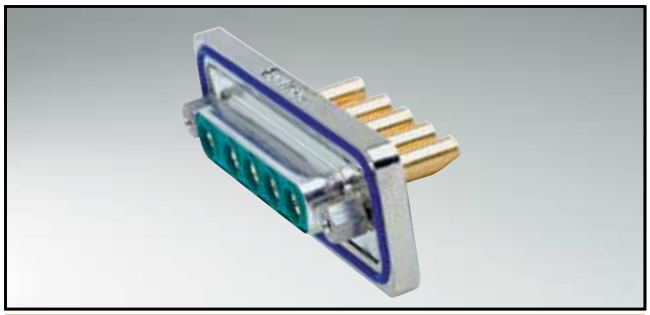
PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness.

For other contacs prefer to page 6|32 to 6|37

| Contact | Code |
|---|---|
| High power 15 A ; E= .075"/1.90 mm = | 59 |
| High power 20 A ; E= .110"/2.85 mm = | 73 |
| High power 30 A ; E= .126"/3.20 mm = | 74 |
| High power 40 A ; E= .150"/3.75 mm = | 75 |

# IP67 Combination D-SUB

## Solder cup – Solder pin – Straight – With power or coaxial contacts – Precision machined contacts

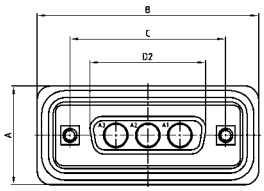


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

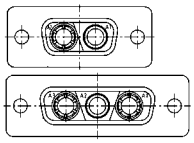
- Designs: **2W2C; 3W3; 3W3C; 5W5; 8W8**
- Contacts: high power or coaxial contacts
- Mounting styles:
  - with 4-40 UNC or M3 threaded insert
  - with 4-40 UNC or M3 threaded rear spacer with PCB clip
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (Stainless steel on request)
- Nickel plated die-cast frame (Black plastic frame on request)
- Stainless steel hex bolts are supplied loose

### Socket connector



| Shellsize | A +0.3 | B +0.3 | C | D2 +0.25 |
|---|---|---|---|---|
| 1 | 21.10 | 39.40 | 25.00 +0.12 -0.13 | 16.46 |
| 2 | 21.10 | 47.70 | 33.30 +0.15 -0.10 | 24.79 |
| 3 | 21.10 | 61.40 | 47.04 ±0.13 | 38.50 |
| 4 | 21.10 | 77.90 | 63.50 ±0.13 | 54.96 |

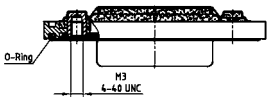
Coded socket connectors



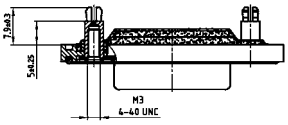
2W2C = 1 Socket – 1 Plug

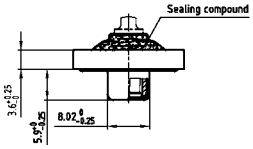
3W3C = 2 Sockets – 1 Plug

Mounting style: Threaded insert (Solder cup)

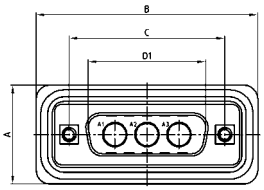



Mounting style: Threaded rear spacer with PCB clip (Solder pin)



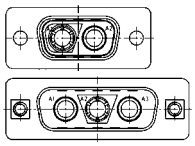




### Plug connector



| Shellsize | A +0.3 | B +0.3 | C | D1 +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 1 | 21.10 | 39.40 | 25.00 +0.12 -0.13 | 16.79 | 5.82 |
| 2 | 21.10 | 47.70 | 33.30 +0.15 -0.10 | 25.12 | 5.82 |
| 3 | 21.10 | 61.40 | 47.04 ±0.13 | 38.84 | 5.69 |
| 4 | 21.10 | 77.90 | 63.50 ±0.13 | 55.30 | 5.69 |

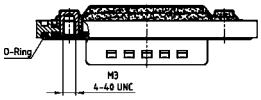
Coded plug connectors



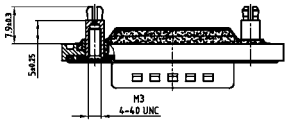
2W2C = 1 Plug – 1 Socket

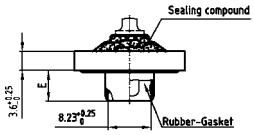
3W3C = 2 Plugs – 1 Socket

Mounting style: Threaded insert (Solder cup)




Mounting style: Threaded rear spacer with PCB clip (Solder pin)




### Order data

**Socket connector**

| Design | Mounting style / Solder cup | Contact | Part Number |
|---|---|---|---|
| 2W2C | Threaded insert 4-40 UNC | High power 10A | 602W2CSXX61B30X |
| 3W3 | Threaded insert 4-40 UNC | High power 10A | 6003W3SXX61B30X |
| 3W3C | Threaded insert 4-40 UNC | High power 10A | 603W3CSXX61B30X |
| 5W5 | Threaded insert 4-40 UNC | High power 10A | 6005W5SXX61B30X |
| 8W8 | Threaded insert 4-40 UNC | High power 10A | 6008W8SXX61B30X |
| **Design** | **Mounting style / Solder pin** | **Contact** | **Part Number** |
| 2W2C | Rear spacer with clip 4-40 UNC | High power 10A | 602W2CSXX68E20X |
| 3W3 | Rear spacer with clip 4-40 UNC | High power 10A | 6003W3SXX68E20X |
| 3W3C | Rear spacer with clip 4-40 UNC | High power 10A | 603W3CSXX68E20X |
| 5W5 | Rear spacer with clip 4-40 UNC | High power 10A | 6005W5SXX68E20X |
| 8W8 | Rear spacer with clip 4-40 UNC | High power 10A | 6008W8SXX68E20X |

**Plug connector**

| Design | Mounting style / Solder cup | Contact | Part Number |
|---|---|---|---|
| 2W2C | Threaded insert 4-40 UNC | High power 10A | 602W2CPXX61B30X |
| 3W3 | Threaded insert 4-40 UNC | High power 10A | 6003W3PXX61B30X |
| 3W3C | Threaded insert 4-40 UNC | High power 10A | 603W3CPXX61B30X |
| 5W5 | Threaded insert 4-40 UNC | High power 10A | 6005W5PXX61B30X |
| 8W8 | Threaded insert 4-40 UNC | High power 10A | 6008W8PXX61B30X |
| **Design** | **Mounting style / Solder pin** | **Contact** | **Part Number** |
| 2W2C | Rear spacer with clip 4-40 UNC | High power 10A | 602W2CPXX68E20X |
| 3W3 | Rear spacer with clip 4-40 UNC | High power 10A | 6003W3PXX68E20X |
| 3W3C | Rear spacer with clip 4-40 UNC | High power 10A | 603W3CPXX68E20X |
| 5W5 | Rear spacer with clip 4-40 UNC | High power 10A | 6005W5PXX68E20X |
| 8W8 | Rear spacer with clip 4-40 UNC | High power 10A | 6008W8PXX68E20X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness.

For other contacs prefer to page 6|32 to 6|37

| *Contact solder cup | | Code |
|---|---|---|
| High power 10A | = | 61 |
| High power 20A | = | 62 |

| Contact solder pin straight | | Code |
|---|---|---|
| High power 20A, D=1,95 | = | 68 |
| High power 20A, D=2,60 | = | 69 |
| High power 20A, D=2,85 | = | 70 |
| High power 30A, D=3,18 | = | 71 |
| High power 40A, D=3,75 | = | 72 |

# IP67 Combination D-SUB

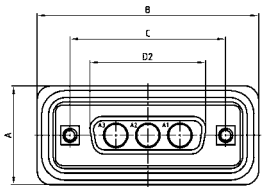
## Solder pin – Angled – With power or coaxial contacts – Precision machined contacts – Metal bracket

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

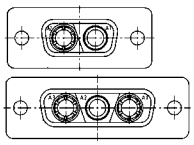
- Designs: **2W2C; 3W3; 3W3C; 5W5; 8W8**
- Contacts: high power or coaxial contacts
- Mounting styles:
  - with 4-40 UNC or M3 threaded insert
  - with 4-40 UNC or M3 threaded rear spacer with PCB clip
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (Stainless steel on request)
- Nickel plated die-cast frame
  (Black plastic frame on request)
- Stainless steel hex bolts are supplied loose

### Socket connector




| Shellsize | A +0.3 | B +0.3 | C | D2 +0.25 |
|---|---|---|---|---|
| 1 | 21.10 | 39.40 | 25.00 +0.12 −0.13 | 16.46 |
| 2 | 21.10 | 47.70 | 33.30 +0.15 −0.10 | 24.79 |
| 3 | 21.10 | 61.40 | 47.04 ±0.13 | 38.50 |
| 4 | 21.10 | 77.90 | 63.50 ±0.13 | 54.96 |

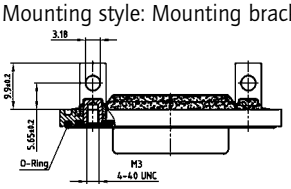
Coded socket connectors



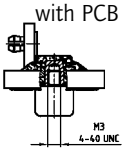
2W2C = 1 Socket – 1 Plug

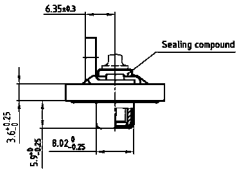
3W3C = 2 Sockets – 1 Plug

Mounting style: Mounting bracket, threaded insert

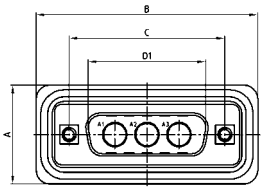



Mounting style: Threaded rear spacer with PCB clip



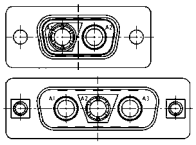




### Plug connector




| Shellsize | A +0.3 | B +0.3 | C | D1 +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 1 | 21.10 | 39.40 | 25.00 +0.12 −0.13 | 16.79 | 5.82 |
| 2 | 21.10 | 47.70 | 33.30 +0.15 −0.10 | 25.12 | 5.82 |
| 3 | 21.10 | 61.40 | 47.04 ±0.13 | 38.84 | 5.69 |
| 4 | 21.10 | 77.90 | 63.50 ±0.13 | 55.30 | 5.69 |

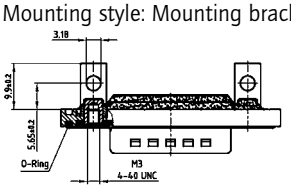
Coded plug connectors



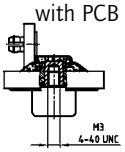
2W2C = 1 Plug – 1 Socket

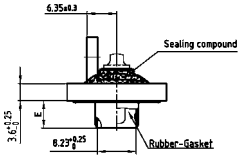
3W3C = 2 Plugs – 1 Socket

Mounting style: Mounting bracket, threaded insert




Mounting style: Threaded rear spacer with PCB clip




### Order data

| Socket connector | | | |
|---|---|---|---|
| Design | Mounting style 4-40 UNC | High power contact | Part Number |
| 2W2C | Threaded insert | 15 A | 602W2CSXX59S20X |
| 3W3 | Threaded insert | 15 A | 6003W3SXX59S20X |
| 3W3C | Threaded insert | 15 A | 603W3CSXX59S20X |
| 5W5 | Threaded insert | 15 A | 6005W5SXX59S20X |
| 8W8 | Threaded insert | 15 A | 6008W8SXX59S20X |
| 2W2C | Threaded rear spacer/PCB clip | 15 A | 602W2CSXX59S40X |
| 3W3 | Threaded rear spacer/PCB clip | 15 A | 6003W3SXX59S40X |
| 3W3C | Threaded rear spacer/PCB clip | 15 A | 603W3CSXX59S40X |
| 5W5 | Threaded rear spacer/PCB clip | 15 A | 6005W5SXX59S40X |
| 8W8 | Threaded rear spacer/PCB clip | 15 A | 6008W8SXX59S40X |

| Plug connector | | | |
|---|---|---|---|
| Design | Mounting style 4-40 UNC | High power contact | Part Number |
| 2W2C | Threaded insert | 15 A | 602W2CPXX59S20X |
| 3W3 | Threaded insert | 15 A | 6003W3PXX59S20X |
| 3W3C | Threaded insert | 15 A | 603W3CPXX59S20X |
| 5W5 | Threaded insert | 15 A | 6005W5PXX59S20X |
| 8W8 | Threaded insert | 15 A | 6008W8PXX59S20X |
| 2W2C | Threaded rear spacer/PCB clip | 15 A | 602W2CPXX59S40X |
| 3W3 | Threaded rear spacer/PCB clip | 15 A | 6003W3PXX59S40X |
| 3W3C | Threaded rear spacer/PCB clip | 15 A | 603W3CPXX59S40X |
| 5W5 | Threaded rear spacer/PCB clip | 15 A | 6005W5PXX59S40X |
| 8W8 | Threaded rear spacer/PCB clip | 15 A | 6008W8PXX59S40X |

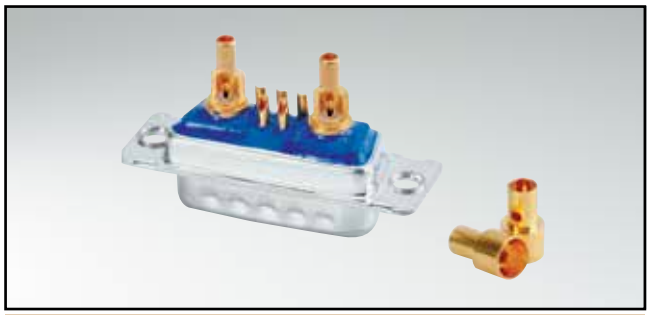
PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness.

For other contacs prefer to page 6|32 to 6|37

| Contact | | Code |
|---|---|---|
| High power 15 A | = | 59 |
| High power 20 A | = | 73 |
| High power 30 A | = | 74 |
| High power 40 A | = | 75 |

# IP67 Combination D-SUB – without frame

## Solder cup – Precision machined contacts – Design for use with hood – For wire size AWG20

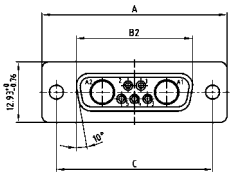


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

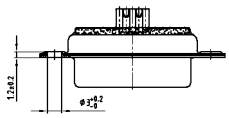
### Description

- Signal contacts for wire size **AWG 20**
- Contacts: high power or coaxial contacts
- Mounting style:
  through-hole Ø .118" / 3.0 mm
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (Stainless steel on request)

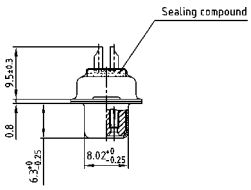
### Socket connector



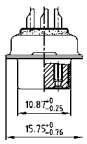
| Shellsize | A -0.76 | B2 -0.25 | C |
|---|---|---|---|
| 1 | 31.19 | 16.46 | 25.00 $^{+0.12}_{-0.13}$ |
| 2 | 39.52 | 24.79 | 33.30 $^{+0.15}_{-0.10}$ |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |
| 5 | 67.31 | 52.55 | 61.10 $^{+0.14}_{-0.11}$ |



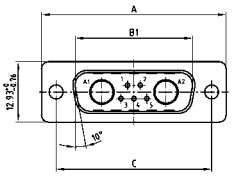
Shellsize 1-4



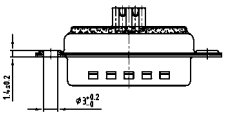

Shellsize 5



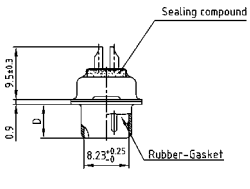
### Plug connector



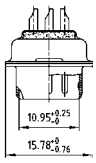
| Shellsize | A -0,76 | B1 +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 1 | 31.19 | 16.79 | 25.00 $^{+0.12}_{-0.13}$ | 6.12 |
| 2 | 39.52 | 25.12 | 33.30 $^{+0.15}_{-0.10}$ | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 5 | 67.31 | 52.68 | 61.10 $^{+0.14}_{-0.11}$ | 5.99 |



Shellsize 1-4




Shellsize 5



### Order data

| Socket connector | | | |
|---|---|---|---|
| Design | Mounting style | High power contact | Part Number |
| 5W1 | Through-hole | 10 A | 4005W1SAM 61 A10X |
| 7W2 | Through-hole | 10 A | 4007W2SAM 61 A10X |
| 11W1 | Through-hole | 10 A | 4011W1SAM 61 A10X |
| 9W4 | Through-hole | 10 A | 4009W4SAM 61 A10X |
| 13W3 | Through-hole | 10 A | 4013W3SAM 61 A10X |
| 17W2 | Through-hole | 10 A | 4017W2SAM 61 A10X |
| 21W1 | Through-hole | 10 A | 4021W1SAM 61 A10X |
| 13W6 | Through-hole | 10 A | 4013W6SAM 61 A10X |
| 17W5 | Through-hole | 10 A | 4017W5SAM 61 A10X |
| 21WA4 | Through-hole | 10 A | 421WA4SAM 61 A10X |
| 25W3 | Through-hole | 10 A | 4025W3SAM 61 A10X |
| 27W2 | Through-hole | 10 A | 4027W2SAM 61 A10X |
| 24W7 | Through-hole | 10 A | 4024W7SAM 61 A10X |
| 36W4 | Through-hole | 10 A | 4036W4SAM 61 A10X |
| 43W2 | Through-hole | 10 A | 4043W2SAM 61 A10X |
| 47W1 | Through-hole | 10 A | 4047W1SAM 61 A10X |

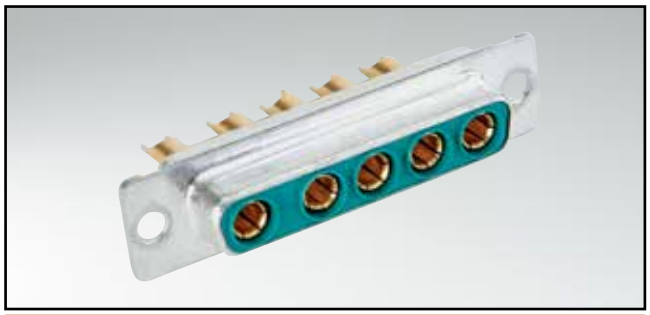
| Plug connector | | | |
|---|---|---|---|
| Design | Mounting style | High power contact | Part Number |
| 5W1 | Through-hole | 10 A | 4005W1PAM 61 A10X |
| 7W2 | Through-hole | 10 A | 4007W2PAM 61 A10X |
| 11W1 | Through-hole | 10 A | 4011W1PAM 61 A10X |
| 9W4 | Through-hole | 10 A | 4009W4PAM 61 A10X |
| 13W3 | Through-hole | 10 A | 4013W3PAM 61 A10X |
| 17W2 | Through-hole | 10 A | 4017W2PAM 61 A10X |
| 21W1 | Through-hole | 10 A | 4021W1PAM 61 A10X |
| 13W6 | Through-hole | 10 A | 4013W6PAM 61 A10X |
| 17W5 | Through-hole | 10 A | 4017W5PAM 61 A10X |
| 21WA4 | Through-hole | 10 A | 421WA4PAM 61 A10X |
| 25W3 | Through-hole | 10 A | 4025W3PAM 61 A10X |
| 27W2 | Through-hole | 10 A | 4027W2PAM 61 A10X |
| 24W7 | Through-hole | 10 A | 4024W7PAM 61 A10X |
| 36W4 | Through-hole | 10 A | 4036W4PAM 61 A10X |
| 43W2 | Through-hole | 10 A | 4043W2PAM 61 A10X |
| 47W1 | Through-hole | 10 A | 4047W1PAM 61 A10X |

For other contacts refer to page 7|24 up to 7|29.

| Contact | | Code |
|---|---|---|
| High power 10 A | = | 61 |
| High power 20 A | = | 62 |

# IP67 Combination D-SUB – without frame

## Solder cup – Precision machined contacts – Design for use with hood

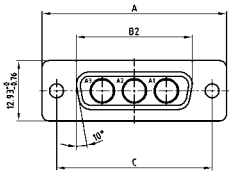


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

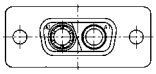
- Designs: **2W2C; 3W3; 3W3C; 5W5; 8W8**
- Contacts: high power or coaxial contacts
- Mounting style:
  through-hole Ø .118" / 3.0 mm
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (Stainless steel on request)

### Socket connector

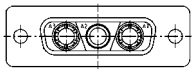


| Shellsize | A -0.76 | B2 -0.25 | C |
|---|---|---|---|
| 1 | 31.19 | 16.46 | 25.00 +0.12 -0.13 |
| 2 | 39.52 | 24.79 | 33.30 +0.15 -0.10 |
| 3 | 53.42 | 38.50 | 47.04 ±0.13 |
| 4 | 69.70 | 54.96 | 63.50 ±0.13 |

Coded socket connectors

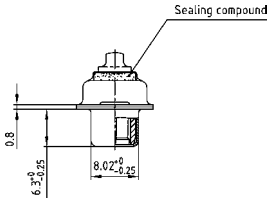


2W2C = 1 Socket – 1 Plug

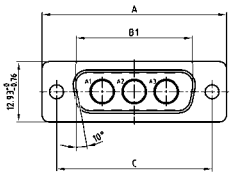


3W3C = 2 Sockets – 1 Plug

Shellsize 1-4

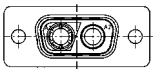



### Plug connector

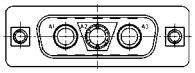


| Shellsize | A -0,76 | B1 +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 1 | 31.19 | 16.79 | 25.00 +0.12 -0.13 | 6.12 |
| 2 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 3 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 4 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |

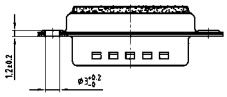
Coded plug connectors



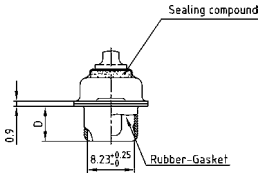
2W2C = 1 Plug – 1 Socket



3W3C = 2 Plugs – 2 Socket



Shellsize 1-4




### Order data

| Socket connector Design | Mounting style | High power contact | Part Number |
|---|---|---|---|
| 2W2C | Through-hole | 10 A | 402W2CSXX 61 A10X |
| 3W3 | Through-hole | 10 A | 4003W3SXX 61 A10X |
| 3W3C | Through-hole | 10 A | 403W3CSXX 61 A10X |
| 5W5 | Through-hole | 10 A | 4005W5SXX 61 A10X |
| 8W8 | Through-hole | 10 A | 4008W8SXX 61 A10X |

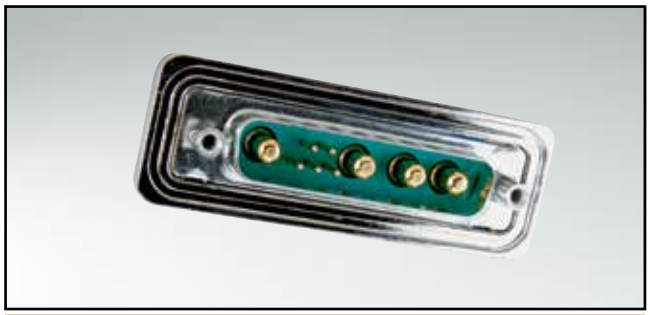
| Plug connector Design | Mounting style | High power contact | Part Number |
|---|---|---|---|
| 2W2C | Through-hole | 10 A | 402W2CPXX 61 A10X |
| 3W3 | Through-hole | 10 A | 4003W3PXX 61 A10X |
| 3W3C | Through-hole | 10 A | 403W3CPXX 61 A10X |
| 5W5 | Through-hole | 10 A | 4005W5PXX 61 A10X |
| 8W8 | Through-hole | 10 A | 4008W8PXX 61 A10X |

For other contacts refer to page 7|24 up to 7|29.

| Contact solder cup | | Code |
|---|---|---|
| High power 10 A | = | 61 |
| High power 20 A | = | 62 |

# IP67 Combination D-SUB – Front panel mounting

## Solder cup – Precision machined contacts

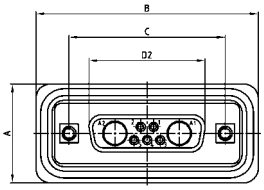


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

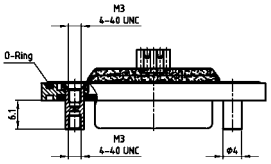
### Description

- Signal contacts for wire size **AWG 20**
- Contacts: high power or coaxial contacts
- Mounting style:
  with 4-40 UNC or M3 front spacer
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (Stainless steel on request)
- Nickel plated die-cast frame
  (Black plastic frame on request)
- Stainless steel hex bolts are supplied loose

### Socket connector

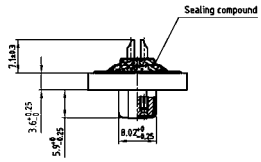


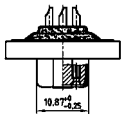

| Shellsize | A +0.3 | B +0.3 | C | D2 +0.25 |
|---|---|---|---|---|
| 1 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.46 |
| 2 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 24.79 |
| 3 | 21.10 | 61.40 | 47.04 ±0.13 | 38.50 |
| 4 | 21.10 | 77.90 | 63.50 ±0.13 | 54.96 |
| 5 | 23.90 | 75.50 | 61.10 $^{+0.14}_{-0.11}$ | 52.55 |



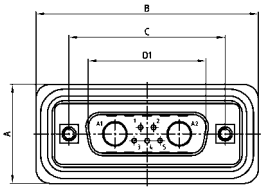

Shellsize 1-4

Shellsize 5

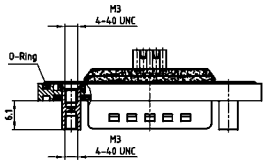



### Plug connector

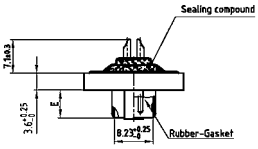


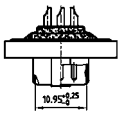

| Shellsize | A +0.3 | B +0.3 | C | D1 +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 1 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.79 | 5.82 |
| 2 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 25.12 | 5.82 |
| 3 | 21.10 | 61.40 | 47.04 ±0.13 | 38.84 | 5.69 |
| 4 | 21.10 | 77.90 | 63.50 ±0.13 | 55.30 | 5.69 |
| 5 | 23.90 | 75.50 | 61.10 $^{+0.14}_{-0.11}$ | 52.68 | 5.69 |




Shellsize 1-4

Shellsize 5




### Order data

| Socket connector<br>Design | Mounting style 4-40 UNC | High power contact | Part Number |
|---|---|---|---|
| 5W1 | Front spacer | 10 A | 6005W1SAM 61 B50X |
| 7W2 | Front spacer | 10 A | 6007W2SAM 61 B50X |
| 11W1 | Front spacer | 10 A | 6011W1SAM 61 B50X |
| 9W4 | Front spacer | 10 A | 6009W4SAM 61 B50X |
| 13W3 | Front spacer | 10 A | 6013W3SAM 61 B50X |
| 17W2 | Front spacer | 10 A | 6017W2SAM 61 B50X |
| 21W1 | Front spacer | 10 A | 6021W1SAM 61 B50X |
| 13W6 | Front spacer | 10 A | 6013W6SAM 61 B50X |
| 17W5 | Front spacer | 10 A | 6017W5SAM 61 B50X |
| 21WA4 | Front spacer | 10 A | 621WA4SAM 61 B50X |
| 25W3 | Front spacer | 10 A | 6025W3SAM 61 B50X |
| 27W2 | Front spacer | 10 A | 6027W2SAM 61 B50X |
| 24W7 | Front spacer | 10 A | 6024W7SAM 61 B50X |
| 36W4 | Front spacer | 10 A | 6036W4SAM 61 B50X |
| 43W2 | Front spacer | 10 A | 6043W2SAM 61 B50X |
| 47W1 | Front spacer | 10 A | 6047W1SAM 61 B50X |

| Plug connector<br>Design | Mounting style 4-40 UNC | High power contact | Part Number |
|---|---|---|---|
| 5W1 | Front spacer | 10 A | 6005W1PAM 61 B50X |
| 7W2 | Front spacer | 10 A | 6007W2PAM 61 B50X |
| 11W1 | Front spacer | 10 A | 6011W1PAM 61 B50X |
| 9W4 | Front spacer | 10 A | 6009W4PAM 61 B50X |
| 13W3 | Front spacer | 10 A | 6013W3PAM 61 B50X |
| 17W2 | Front spacer | 10 A | 6017W2PAM 61 B50X |
| 21W1 | Front spacer | 10 A | 6021W1PAM 61 B50X |
| 13W6 | Front spacer | 10 A | 6013W6PAM 61 B50X |
| 17W5 | Front spacer | 10 A | 6017W5PAM 61 B50X |
| 21WA4 | Front spacer | 10 A | 621WA4PAM 61 B50X |
| 25W3 | Front spacer | 10 A | 6025W3PAM 61 B50X |
| 27W2 | Front spacer | 10 A | 6027W2PAM 61 B50X |
| 24W7 | Front spacer | 10 A | 6024W7PAM 61 B50X |
| 36W4 | Front spacer | 10 A | 6036W4PAM 61 B50X |
| 43W2 | Front spacer | 10 A | 6043W2PAM 61 B50X |
| 47W1 | Front spacer | 10 A | 6047W1PAM 61 B50X |

For other contacts refer to page 7|24 up to 7|29.

| Contact | | Code |
|---|---|---|
| High power 10 A | = | 61 |
| High power 20 A | = | 62 |

# IP67 Combination D-SUB – Front panel mounting

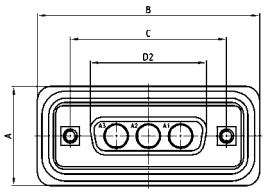
## Solder cup – With power or coaxial contacts – Precision machined contacts

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

- Designs: **2W2C; 3W3; 3W3C; 5W5; 8W8**
- Contacts: high power or coaxial contacts
- Mounting styles:
  with 4-40 UNC or M3 front spacer
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated
- Nickel plated die-cast frame
  (Black plastic frame on request)
- Stainless steel hex bolts are supplied loose

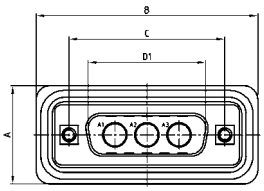
### Socket connector




Dimensions in mm

| Shellsize | A +0.3 | B +0.3 | C | D2 +0.25 |
|---|---|---|---|---|
| 1 | 39.40 | 16.46 | 24.99 $^{+0.13}_{-0.12}$ | 16.79 |
| 2 | 47.70 | 24.79 | 33.32 $^{+0.13}_{-0.12}$ | 25.12 |
| 3 | 61.40 | 38.50 | 47.04 ±0.13 | 38.84 |
| 4 | 77.90 | 54.96 | 63.50 ±0.13 | 55.30 |

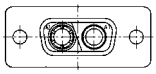
### Plug connector



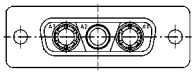

Dimensions in mm

| Shellsize | A +0.3 | B +0.3 | C | D1 +0.25 | E -0,30 |
|---|---|---|---|---|---|
| 1 | 39.40 | 16.46 | 24.99 $^{+0.13}_{-0.12}$ | 16.46 | 5.82 |
| 2 | 47.70 | 24.79 | 33.32 $^{+0.13}_{-0.12}$ | 24.79 | 5.82 |
| 3 | 61.40 | 38.50 | 47.04 ±0.13 | 38.50 | 5.69 |
| 4 | 77.90 | 54.96 | 63.50 ±0.13 | 54.96 | 5.69 |

Coded socket connectors

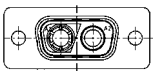


2W2C = 1 Socket – 1 Plug

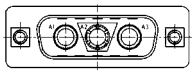


3W3C = 2 Sockets – 1 Plug

Coded plug connectors

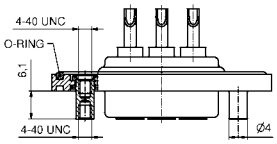


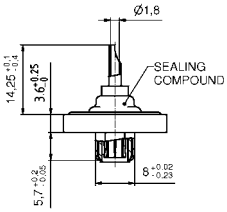
2W2C = 1 Plug – 1 Socket



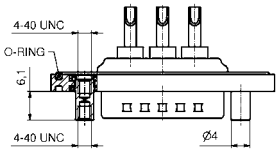
3W3C = 2 Plugs – 1 Socket

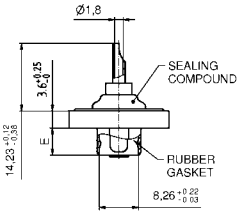
Shellsize 1-4




Shellsize 1-4




### Order data

| Socket connector | | | |
|---|---|---|---|
| Design | Mounting style 4-40 UNC | High power contact | Part Number |
| 2W2C | Front spacer | 10 A | 602W2CSXX61 B50X |
| 3W3 | Front spacer | 10 A | 6003W3SXX61 B50X |
| 3W3C | Front spacer | 10 A | 603W3CSXX61 B50X |
| 5W5 | Front spacer | 10 A | 6005W5SXX61 B50X |
| 8W8 | Front spacer | 10 A | 6008W8SXX61 B50X |

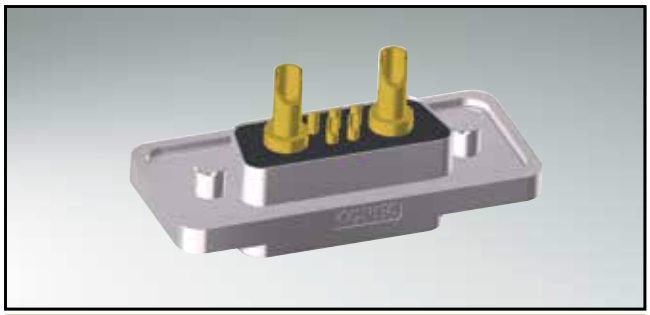
| Plug connector | | | |
|---|---|---|---|
| Design | Mounting style 4-40 UNC | High power contact | Part Number |
| 2W2C | Front spacer | 10 A | 602W2CPXX61 B50X |
| 3W3 | Front spacer | 10 A | 6003W3PXX61 B50X |
| 3W3C | Front spacer | 10 A | 603W3CPXX61 B50X |
| 5W5 | Front spacer | 10 A | 6005W5PXX61 B50X |
| 8W8 | Front spacer | 10 A | 6008W8PXX61 B50X |

For other contacts refer to page 7|24 up to 7|29.

| Contact | | Code |
|---|---|---|
| High power 10 A | = | 61 |
| High power 20 A | = | 62 |

# IP67 Combination D-SUB Solid Body

## Solder cup – Precision machined contacts – For wire size AWG 20 and AWG 12 - 14

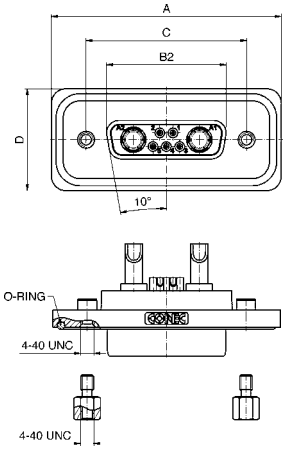


RoHS compliant – UL listed, File No.: E202784

### Description

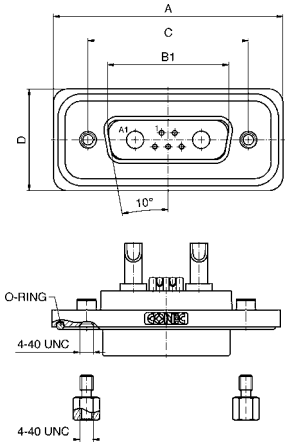
- Signal contacts for wire size **AWG 20**
- High power contacts 20A for cable **AWG 12 - 14**
- Mounting style:
  with 4-40 UNC threaded insert
- Quality class 3 (also available in quality class 1)
- One-piece zinc die-cast nickel plated shell
- IP67 for harsh environments, pressure-proof up to 1.45 PSI
- Stainless steel hex bolts are supplied loose

### Socket connector



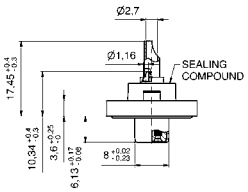

| Shellsize | A | B2 -0.25 | C | D |
|---|---|---|---|---|
| 1 | $39.40^{+0.3}_{-0}$ | 16.46 | $25.00^{+0.12}_{-0.13}$ | $21.10^{+0.3}$ |
| 2 | $47.70^{+0.3}_{-0}$ | 24.79 | $33.32^{+0.13}_{-0.12}$ | $21.10^{+0.3}$ |
| 3 | $61.40^{+0.3}_{-0}$ | 38.50 | $47.04^{\pm 0.13}$ | $21.10^{+0.3}$ |
| 4 | $78.00^{+0.3}_{-0}$ | 54.96 | $63.50^{\pm 0.13}$ | $21.10^{+0.3}$ |
| 5 | $75.60^{+0.3}_{-0.1}$ | 52.55 | $61.10^{+0.14}_{-0.11}$ | $23.90^{+0.3}_{-0.1}$ |

### Plug connector

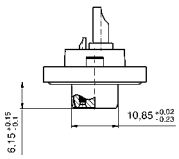



| Shellsize | A | B1 | C | D | E |
|---|---|---|---|---|---|
| 1 | $39.40^{+0.3}_{-0}$ | $16.81^{+0.23}_{-0.02}$ | $25.00^{+0.12}_{-0.13}$ | $21.10^{+0.3}$ | $6.00^{+0.12}_{-0.18}$ |
| 2 | $47.70^{+0.3}_{-0}$ | $25.14^{+0.23}_{-0.02}$ | $33.32^{+0.13}_{-0.12}$ | $21.10^{+0.3}$ | $6.00^{+0.12}_{-0.18}$ |
| 3 | $61.40^{+0.3}_{-0}$ | $38.86^{+0.23}_{-0.02}$ | $47.04^{\pm 0.13}$ | $21.10^{+0.3}$ | $5.99^{-0.3}$ |
| 4 | $78.00^{+0.3}_{-0}$ | $55.32^{+0.23}_{-0.02}$ | $63.50^{\pm 0.13}$ | $21.10^{+0.3}$ | $5.99^{-0.3}$ |
| 5 | $75.60^{+0.3}_{-0.1}$ | $52.80^{+0.13}_{-0.12}$ | $61.10^{+0.14}_{-0.11}$ | $23.90^{+0.3}_{-0.1}$ | $5.99^{-0.3}$ |

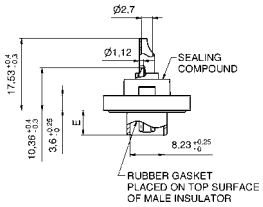
Shellsize 1-4



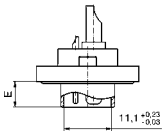

Shellsize 5



Shellsize 1-4




Shellsize 5



### Order data

**Socket connector**

| Design | Mounting style | Power contact | Part Number |
|---|---|---|---|
| 5W1 | Threaded insert 4-40 UNC | High power 20A | 15-005063 |
| 7W2 | Threaded insert 4-40 UNC | High power 20A | 15-001103 |
| 11W1 | Threaded insert 4-40 UNC | High power 20A | 15-005073 |
| 9W4 | Threaded insert 4-40 UNC | High power 20A | 15-005083 |
| 13W3 | Threaded insert 4-40 UNC | High power 20A | 15-004563 |
| 17W2 | Threaded insert 4-40 UNC | High power 20A | 15-004453 |
| 21W1 | Threaded insert 4-40 UNC | High power 20A | 15-005093 |
| 13W6 | Threaded insert 4-40 UNC | High power 20A | 15-005103 |
| 17W5 | Threaded insert 4-40 UNC | High power 20A | 15-005113 |
| 21WA4 | Threaded insert 4-40 UNC | High power 20A | 15-005123 |
| 25W3 | Threaded insert 4-40 UNC | High power 20A | 15-005133 |
| 27W2 | Threaded insert 4-40 UNC | High power 20A | 15-005143 |
| 24W7 | Threaded insert 4-40 UNC | High power 20A | 15-005153 |
| 36W4 | Threaded insert 4-40 UNC | High power 20A | 15-005163 |
| 43W2 | Threaded insert 4-40 UNC | High power 20A | 15-004593 |
| 47W1 | Threaded insert 4-40 UNC | High power 20A | 15-005183 |

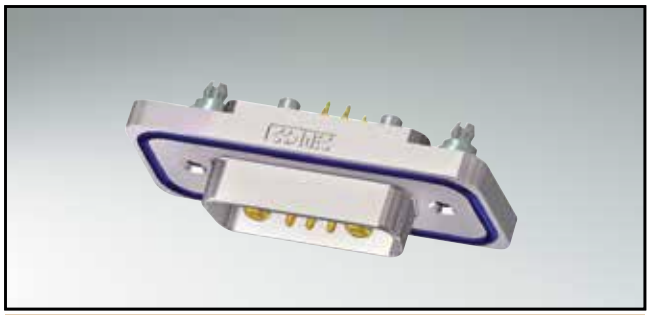
**Plug connector**

| Design | Mounting style | Power contact | Part Number |
|---|---|---|---|
| 5W1 | Threaded insert 4-40 UNC | High power 20A | 15-005193 |
| 7W2 | Threaded insert 4-40 UNC | High power 20A | 15-004643 |
| 11W1 | Threaded insert 4-40 UNC | High power 20A | 15-005203 |
| 9W4 | Threaded insert 4-40 UNC | High power 20A | 15-005213 |
| 13W3 | Threaded insert 4-40 UNC | High power 20A | 15-004553 |
| 17W2 | Threaded insert 4-40 UNC | High power 20A | 15-004543 |
| 21W1 | Threaded insert 4-40 UNC | High power 20A | 15-005223 |
| 13W6 | Threaded insert 4-40 UNC | High power 20A | 15-005233 |
| 17W5 | Threaded insert 4-40 UNC | High power 20A | 15-005243 |
| 21WA4 | Threaded insert 4-40 UNC | High power 20A | 15-005253 |
| 25W3 | Threaded insert 4-40 UNC | High power 20A | 15-005263 |
| 27W2 | Threaded insert 4-40 UNC | High power 20A | 15-005273 |
| 24W7 | Threaded insert 4-40 UNC | High power 20A | 15-005283 |
| 36W4 | Threaded insert 4-40 UNC | High power 20A | 15-005293 |
| 43W2 | Threaded insert 4-40 UNC | High power 20A | 15-005303 |
| 47W1 | Threaded insert 4-40 UNC | High power 20A | 15-005313 |

Other high power or coaxial contacts on request.

# IP67 Combination D-SUB Solid Body

## Solder pin – straight – Precision machined contacts

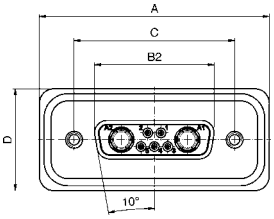


RoHS compliant – UL listed, File No.: E202784

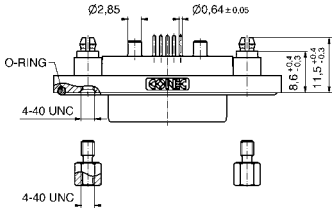
### Description

- High power contacts 20A
- Mounting style:
  4-40 UNC threaded rear spacer with PCB clip
- Quality class 3 (Also available in quality class 1)
- One-piece zinc die-cast nickel plated shell
- IP67 for harsh environments, pressure-proof up to 1.45 PSI
- Stainless steel hex bolts are supplied loose

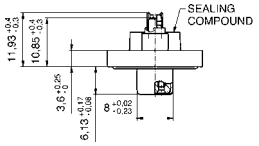
### Socket connector



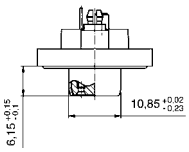

| Shellsize | A | B2 -0.25 | C | D2 |
|---|---|---|---|---|
| 1 | 39.40 $^{+0.3}_{-0}$ | 16.46 | 25.00 $^{+0.12}_{-0.13}$ | 21.10 $^{+0.3}$ |
| 2 | 47.70 $^{+0.3}_{-0}$ | 24.79 | 33.32 $^{+0.13}_{-0.12}$ | 21.10 $^{+0.3}$ |
| 3 | 61.40 $^{+0.3}_{-0}$ | 38.50 | 47.04 $^{\pm 0.13}$ | 21.10 $^{+0.3}$ |
| 4 | 78.00 $^{+0.3}_{-0}$ | 54.96 | 63.50 $^{\pm 0.13}$ | 21.10 $^{+0.3}$ |
| 5 | 75.60 $^{+0.3}_{-0.1}$ | 52.55 | 61.10 $^{+0.14}_{-0.11}$ | 23.90 $^{+0.3}_{-0.1}$ |



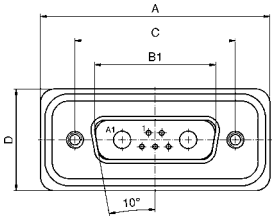

Shellsize 1-4



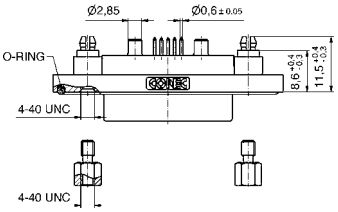

Shellsize 5



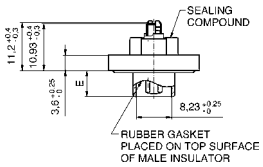

### Plug connector



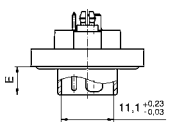

| Shellsize | A | B1 | C | D | E |
|---|---|---|---|---|---|
| 1 | 39.40 $^{+0.3}_{-0}$ | 16.81 $^{+0.22}_{-0.02}$ | 25.00 $^{+0.12}_{-0.13}$ | 21.10 $^{+0.3}$ | 6.00 $^{+0.12}_{-0.18}$ |
| 2 | 47.70 $^{+0.3}_{-0}$ | 25.14 $^{+0.22}_{-0.02}$ | 33.32 $^{+0.13}_{-0.12}$ | 21.10 $^{+0.3}$ | 6.00 $^{+0.12}_{-0.18}$ |
| 3 | 61.40 $^{+0.3}_{-0}$ | 38.86 $^{+0.22}_{-0.02}$ | 47.04 $^{\pm 0.13}$ | 21.10 $^{+0.3}$ | 5.99 $^{-0.3}$ |
| 4 | 78.00 $^{+0.3}_{-0}$ | 55.32 $^{+0.22}_{-0.02}$ | 63.50 $^{\pm 0.13}$ | 21.10 $^{+0.3}$ | 5.99 $^{-0.3}$ |
| 5 | 75.60 $^{+0.3}_{-0.1}$ | 52.80 $^{+0.12}_{-0.12}$ | 61.10 $^{+0.14}_{-0.11}$ | 23.90 $^{+0.3}_{-0.1}$ | 5.99 $^{-0.3}$ |




Shellsize 1-4




Shellsize 5




### Order data

**Socket connector**

| Design | Mounting style 4-40 UNC | Power contact | Part Number |
|---|---|---|---|
| 5W1 | Threaded rear spacer PCB clip | High power 20A | 15-005323 |
| 7W2 | Threaded rear spacer PCB clip | High power 20A | 15-001823 |
| 11W1 | Threaded rear spacer PCB clip | High power 20A | 15-005333 |
| 9W4 | Threaded rear spacer PCB clip | High power 20A | 15-005343 |
| 13W3 | Threaded rear spacer PCB clip | High power 20A | 15-005353 |
| 17W2 | Threaded rear spacer PCB clip | High power 20A | 15-005363 |
| 21W1 | Threaded rear spacer PCB clip | High power 20A | 15-005373 |
| 13W6 | Threaded rear spacer PCB clip | High power 20A | 15-005383 |
| 17W5 | Threaded rear spacer PCB clip | High power 20A | 15-005393 |
| 21WA4 | Threaded rear spacer PCB clip | High power 20A | 15-005403 |
| 25W3 | Threaded rear spacer PCB clip | High power 20A | 15-005413 |
| 27W2 | Threaded rear spacer PCB clip | High power 20A | 15-005423 |
| 24W7 | Threaded rear spacer PCB clip | High power 20A | 15-005433 |
| 36W4 | Threaded rear spacer PCB clip | High power 20A | 15-005443 |
| 43W2 | Threaded rear spacer PCB clip | High power 20A | 15-005453 |
| 47W1 | Threaded rear spacer PCB clip | High power 20A | 15-005463 |

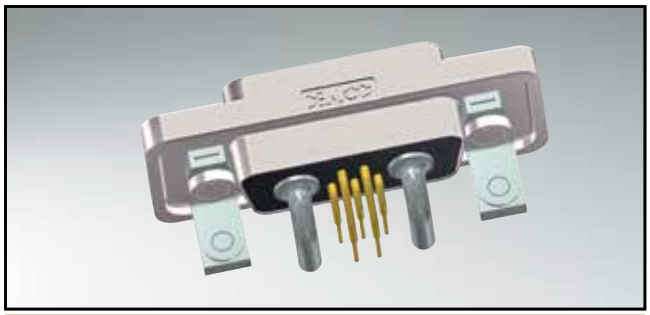
**Plug connector**

| Design | Mounting style 4-40 UNC | Power contact | Part Number |
|---|---|---|---|
| 5W1 | Threaded rear spacer PCB clip | High power 20A | 15-005473 |
| 7W2 | Threaded rear spacer PCB clip | High power 20A | 15-001863 |
| 11W1 | Threaded rear spacer PCB clip | High power 20A | 15-005483 |
| 9W4 | Threaded rear spacer PCB clip | High power 20A | 15-005493 |
| 13W3 | Threaded rear spacer PCB clip | High power 20A | 15-005503 |
| 17W2 | Threaded rear spacer PCB clip | High power 20A | 15-005513 |
| 21W1 | Threaded rear spacer PCB clip | High power 20A | 15-005523 |
| 13W6 | Threaded rear spacer PCB clip | High power 20A | 15-005533 |
| 17W5 | Threaded rear spacer PCB clip | High power 20A | 15-005543 |
| 21WA4 | Threaded rear spacer PCB clip | High power 20A | 15-005553 |
| 25W3 | Threaded rear spacer PCB clip | High power 20A | 15-005563 |
| 27W2 | Threaded rear spacer PCB clip | High power 20A | 15-005573 |
| 24W7 | Threaded rear spacer PCB clip | High power 20A | 15-005583 |
| 36W4 | Threaded rear spacer PCB clip | High power 20A | 15-005593 |
| 43W2 | Threaded rear spacer PCB clip | High power 20A | 15-005603 |
| 47W1 | Threaded rear spacer PCB clip | High power 20A | 15-005613 |

Other high power or coaxial contacts on request.

# IP67 Combination D-SUB Solid Body

## Solder pin – Angled – .402"/10.2 mm – Precision machined contacts – Metal bracket

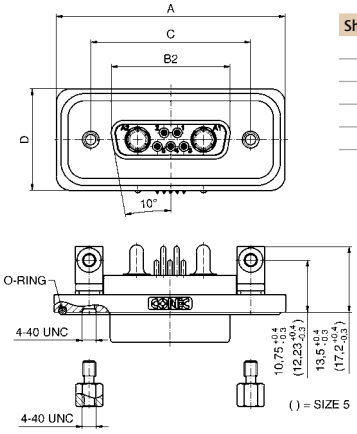


RoHS compliant – UL listed, File No.: E202784

### Description

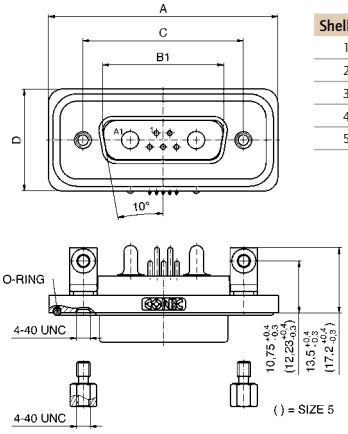
- High power contacts 20A
- Mounting style:
  mounting bracket, 4-40 UNC PCB clip
- Quality class 3 (also available in quality class 1)
- One-piece zinc die-cast nickel plated shell
- IP67 for harsh environments, pressure-proof up to 1.45 PSI
- Stainless steel hex bolts are supplied loose

### Socket connector



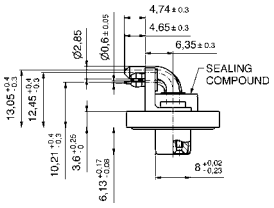

| Shellsize | A | B2 -0.25 | C | D |
|---|---|---|---|---|
| 1 | 39.40 $^{+0.3}_{-0}$ | 16.46 | 25.00 $^{+0.12}_{-0.13}$ | 21.10 $^{+0.3}$ |
| 2 | 47.70 $^{+0.3}_{-0}$ | 24.79 | 33.32 $^{+0.13}_{-0.12}$ | 21.10 $^{+0.3}$ |
| 3 | 61.40 $^{+0.3}_{-0}$ | 38.50 | 47.04 $^{\pm 0.13}$ | 21.10 $^{+0.3}$ |
| 4 | 78.00 $^{+0.3}_{-0}$ | 54.96 | 63.50 $^{\pm 0.13}$ | 21.10 $^{+0.3}$ |
| 5 | 75.60 $^{+0.3}_{-0.1}$ | 52.55 | 61.10 $^{+0.14}_{-0.11}$ | 23.90 $^{+0.3}_{-0.1}$ |

### Plug connector

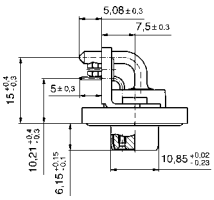



| Shellsize | A | B1 | C | D | E |
|---|---|---|---|---|---|
| 1 | 39.40 $^{+0.3}_{0}$ | 16.81 $^{+0.22}_{-0.02}$ | 25.00 $^{+0.12}_{-0.13}$ | 21.10 $^{+0.3}$ | 6.00 $^{+0.12}_{-0.18}$ |
| 2 | 47.70 $^{+0.3}_{0}$ | 25.14 $^{+0.22}_{-0.02}$ | 33.32 $^{+0.12}_{-0.12}$ | 21.10 $^{+0.3}$ | 6.00 $^{+0.12}_{-0.18}$ |
| 3 | 61.40 $^{+0.3}_{0}$ | 38.86 $^{+0.22}_{-0.02}$ | 47.04 $^{\pm 0.13}$ | 21.10 $^{+0.3}$ | 5.99 $^{-0.3}$ |
| 4 | 78.00 $^{+0.3}_{0}$ | 55.32 $^{+0.22}_{-0.02}$ | 63.50 $^{\pm 0.13}$ | 21.10 $^{+0.3}$ | 5.99 $^{-0.3}$ |
| 5 | 75.60 $^{+0.3}_{-0.1}$ | 52.80 $^{+0.12}_{-0.12}$ | 61.10 $^{+0.14}_{-0.11}$ | 23.90 $^{+0.3}_{-0.1}$ | 5.99 $^{-0.3}$ |

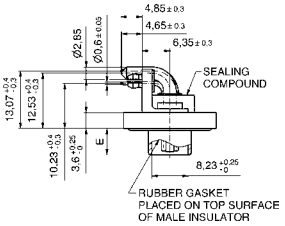
Shellsize 1-4



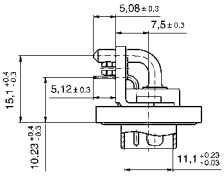

Shellsize 5




Shellsize 1-4




Shellsize 5




### Order data

**Socket connector**

| Design | Mounting style 4-40 UNC | Power contact | Part number |
|---|---|---|---|
| 5W1 | Mounting bracket PCB clip | High power 20A | 15-005623 |
| 7W2 | Mounting bracket PCB clip | High power 20A | 15-001463 |
| 11W1 | Mounting bracket PCB clip | High power 20A | 15-005633 |
| 9W4 | Mounting bracket PCB clip | High power 20A | 15-005643 |
| 13W3 | Mounting bracket PCB clip | High power 20A | 15-005653 |
| 17W2 | Mounting bracket PCB clip | High power 20A | 15-005663 |
| 21W1 | Mounting bracket PCB clip | High power 20A | 15-005673 |
| 13W6 | Mounting bracket PCB clip | High power 20A | 15-005683 |
| 17W5 | Mounting bracket PCB clip | High power 20A | 15-005693 |
| 21WA4 | Mounting bracket PCB clip | High power 20A | 15-005703 |
| 25W3 | Mounting bracket PCB clip | High power 20A | 15-005713 |
| 27W2 | Mounting bracket PCB clip | High power 20A | 15-005723 |
| 24W7 | Mounting bracket PCB clip | High power 20A | 15-005733 |
| 36W4 | Mounting bracket PCB clip | High power 20A | 15-005743 |
| 43W2 | Mounting bracket PCB clip | High power 20A | 15-004593 |
| 47W1 | Mounting bracket PCB clip | High power 20A | 15-005753 |

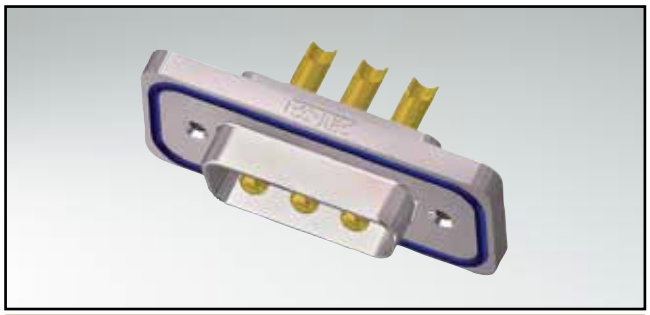
**Plug connector**

| Design | Mounting style 4-40 UNC | Power contact | Part number |
|---|---|---|---|
| 5W1 | Mounting bracket PCB clip | High power 20A | 15-005763 |
| 7W2 | Mounting bracket PCB clip | High power 20A | 15-001503 |
| 11W1 | Mounting bracket PCB clip | High power 20A | 15-005773 |
| 9W4 | Mounting bracket PCB clip | High power 20A | 15-005783 |
| 13W3 | Mounting bracket PCB clip | High power 20A | 15-005793 |
| 17W2 | Mounting bracket PCB clip | High power 20A | 15-002323 |
| 21W1 | Mounting bracket PCB clip | High power 20A | 15-005803 |
| 13W6 | Mounting bracket PCB clip | High power 20A | 15-005813 |
| 17W5 | Mounting bracket PCB clip | High power 20A | 15-005823 |
| 21WA4 | Mounting bracket PCB clip | High power 20A | 15-005833 |
| 25W3 | Mounting bracket PCB clip | High power 20A | 15-002333 |
| 27W2 | Mounting bracket PCB clip | High power 20A | 15-005843 |
| 24W7 | Mounting bracket PCB clip | High power 20A | 15-005853 |
| 36W4 | Mounting bracket PCB clip | High power 20A | 15-002293 |
| 43W2 | Mounting bracket PCB clip | High power 20A | 15-005863 |
| 47W1 | Mounting bracket PCB clip | High power 20A | 15-005873 |

Other high power or coaxial contacts on request.

# IP67 Combination D-SUB Solid Body

## Solder cup – Precision machined contacts – For wire size AWG 12 - 14

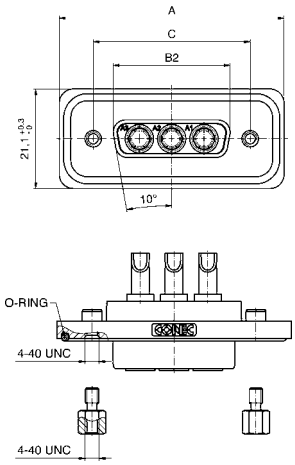


RoHS compliant – UL listed, File No.: E202784

### Description

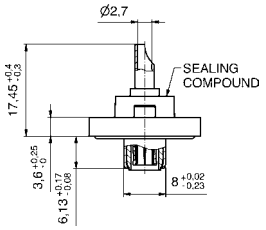
- High power contacts 20A for wire size **AWG 12 - 14**
- Mounting style:
  with 4-40 UNC threaded insert
- Quality class 3 (Also available in quality class 1)
- One-piece zinc die-cast nickel plated shell
- IP67 for harsh environments, pressure-proof up to 1.45 PSI
- Stainless steel hex bolts are supplied loose

### Socket connector

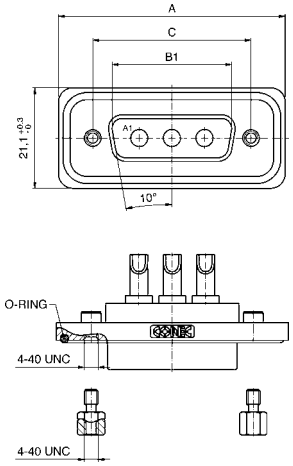



| Shellsize | A | B2 -0.25 | C |
|---|---|---|---|
| 1 | 39.40 +0.3 -0 | 16.46 | 25.00 +0.12 -0.13 |
| 2 | 47.70 +0.3 -0 | 24.79 | 33.32 +0.13 -0.12 |
| 3 | 61.40 +0.3 -0 | 38.50 | 47.04 ±0.13 |
| 4 | 78.00 +0.3 -0 | 54.96 | 63.50 ±0.13 |

Shellsize 1-4

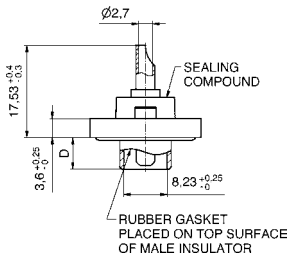



### Plug connector




| Shellsize | A | B1 | C | D |
|---|---|---|---|---|
| 1 | 39.40 +0.3 -0 | 16.81 +0.23 -0.02 | 25.00 +0.12 -0.13 | 6.00 +0.12 -0.18 |
| 2 | 47.70 +0.3 -0 | 25.14 +0.23 -0.02 | 33.32 +0.13 -0.12 | 6.00 +0.12 -0.18 |
| 3 | 61.40 +0.3 -0 | 38.86 +0.23 -0.02 | 47.04 ±0.13 | 5.99 -0.3 |
| 4 | 78.00 +0.3 -0 | 55.32 +0.23 -0.02 | 63.50 ±0.13 | 5.99 -0.3 |

Shellsize 1-4




### Order data

**Socket connector**

| Design | Mounting style 4-40 UNC | Power contact | Part number |
|---|---|---|---|
| 2W2C | Threaded insert | High power 20A | 15-001063 |
| 3W3C | Threaded insert | High power 20A | 15-001073 |
| 3W3 | Threaded insert | High power 20A | 15-001083 |
| 5W5 | Threaded insert | High power 20A | 15-001093 |
| 8W8 | Threaded insert | High power 20A | 15-001613 |

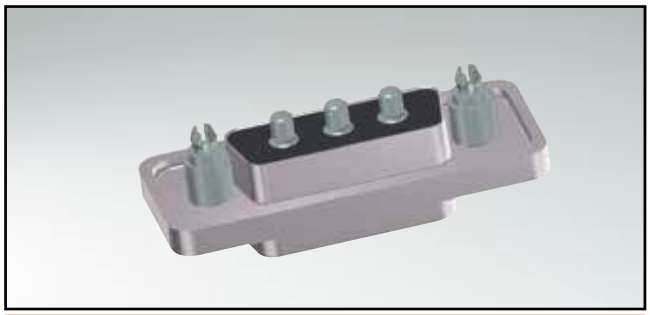
Other high power or coaxial contacts on request.

**Design**

| Bauform | Mounting style 4-40 UNC | Power contact | Part number |
|---|---|---|---|
| 3W3C | Threaded insert | High power 20A | 15-001113 |
| 3W3 | Threaded insert | High power 20A | 15-001123 |
| 5W5 | Threaded insert | High power 20A | 15-001133 |
| 8W8 | Threaded insert | High power 20A | 15-001653 |

# IP67 Combination D-SUB Solid Body

## Solder pin – Straight – Precision machined contacts

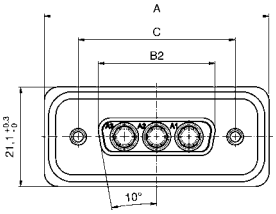


RoHS compliant – UL listed, File No.: E202784

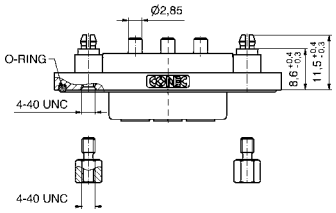
### Description

- High power contacts 20A
- Mounting style:
  4-40 UNC threaded rear spacer with PCB clip
- Quality class 3 (also available in quality class 1)
- One-piece zinc die-cast nickel plated shell
- IP67 for harsh environments, pressure-proof up to 1.45 PSI
- Stainless steel hex bolts are supplied loose

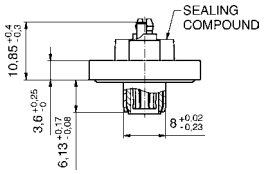
### Socket connector



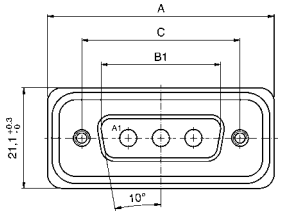

| Shellsize | A | B2 -0.25 | C |
|---|---|---|---|
| 1 | 39.40 +0.3 -0 | 16.46 | 25.00 +0.12 -0.13 |
| 2 | 47.70 +0.3 -0 | 24.79 | 33.32 +0.13 -0.12 |
| 3 | 61.40 +0.3 -0 | 38.50 | 47.04 ±0.13 |
| 4 | 78.00 +0.3 -0 | 54.96 | 63.50 ±0.13 |



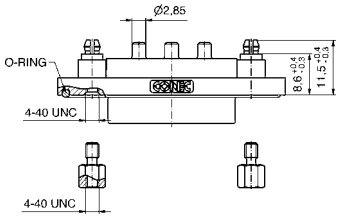

Shellsize 1-4



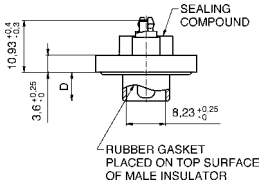

### Plug connector




| Shellsize | A | B1 | C | D |
|---|---|---|---|---|
| 1 | 39.40 +0.3 -0 | 16.81 +0.23 -0.02 | 25.00 +0.12 -0.13 | 6.00 +0.12 -0.18 |
| 2 | 47.70 +0.3 -0 | 25.14 +0.23 -0.02 | 33.32 +0.13 -0.12 | 6.00 +0.12 -0.18 |
| 3 | 61.40 +0.3 -0 | 38.86 +0.23 -0.02 | 47.04 ±0.13 | 5.99 -0.3 |
| 4 | 78.00 +0.3 -0 | 55.32 +0.23 -0.02 | 63.50 ±0.13 | 5.99 -0.3 |




Shellsize 1-4




### Order data

**Socket connector**

| Design | Mounting style 4-40 UNC | Power contact | Part number |
|---|---|---|---|
| 2W2C | Threaded rear spacer PCB clip | High power 20A | 15-001783 |
| 3W3C | Threaded rear spacer PCB clip | High power 20A | 15-001793 |
| 3W3 | Threaded rear spacer PCB clip | High power 20A | 15-001803 |
| 5W5 | Threaded rear spacer PCB clip | High power 20A | 15-001813 |
| 8W8 | Threaded rear spacer PCB clip | High power 20A | 15-002023 |

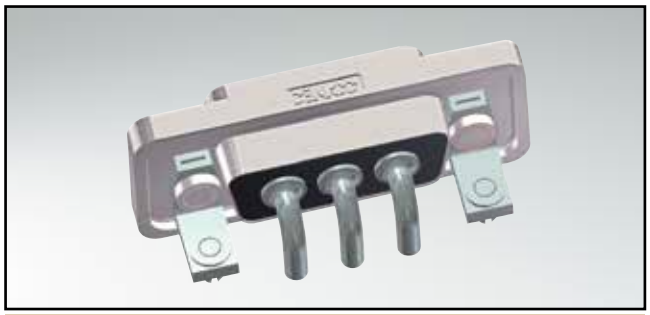
Other high power or coaxial contacts on request.

**Plug connector**

| Design | Mounting style 4-40 UNC | Power contact | Part number |
|---|---|---|---|
| 3W3C | Threaded rear spacer PCB clip | High power 20A | 15-005883 |
| 3W3 | Threaded rear spacer PCB clip | High power 20A | 15-001843 |
| 5W5 | Threaded rear spacer PCB clip | High power 20A | 15-001853 |
| 8W8 | Threaded rear spacer PCB clip | High power 20A | 15-001833 |

# IP67 Combination D-SUB Solid Body

## Solder pin – Angled – Precision machined contacts – Metal bracket

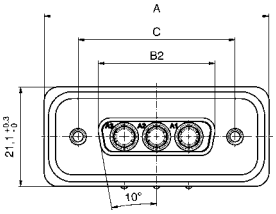


RoHS compliant – UL listed, File No.: E202784

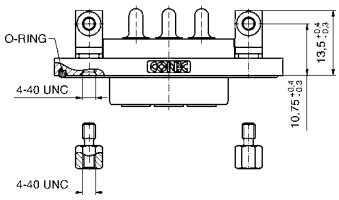
### Description

- High power contacts 20A
- Mounting style:
  mounting bracket, 4-40 UNC PCB clip
- Quality class 3 (Also available in quality class 1)
- One-piece zinc die-cast nickel plated shell
- IP67 for harsh environments, pressure-proof up to 1.45 PSI
- Stainless steel hex bolts are supplied loose

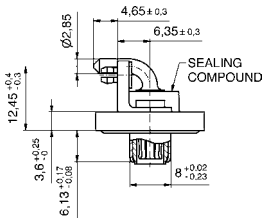
### Socket connector



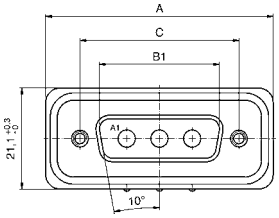

| Shellsize | A | B2 -0.25 | C |
|---|---|---|---|
| 1 | 39.40 +0.3 -0 | 16.46 | 25.00 +0.12 -0.13 |
| 2 | 47.70 +0.3 -0 | 24.79 | 33.32 +0.13 -0.12 |
| 3 | 61.40 +0.3 -0 | 38.50 | 47.04 ±0.13 |
| 4 | 78.00 +0.3 -0 | 54.96 | 63.50 ±0.13 |



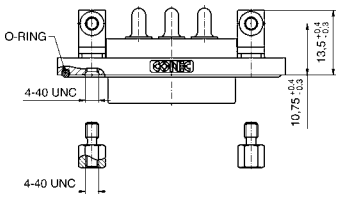

Shellsize 1-4



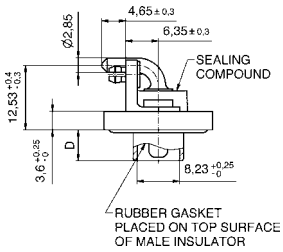

### Plug connector




| Shellsize | A | B1 | C | D |
|---|---|---|---|---|
| 1 | 39.40 +0.3 -0 | 16.81 +0.23 -0.02 | 25.00 +0.12 -0.13 | 6.00 +0.12 -0.18 |
| 2 | 47.70 +0.3 -0 | 25.14 +0.23 -0.02 | 33.32 +0.13 -0.12 | 6.00 +0.12 -0.18 |
| 3 | 61.40 +0.3 -0 | 38.86 +0.23 -0.02 | 47.04 ±0.13 | 5.99 -0.3 |
| 4 | 78.00 +0.3 -0 | 55.32 +0.23 -0.02 | 63.50 ±0.13 | 5.99 -0.3 |




Shellsize 1-4




### Order data

**Socket connector**

| Design | Mounting style 4-40 UNC | Power contact | Part number |
|---|---|---|---|
| 2W2C | Mounting bracket PCB clip | High power 20A | 15-001423 |
| 3W3C | Mounting bracket PCB clip | High power 20A | 15-001433 |
| 3W3 | Mounting bracket PCB clip | High power 20A | 15-001443 |
| 5W5 | Mounting bracket PCB clip | High power 20A | 15-001453 |
| 8W8 | Mounting bracket PCB clip | High power 20A | 15-001963 |

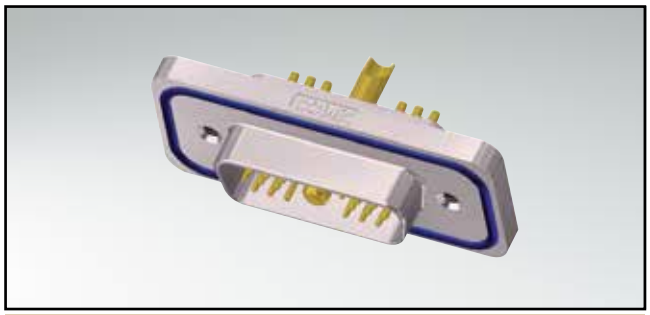
Other high power or coaxial contacts on request.

**Plug connector**

| Design | Mounting style 4-40 UNC | Power contact | Part number |
|---|---|---|---|
| 3W3C | Mounting bracket PCB clip | High power 20A | 15-001473 |
| 3W3 | Mounting bracket PCB clip | High power 20A | 15-001483 |
| 5W5 | Mounting bracket PCB clip | High power 20A | 15-001493 |
| 8W8 | Mounting bracket PCB clip | High power 20A | 15-001993 |

# IP67 Combination HD-SUB Solid Body

## Solder cup – Precision machined contacts – For wire size AWG 22 and AWG 12 - 14

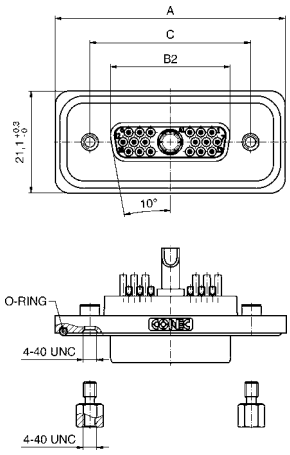


RoHS compliant

### Description

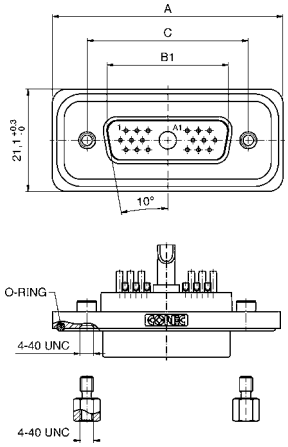
- Signal contacts for wire size **AWG 22**
- High power contacts 20A for cable **AWG 12 - 14**
- Mounting style:
  with 4-40 UNC threaded insert
- Quality class 3 (Also available in quality class 1)
- One-piece zinc die-cast nickel plated shell
- IP67 for harsh environments, pressure-proof up to 1.45 PSI
- Stainless steel hex bolts are supplied loose

### Socket connector



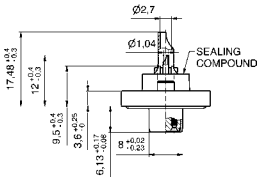

| Shellsize | A | B2 -0.25 | C |
|---|---|---|---|
| 2 | 47.70 +0.3 -0 | 24.79 | 33.32 +0.13 -0.12 |
| 3 | 61.40 +0.3 -0 | 38.50 | 47.04 ±0.13 |
| 4 | 78.00 +0.3 -0 | 54.96 | 63.50 ±0.13 |

### Plug connector

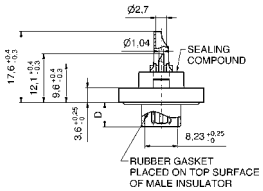



| Shellsize | A | B1 | C | D |
|---|---|---|---|---|
| 2 | 47.70 +0.3 -0 | 25.14 +0.22 -0.02 | 33.32 +0.13 -0.12 | 6.00 +0.12 -0.18 |
| 3 | 61.40 +0.3 -0 | 38.86 +0.22 -0.02 | 47.04 ±0.13 | 5.99 -0.3 |
| 4 | 78.00 +0.3 -0 | 55.32 +0.22 -0.02 | 63.50 ±0.13 | 5.99 -0.3 |

Shellsize 2-4




Shellsize 2-4




### Order data

**Socket connector**

| Design | Mounting style 4-40 UNC | Power contact | Part number |
|---|---|---|---|
| 15W4 | Threaded insert | High power 20A | 15-005893 |
| 19W1 | Threaded insert | High power 20A | 15-005903 |
| 45W2 | Threaded insert | High power 20A | 15-005913 |

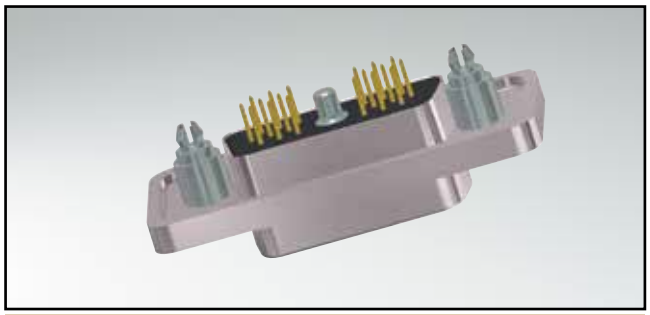
**Plug connector**

| Design | Mounting style 4-40 UNC | Power contact | Part number |
|---|---|---|---|
| 15W4 | Threaded insert | High power 20A | 15-005923 |
| 19W1 | Threaded insert | High power 20A | 15-005933 |
| 45W2 | Threaded insert | High power 20A | 15-005943 |

Other high power or coaxial contacts on request.

# IP67 Combination HD-SUB Solid Body

## Solder pin – Straight – Precision machined contacts

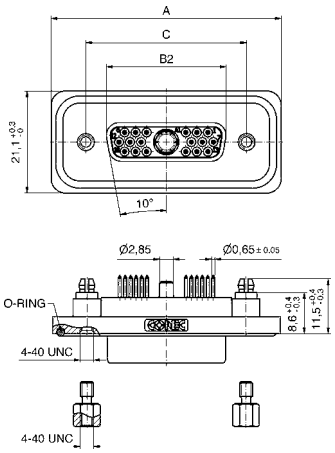


RoHS compliant

### Description

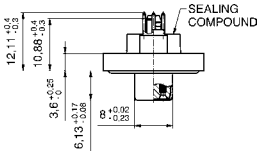
- High power contacts 20A
- Mounting style:
  4-40 UNC threaded rear spacer with PCB clip
- Quality class 3 (Also available in quality class 1)
- One-piece zinc die-cast nickel plated shell
- IP67 for harsh environments, pressure-proof up to 1.45 PSI
- Stainless steel hex bolts are supplied loose

### Socket connector

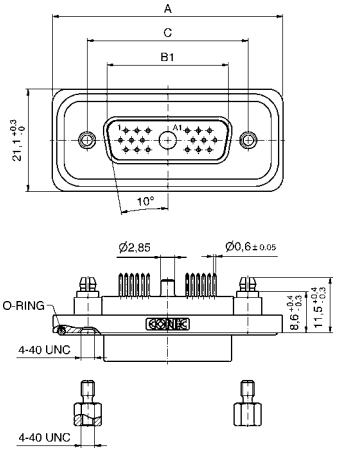



| Shellsize | A | B2 -0.25 | C |
|---|---|---|---|
| 2 | 47.70 +0.3 -0 | 24.79 | 33.32 +0.13 -0.12 |
| 3 | 61.40 +0.3 -0 | 38.50 | 47.04 ± 0.13 |
| 4 | 78.00 +0.3 -0 | 54.96 | 63.50 ± 0.13 |

Shellsize 2-4

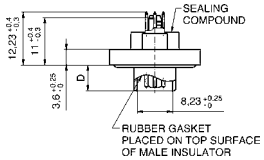



### Plug connector




| Shellsize | A | B1 | C | D |
|---|---|---|---|---|
| 2 | 47.70 +0.3 -0 | 25.14 +0.22 -0.02 | 33.32 +0.13 -0.12 | 6.00 +0.12 -0.18 |
| 3 | 61.40 +0.3 -0 | 38.86 +0.22 -0.02 | 47.04 ± 0.13 | 5.99 -0.3 |
| 4 | 78.00 +0.3 -0 | 55.32 +0.22 -0.02 | 63.50 ± 0.13 | 5.99 -0.3 |

Shellsize 2-4




### Order data

**Socket connector**

| Design | Mounting style 4-40 UNC | Power contact | Part number |
|---|---|---|---|
| 15W4 | Threaded rear spacer PCB clip | High power 20A | 15-005953 |
| 19W1 | Threaded rear spacer PCB clip | High power 20A | 15-005963 |
| 45W2 | Threaded rear spacer PCB clip | High power 20A | 15-005973 |

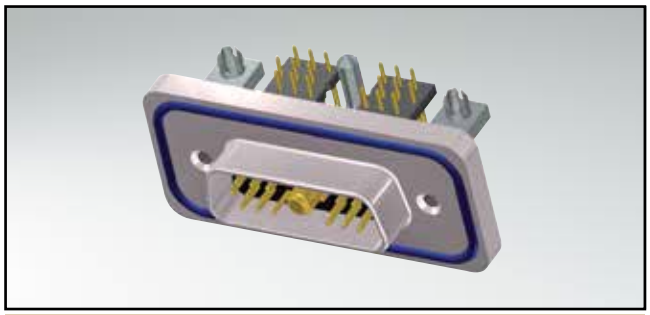
**Plug connector**

| Design | Mounting style 4-40 UNC | Power contact | Part number |
|---|---|---|---|
| 15W4 | Threaded rear spacer PCB clip | High power 20A | 15-005983 |
| 19W1 | Threaded rear spacer PCB clip | High power 20A | 15-005993 |
| 45W2 | Threaded rear spacer PCB clip | High power 20A | 15-006003 |

Other high power or coaxial contacts on request.

# IP67 Combination HD-SUB Solid Body

## Solder pin – Angled – Precision machined contacts – Metal bracket

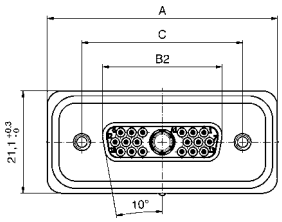


RoHS compliant

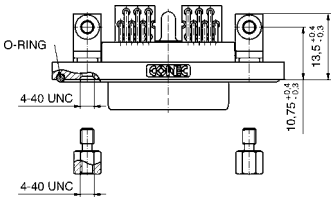
### Description

- High power contacts 20A
- Mounting style:
  mounting bracket, 4-40 UNC PCB clip
- Quality class 3 (Also available in quality class 1)
- One-piece zinc die-cast nickel plated shell
- IP67 for harsh environments, pressure-proof up to 1.45 PSI
- Stainless steel hex bolts are supplied loose

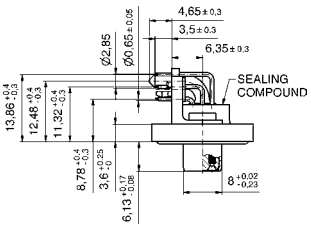
### Socket connector



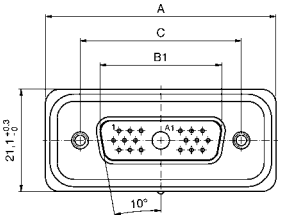

| Shellsize | A | B2 -0.25 | C |
|---|---|---|---|
| 2 | 47.70 +0.3 -0 | 24.79 | 33.32 +0.13 -0.12 |
| 3 | 61.40 +0.3 -0 | 38.50 | 47.04 ±0.13 |
| 4 | 78.00 +0.3 -0 | 54.96 | 63.50 ±0.13 |



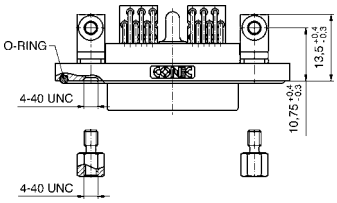

Shellsize 2-4



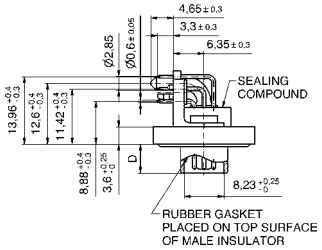

### Plug connector




| Shellsize | A | B1 | C | D |
|---|---|---|---|---|
| 2 | 47.70 +0.3 -0 | 25.14 +0.22 -0.02 | 33.32 +0.13 -0.12 | 6.00 +0.12 -0.18 |
| 3 | 61.40 +0.3 -0 | 38.86 +0.22 -0.02 | 47.04 ±0.13 | 5.99 -0.3 |
| 4 | 78.00 +0.3 -0 | 55.32 +0.22 -0.02 | 63.50 ±0.13 | 5.99 -0.3 |




Shellsize 2-4




### Order data

**Socket connector**

| Design | Mounting style 4-40 UNC | Power contact | Part number |
|---|---|---|---|
| 15W4 | Mounting bracket PCB clip | High power 20A | 15-006013 |
| 19W1 | Mounting bracket PCB clip | High power 20A | 15-006023 |
| 45W2 | Mounting bracket PCB clip | High power 20A | 15-006033 |

**Plug connector**

| Design | Mounting style 4-40 UNC | Power contact | Part number |
|---|---|---|---|
| 15W4 | Mounting bracket PCB clip | High power 20A | 15-006043 |
| 19W1 | Mounting bracket PCB clip | High power 20A | 15-006053 |
| 45W2 | Mounting bracket PCB clip | High power 20A | 15-006063 |

Other high power or coaxial contacts on request.

# Combination D-SUB Contacts

## High power contacts – Solder cup – Screw / Crimp version

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

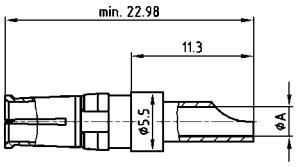
### Description

- Precision machined contacts
- Quality class 3: 50 mating cycles
- Quality class 1: 500 mating cycles
- Premating contacts available on request
- Solder area tin plated available on request

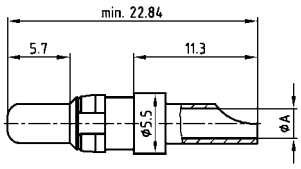
**Note:**
Contacts shown on this page, are for the Selection and Coding of your part number, using the Part Number Constructor on page 9|2.

### Product drawing

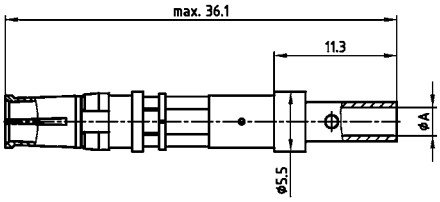
Socket contact / Solder cup



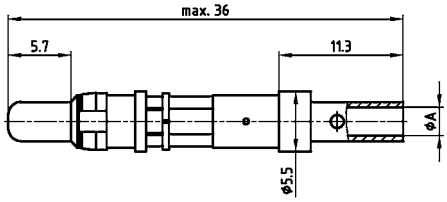

Plug contact / Solder cup




Socket contact / Screw crimp

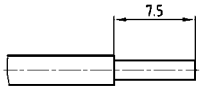



Plug contact / Screw crimp




| AWG | Current rating | ØA+0.15 |
|---|---|---|
| 16-20 | 10A | 1.80 |
| 12-14 | 20A | 2.70 |
| 10-12 | 30A | 3.50 |
| 8-10 | 40A | 4.80 |

Wire stripping



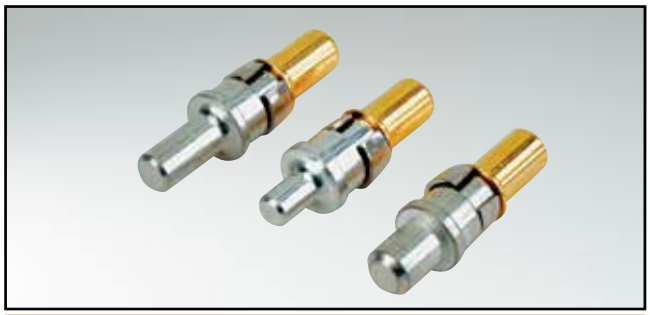

### Order data

| High power contact solder cup | | Quality class 3 | | Quality class 1 |
|---|---|---|---|---|
| Wire size | Current rating | Code | | Code |
| AWG 16...20 | 10 A | 61 | | 41 |
| AWG 12...14 | 20 A | 62 | | 42 |
| AWG 10...12 | 30 A | 63 (only for solid body) | | 43 |
| AWG 8...10 | 40 A | 64 (only for solid body) | | 44 |

| High power contact screw crimp | | Quality class 3 | | Quality class 1 |
|---|---|---|---|---|
| Wire size | Current rating | Code | | Code |
| AWG 16...20 | 10 A | On request | | R1 |
| AWG 12...14 | 20 A | On request | | R2 |
| AWG 10...12 | 30 A | On request | | R3 |
| AWG 8...10 | 40 A | On request | | R4 |

# Combination D-SUB Contacts

## High power contacts – Solder pin – Straight



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

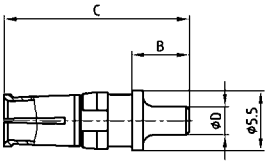
### Description

- Precision machined contacts
- Quality class 3: 50 mating cycles (gold plated)
- Quality class 1: 500 mating cycles (gold plated)
- Premating contacts available on request

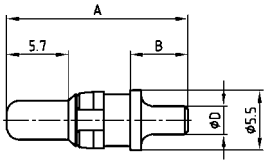
**Note:**
Contacts shown on this page, are for the Selection and Coding of your part number, using the Part Number Constructor on page 9|2.

### Product drawing

Socket contact




Plug contact




| Current rating | Termination | A | B | C | Ø D |
|---|---|---|---|---|---|
| 20A | 48/68 | 15.84 | 4.60 | 15.98 | 1.95 |
| 20A | 49/69 | 16.84 | 5.30 | 16.98 | 2.60 |
| 20A | 50/70 | 16.24 | 4.70 | 16.38 | 2.85 |
| 30A | 51/71 | 19.04 | 7.50 | 19.18 | 3.18 |
| 40A | 52/72 | 17.29 | 5.75 | 17.43 | 3.75 |

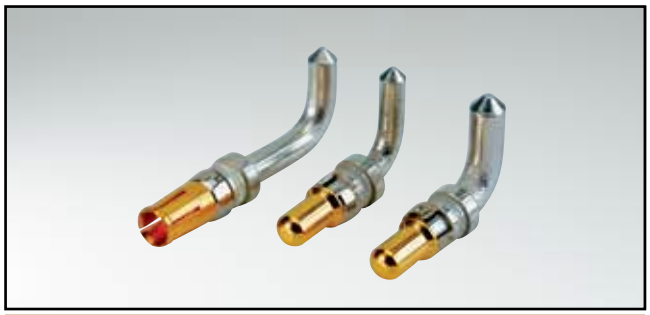
### Order data

| High power contact | | Quality class 3 | | Quality class 1 |
|---|---|---|---|---|
| Solder tail diameter D | Current rating | Code | | Code |
| .077"/1.95 mm | 20A | 68 | | 48 |
| .102"/2.60 mm | 20A | 69 | | 49 |
| .112"/2.85 mm | 20A | 70 | | 50 |
| .125"/3.18 mm | 30A | 71 | | 51 |
| .148"/3.75 mm | 40A | 72 | | 52 |

Please select code to create a new part number.

# Combination D-SUB Contacts

## High power contacts – Solder pin – angled



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

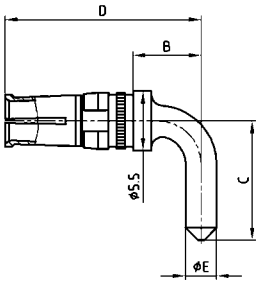
### Description

- Precision machined contacts
- Quality class 3: .008 µ"/0.2 µm Au in contact area
- Quality class 1: .032 µ"/0.8 µm Au in contact area
- Premating contacts available on request

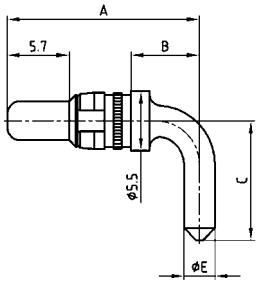
**Note:**
Contacts shown on this page, are for the Selection and Coding of your part number, using the Part Number Constructor on page 9|2.

### Product drawing

Socket contact




Plug contact




| Shellsize | Current rating | Termination | A | B | C | D | Ø E |
|---|---|---|---|---|---|---|---|
| 1-4 | 15A | 55/59 | 14.54 | 3.00 | 10.50 | 14.68 | 1.90 |
| 1-4 | 20A | 56/73 | 17.84 | 6.30 | 11.00 | 17.98 | 2.85 |
| 1-4 | 30A | 57/74 | 26.54 | 15.00 | 9.50 | 26.68 | 3.20 |
| 1-4 | 40A | 58/75 | 17.84 | 6.30 | 11.00 | 17.98 | 3.75 |
| 5 | 20A | 66/81 | 20.39 | 8.85 | 14.00 | 20.53 | 2.85 |
| 5 | 30A | 67/82 | 20.39 | 8.85 | 14.00 | 20.53 | 3.20 |
| 5 | 30A | 65/85 | 26.54 | 15.00 | 13.50 | 26.68 | 3.20 |
| 5 | 40A | 60/77 | 20.39 | 8.85 | 14.00 | 20.53 | 3.75 |

### Order data

| High power contact | | Quality class 3 | | Quality class 1 |
|---|---|---|---|---|
| Shellsize | Current rating | Code | | Code |
| 1-4 | 15 A | 59 | | 55 |
| 1-4 | 20 A | 73 | | 56 |
| 1-4 | 30 A | 74 | | 57 |
| 1-4 | 40 A | 75 | | 58 |
| 5 | 20 A | 81 | | 66 |
| 5 | 30 A | 82 | | 67 |
| 5 | 30 A | 85 | | 65 |
| 5 | 40 A | 77 | | 60 |

Please select code to create a new part number.

# Combination D-SUB Contacts

## Coaxial contacts – Straight – Inner and outer conductor for solder connection

RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

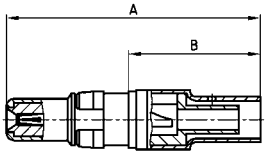
- 50 and 75 Ω design
- Contact plating:
  - .008 µ"/0.2 µm Au plating mating side inner- and outer conductor (Quality class 3)
  - other qualitiy classes on request
- IP67 protection only in mated condition in conjunction with water resistant housing from CONEC

**Note:**
Contacts shown on this page, are for the Selection and Coding of your part number, using the Part Number Constructor on page 9|2.

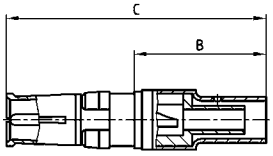
### Product drawing

## 50 Ω version

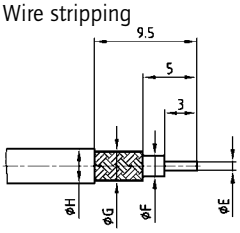
Plug contact




Socket contact



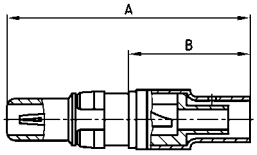

Wire stripping



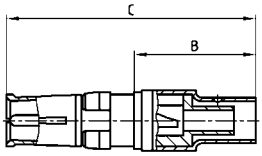

| Usable Cables RG | A | B | C | Ø E max. | Ø F max. | Ø G max. | Ø H max. |
|---|---|---|---|---|---|---|---|
| 178BU, 196AU,404 U | 22.50 | 11.20 | 23.00 | 0.85 | 1.20 | 1.40 | 2.30 |
| 174U, 188AU, 316U | 22.50 | 11.20 | 23.00 | 0.85 | 1.90 | 2.30 | 3.20 |
| 180BU | 22.50 | 11.20 | 23.00 | 0.85 | 2.80 | 3.10 | 4.50 |
| 58CU, 141AU | 26.30 | 14.80 | 26.80 | 1.00 | 3.00 | 3.60 | 5.20 |
| 316U double braided | 23.50 | 12.20 | 24.00 | 0.85 | 1.90 | 2.70 | 3.20 |

## 75 Ω version

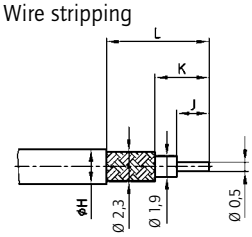
Plug contact




Socket contact




Wire stripping




| Usable Cables RG | A | B | C | Ø H max. | J | K | L |
|---|---|---|---|---|---|---|---|
| 179BU, 187AU | 18.55 | 7.30 | 19.05 | 2.30 | 2.00 | 3.10 | 6.00 |
| 179BU, 187AU | 22.50 | 11.20 | 23.00 | 3.20 | 3.20 | 5.00 | 9.50 |

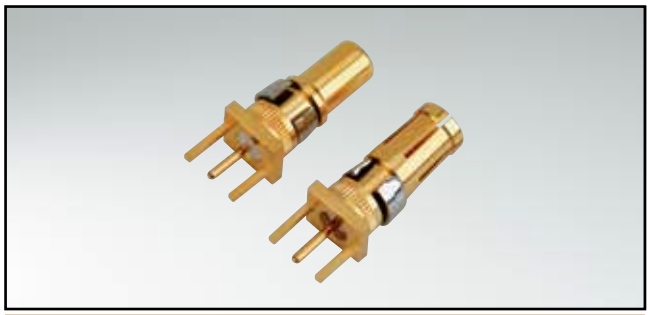
### Order data

| Coaxial contact | | Quality class 1 | | Quality class 3 |
|---|---|---|---|---|
| Usable cable | Characteristic impedance | Code | | Code |
| 178BU, 196AU, 404U | 50 Ω | H6 | | G2 |
| 174U, 188AU, 316U | 50 Ω | H7 | | G3 |
| 180BU | 50 Ω | H8 | | G4 |
| 58CU, 141AU | 50 Ω | H9 | | G5 |
| 316U double baided | 50 Ω | K1 | | G6 |
| 179BU, 187AU (B= .290"/7.3 mm) | 75 Ω | H4 | | F9 |
| 179BU, 187AU (B= .441"/11.2 mm) | 75 Ω | H5 | | G1 |

Please select code to create a new part number.

# Combination D-SUB Contacts

## Coaxial contacts – Straight – PCB termination – 3 solder pins



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

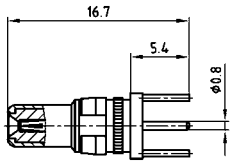
- 50 and 75 Ω design
- Contact plating:
  - .051 µ"/1.3 µm Au plating mating side inner conductor / .032 µ"/0.8 µm Au outer conductor (Quality class 1)
  - .008 µ"/0.2 µm Au plating mating side inner- and outer conductor (Quality class 3)
- IP67 protection only in mated condition in conjunction with water resistant housing from CONEC

**Note:**
Contacts shown on this page, are for the Selection and Coding of your part number, using the Part Number Constructor on page 9|2.

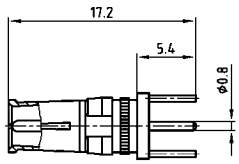
### Product drawing

#### 50 Ω version

Plug contact

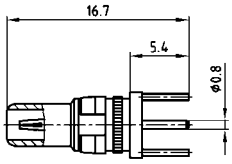


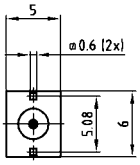

Socket contact



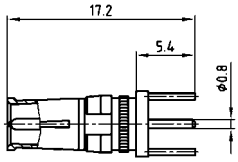

#### 75 Ω version

Plug contact




Socket contact



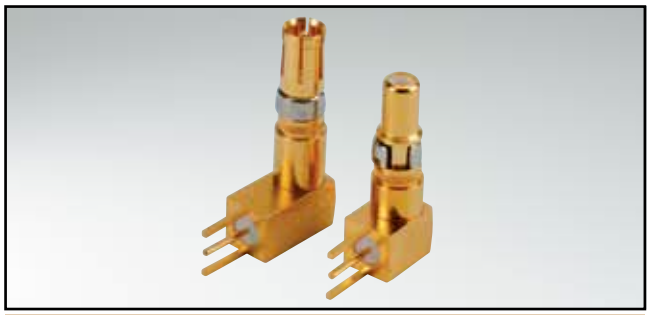

### Order data

| Coaxial contact | | Quality class 1 | | Quality class 3 |
|---|---|---|---|---|
| Shellsize | Characteristic impedance | Code | | Code |
| 1-5 | 50 Ω | 76 | | G7 |
| 1-5 | 75 Ω | 86 | | G8 |

Please select code to create a new part number.

# Combination D-SUB Contacts

## Coaxial contacts – Angled – PCB termination – 3 solder pins



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

### Description

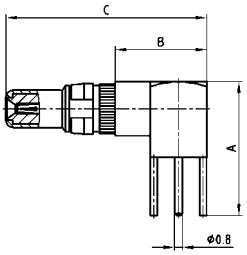
- 50 and 75 Ω design
- Contact plating:
  - .051 µ"/1.3 µm Au plating mating side inner conductor / .032 µ"/0.8 µm Au outer conductor (Quality class 1)
  - .008 µ"/0.2 µm Au plating mating side inner- and outer conductor (Quality class 3)
- IP67 protection only in mated condition in conjunction with water resistant shells from CONEC

**Note:**
Contacts shown on this page, are for the Selection and Coding of your part number, using the Part Number Constructor on page 9|2.

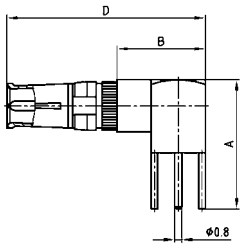
### Product drawing

### 50 Ω version

Plug contact

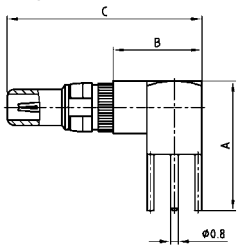


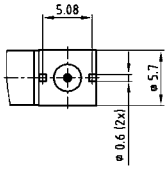

Socket contact




### 75 Ω version

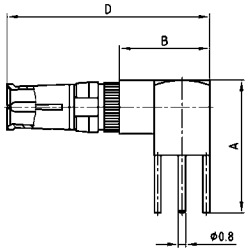
Plug contact




| Shellsize | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| 1-4 | 13.80 | 9.30 | 20.70 | 21.20 | 11.00 | 9.30 |
| 5 | 16.80 | 11.80 | 23.20 | 23.70 | 14.00 | 11.80 |

Socket contact




### Order data

| Coaxial contact | | Quality class 1 | | Quality class 3 |
|---|---|---|---|---|
| Shellsize | Characteristic impedance | Code | | Code |
| 1-4 | 50 Ω | 78 | | G9 |
| 5 | 50 Ω | 79 | | H1 |
| 1-4 | 75 Ω | 88 | | H2 |
| 5 | 75 Ω | 89 | | H3 |

Please select code to create a new part number.

Section 10

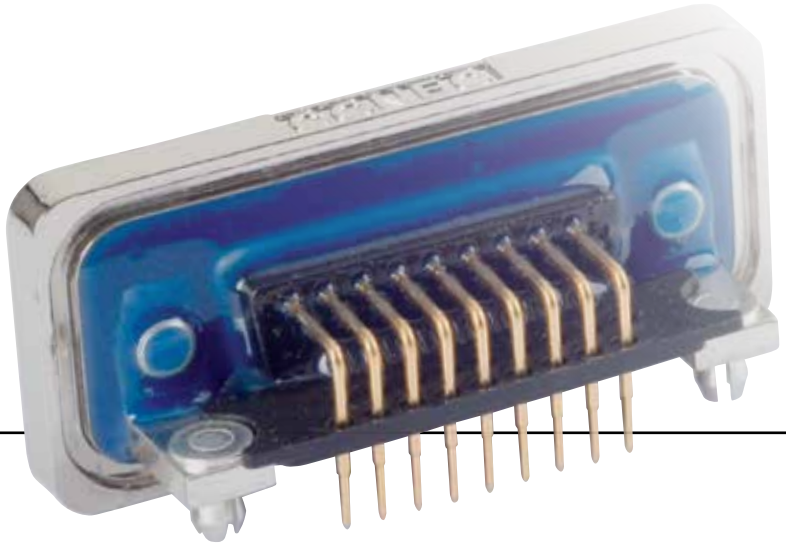
# IP67 Filter D-SUB Connectors

Many applications in harsh, industrial environments place additional demands on the interface.

The filtered, water resistant connector system developed by CONEC is well suited for applications that require increased EMC protection under ambient conditions where there is risk of dust and moisture.

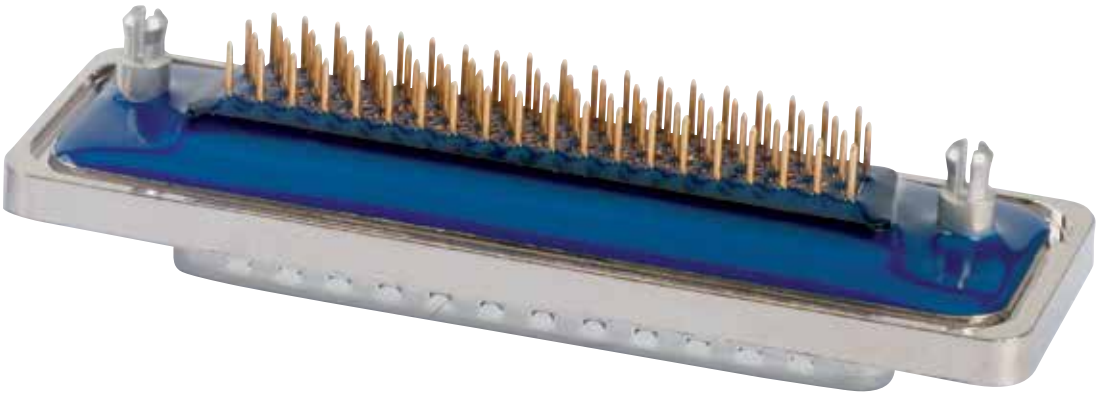
The system includes D-Subminiature Connectors in standard and high-density designs.

This connector system designed to IEC 60529 with an IP67 rating. In order to ensure these requirements are met, special sealing measures have been taken for these connectors and their sealing frames. Special water resistant accessories and protective caps supplement the product line.



**System details:**

- Plastic or metal frame with O-ring for sealing
- Seal in the connector plug- water cannot penetrate into the housing
- Available for front side or rear side panel of the enclosure
- Connector without frame for cable housing
- Special threaded parts, 4-40 UNC and M 3
- Plastic materials comply with UL 94 V0
- Machined precision contacts for heavy duty usage
- Various gold plating options available
- All conventional contact termination types available
- Special accessories, e.g. water resistant hoods and sealing caps



# Part Number Creator

6 S T F 0 9 P A M 0 4 B 3 O X

**Product Line**
4* = Shell brass tin plated with plastic frame or without frame
6 = Shell brass tin plated with metal frame (Standard)
(*on request)

**Variations**
STF = D-Subminiatur Standard filtered
HDF = D-Subminiatur High Density filtered

| No. of pos. for STF | | No. of pos. for HDF | |
|---|---|---|---|
| 09 | = 09 pos. | 15 | = 15 pos. |
| 15 | = 15 pos. | 26 | = 26 pos. |
| 25 | = 25 pos. | 44 | = 44 pos. |
| 37 | = 37 pos. | 62 | = 62 pos. |
| 50 | = 50 pos. | 78 | = 78 pos. |

P = Plug connector (Standard)
(Socket connector on request)

**Quality class / Plating code for contacts**
A = Quality class 3 = 50 mating cycles
B = Quality class 2 =200 mating cycles
C = Quality class 1 =500 mating cycles

**Termination**
M = Solder cup only for STF
R = Solder pin, straight
T = Solder pin, angled, .189" / 4.80 mm only for STF
U = Solder pin, angled, .276" / 7.00 mm only for STF
Z = Solder pin, angled, .465" / 11.80 mm only for STF
Y = Solder pin, angled, .220" / 5.60 mm only for HDF

**Capacitance**
01 = 180 pF ± 20% tolerance
03 = 370 pF ± 20% tolerance
04 = 830 pF ± 20% tolerance
05* = 1300 pF ± 20% tolerance *not applicable for HDF

**Mounting style**
A1 = Riveted through hole for cable mount / Shell without sealing frame
B2 = M3 threaded insert
B3 = 4-40 UNC threaded insert
B4 = Threaded lock for M3 front mounting
B5 = Threaded lock for 4-40 UNC front mounting
E1 = M3 threaded rear spacer with PCB clip, PCB .063" / 1.60 mm
E2 = 4-40 UNC threaded rear spacer with PCB clip, PCB .063" / 1.60 mm
S1 = Metal bracket, M3 threaded insert
S2 = Metal bracket, 4-40 UNC threaded insert
S3 = Metal bracket, M3 threaded insert and PCB clip
S4 = Metal bracket, 4-40 UNC threaded insert and PCB clip
R1 = Metal bracket, M3 threaded insert
R2 = Metal bracket, 4-40 UNC threaded insert
R3 = Metal bracket, M3 threaded insert and PCB clip
R4 = Metal bracket, 4-40 UNC threaded insert and PCB clip

OX = Standard

# Panel cut-out

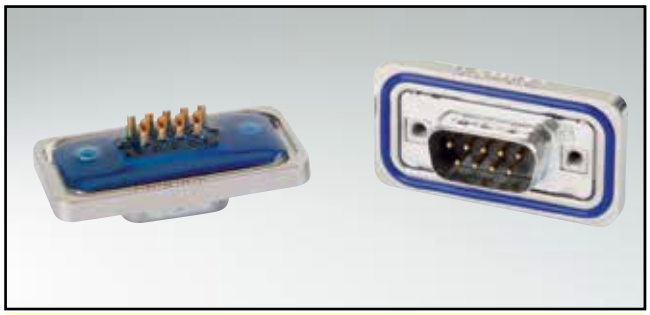
## Front panel mounting

## Rear panel mounting

The hex bolts illustrated here (4-40 UNC or M3 threads) are included in the delivery complement of every connector with a sealing frame. The length of this spacer has been selected to accommodate a panel thickness of .063"/1.6 mm such that it does not extend beyond the plug-in height. Furthermore, the hex bolts outside threads are shorter than standard hex bolts. Material: stainless steel.

# IP67 C-Filter D-SUB Standard

## Plug connector – Solder cup – Precision machined contacts – For wire size AWG 26

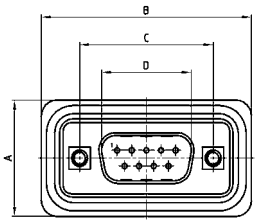


RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 202784

### Description

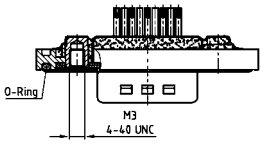
- Suitable for wire size **AWG 26** (AWG 20 available on request)
- Mounting style:
  with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: brass tin plated
- Nickel plated die-cast frame
  (Black plastic frame on request)

### Product drawing

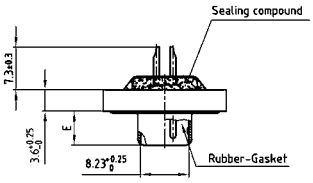



| No. of pos. | A +0.30 | B +0.30 | C | D +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 09 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.79 | 5.82 |
| 15 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 25.12 | 5.82 |
| 25 | 21.10 | 61.40 | 47.04 ±0.13 | 38.84 | 5.69 |
| 37 | 21.10 | 77.90 | 63.50 ±0.13 | 55.30 | 5.69 |
| 50 | 23.90 | 75.50 | 61.10 $^{+0.14}_{-0.11}$ | 52.68 | 5.69 |

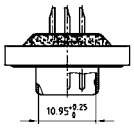
Mounting style: Threaded insert




9-37 pos.




50 pos.




### Order data

## Capacitance 180 pF

**Plug connector**

| No. of pos. | Mounting style M3 | Part Number |
|---|---|---|
| 09 | Threaded insert | 6STF09PAM01B20X |
| 15 | Threaded insert | 6STF15PAM01B20X |
| 25 | Threaded insert | 6STF25PAM01B20X |
| 37 | Threaded insert | 6STF37PAM01B20X |
| 50 | Threaded insert | 6STF50PAM01B20X |

**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 6STF09PAM01B30X |
| 15 | Threaded insert | 6STF15PAM01B30X |
| 25 | Threaded insert | 6STF25PAM01B30X |
| 37 | Threaded insert | 6STF37PAM01B30X |
| 50 | Threaded insert | 6STF50PAM01B30X |

# IP67 C-Filter D-SUB Standard

## Plug connector – Solder cup – Precision machined contacts – For wire size AWG 26

### Order data

### Capacitance 370 pF

Plug connector

| No. of pos. | Mounting style M3 | Part Number |
|---|---|---|
| 09 | Threaded insert | 6STF09PAM03B20X |
| 15 | Threaded insert | 6STF15PAM03B20X |
| 25 | Threaded insert | 6STF25PAM03B20X |
| 37 | Threaded insert | 6STF37PAM03B20X |
| 50 | Threaded insert | 6STF50PAM03B20X |

Plug connector

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 6STF09PAM03B30X |
| 15 | Threaded insert | 6STF15PAM03B30X |
| 25 | Threaded insert | 6STF25PAM03B30X |
| 37 | Threaded insert | 6STF37PAM03B30X |
| 50 | Threaded insert | 6STF50PAM03B30X |

### Capacitance 830 pF

Plug connector

| No. of pos. | Mounting style M3 | Part Number |
|---|---|---|
| 09 | Threaded insert | 6STF09PAM04B20X |
| 15 | Threaded insert | 6STF15PAM04B20X |
| 25 | Threaded insert | 6STF25PAM04B20X |
| 37 | Threaded insert | 6STF37PAM04B20X |
| 50 | Threaded insert | 6STF50PAM04B20X |

Plug connector

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 6STF09PAM04B30X |
| 15 | Threaded insert | 6STF15PAM04B30X |
| 25 | Threaded insert | 6STF25PAM04B30X |
| 37 | Threaded insert | 6STF37PAM04B30X |
| 50 | Threaded insert | 6STF50PAM04B30X |

### Capacitance 1300 pF

Plug connector

| No. of pos. | Mounting style M3 | Part Number |
|---|---|---|
| 09 | Threaded insert | 6STF09PAM05B20X |
| 15 | Threaded insert | 6STF15PAM05B20X |
| 25 | Threaded insert | 6STF25PAM05B20X |
| 37 | Threaded insert | 6STF37PAM05B20X |
| 50 | Threaded insert | 6STF50PAM05B20X |

Plug connector

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Threaded insert | 6STF09PAM05B30X |
| 15 | Threaded insert | 6STF15PAM05B30X |
| 25 | Threaded insert | 6STF25PAM05B30X |
| 37 | Threaded insert | 6STF37PAM05B30X |
| 50 | Threaded insert | 6STF50PAM05B30X |

# IP67 C-Filter D-SUB Standard

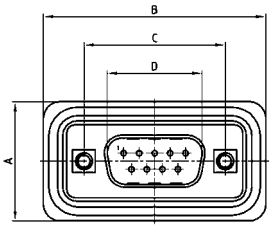
## Plug connector – Solder pin – Straight – Precision machined contacts

RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 202784

### Description

- Mounting styles:
  - with 4-40 UNC or M3 threaded insert
  - with 4-40 UNC or M3 threaded rear spacer with PCB clip
- Quality class 3 (also available in quality class 1)
- Shell: brass tin plated
- Nickel plated die-cast frame
  (Black plastic frame on request)

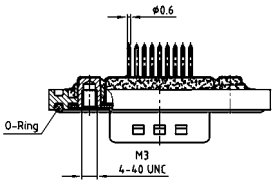
### Product drawing



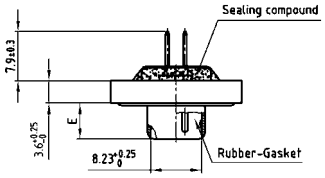

| No. of pos. | A +0.30 | B +0.30 | C | D +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 09 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.79 | 5.82 |
| 15 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 25.12 | 5.82 |
| 25 | 21.10 | 61.40 | 47.04 ±0.13 | 38.84 | 5.69 |
| 37 | 21.10 | 77.90 | 63.50 ±0.13 | 55.30 | 5.69 |
| 50 | 23.90 | 75.50 | 61.10 $^{+0.14}_{-0.11}$ | 52.68 | 5.69 |

PCB-Layout: Kat1kFVA / Kat1kFUA

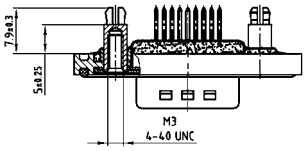
Mounting style: Threaded insert



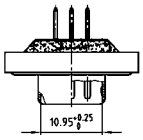

9-37 pos.




Mounting style: Threaded rear spacer with PCB clip




50 pos.




### Order data

## Capacitance 180 pF

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded insert | 6STF09PAR01B20X |
| 15 | M3 Threaded insert | 6STF15PAR01B20X |
| 25 | M3 Threaded insert | 6STF25PAR01B20X |
| 37 | M3 Threaded insert | 6STF37PAR01B20X |
| 50 | M3 Threaded insert | 6STF50PAR01B20X |
| 09 | 4-40 UNC Threaded insert | 6STF09PAR01B30X |
| 15 | 4-40 UNC Threaded insert | 6STF15PAR01B30X |
| 25 | 4-40 UNC Threaded insert | 6STF25PAR01B30X |
| 37 | 4-40 UNC Threaded insert | 6STF37PAR01B30X |
| 50 | 4-40 UNC Threaded insert | 6STF50PAR01B30X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded rear spacer PCB clip | 6STF09PAR01E10X |
| 15 | M3 Threaded rear spacer PCB clip | 6STF15PAR01E10X |
| 25 | M3 Threaded rear spacer PCB clip | 6STF25PAR01E10X |
| 37 | M3 Threaded rear spacer PCB clip | 6STF37PAR01E10X |
| 50 | M3 Threaded rear spacer PCB clip | 6STF50PAR01E10X |
| 09 | 4-40 UNC Threaded rear spacer PCB clip | 6STF09PAR01E20X |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 6STF15PAR01E20X |
| 25 | 4-40 UNC Threaded rear spacer PCB clip | 6STF25PAR01E20X |
| 37 | 4-40 UNC Threaded rear spacer PCB clip | 6STF37PAR01E20X |
| 50 | 4-40 UNC Threaded rear spacer PCB clip | 6STF50PAR01E20X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# IP67 C-Filter D-SUB Standard

## Plug connector – Solder pin – Straight – Precision machined contacts

### Order data

### Capacitance 370 pF

Plug connector

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded insert | 6STF09PAR03B20X |
| 15 | M3 Threaded insert | 6STF15PAR03B20X |
| 25 | M3 Threaded insert | 6STF25PAR03B20X |
| 37 | M3 Threaded insert | 6STF37PAR03B20X |
| 50 | M3 Threaded insert | 6STF50PAR03B20X |
| 09 | 4-40 UNC Threaded insert | 6STF09PAR03B30X |
| 15 | 4-40 UNC Threaded insert | 6STF15PAR03B30X |
| 25 | 4-40 UNC Threaded insert | 6STF25PAR03B30X |
| 37 | 4-40 UNC Threaded insert | 6STF37PAR03B30X |
| 50 | 4-40 UNC Threaded insert | 6STF50PAR03B30X |

Plug connector

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded rear spacer PCB clip | 6STF09PAR03E10X |
| 15 | M3 Threaded rear spacer PCB clip | 6STF15PAR03E10X |
| 25 | M3 Threaded rear spacer PCB clip | 6STF25PAR03E10X |
| 37 | M3 Threaded rear spacer PCB clip | 6STF37PAR03E10X |
| 50 | M3 Threaded rear spacer PCB clip | 6STF50PAR03E10X |
| 09 | 4-40 UNC Threaded rear spacer PCB clip | 6STF09PAR03E20X |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 6STF15PAR03E20X |
| 25 | 4-40 UNC Threaded rear spacer PCB clip | 6STF25PAR03E20X |
| 37 | 4-40 UNC Threaded rear spacer PCB clip | 6STF37PAR03E20X |
| 50 | 4-40 UNC Threaded rear spacer PCB clip | 6STF50PAR03E20X |

### Capacitance 830 pF

Plug connector

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded insert | 6STF09PAR04B20X |
| 15 | M3 Threaded insert | 6STF15PAR04B20X |
| 25 | M3 Threaded insert | 6STF25PAR04B20X |
| 37 | M3 Threaded insert | 6STF37PAR04B20X |
| 50 | M3 Threaded insert | 6STF50PAR04B20X |
| 09 | 4-40 UNC Threaded insert | 6STF09PAR04B30X |
| 15 | 4-40 UNC Threaded insert | 6STF15PAR04B30X |
| 25 | 4-40 UNC Threaded insert | 6STF25PAR04B30X |
| 37 | 4-40 UNC Threaded insert | 6STF37PAR04B30X |
| 50 | 4-40 UNC Threaded insert | 6STF50PAR04B30X |

Plug connector

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded rear spacer PCB clip | 6STF09PAR04E10X |
| 15 | M3 Threaded rear spacer PCB clip | 6STF15PAR04E10X |
| 25 | M3 Threaded rear spacer PCB clip | 6STF25PAR04E10X |
| 37 | M3 Threaded rear spacer PCB clip | 6STF37PAR04E10X |
| 50 | M3 Threaded rear spacer PCB clip | 6STF50PAR04E10X |
| 09 | 4-40 UNC Threaded rear spacer PCB clip | 6STF09PAR04E20X |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 6STF15PAR04E20X |
| 25 | 4-40 UNC Threaded rear spacer PCB clip | 6STF25PAR04E20X |
| 37 | 4-40 UNC Threaded rear spacer PCB clip | 6STF37PAR04E20X |
| 50 | 4-40 UNC Threaded rear spacer PCB clip | 6STF50PAR04E20X |

### Capacitance 1300 pF

Plug connector

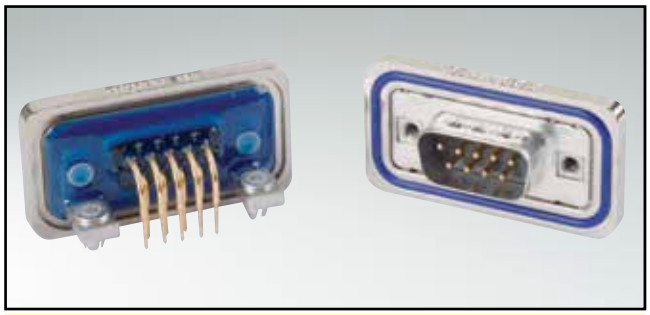
| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded insert | 6STF09PAR05B20X |
| 15 | M3 Threaded insert | 6STF15PAR05B20X |
| 25 | M3 Threaded insert | 6STF25PAR05B20X |
| 37 | M3 Threaded insert | 6STF37PAR05B20X |
| 50 | M3 Threaded insert | 6STF50PAR05B20X |
| 09 | 4-40 UNC Threaded insert | 6STF09PAR05B30X |
| 15 | 4-40 UNC Threaded insert | 6STF15PAR05B30X |
| 25 | 4-40 UNC Threaded insert | 6STF25PAR05B30X |
| 37 | 4-40 UNC Threaded insert | 6STF37PAR05B30X |
| 50 | 4-40 UNC Threaded insert | 6STF50PAR05B30X |

Plug connector

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded rear spacer PCB clip | 6STF09PAR05E10X |
| 15 | M3 Threaded rear spacer PCB clip | 6STF15PAR05E10X |
| 25 | M3 Threaded rear spacer PCB clip | 6STF25PAR05E10X |
| 37 | M3 Threaded rear spacer PCB clip | 6STF37PAR05E10X |
| 50 | M3 Threaded rear spacer PCB clip | 6STF50PAR05E10X |
| 09 | 4-40 UNC Threaded rear spacer PCB clip | 6STF09PAR05E20X |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 6STF15PAR05E20X |
| 25 | 4-40 UNC Threaded rear spacer PCB clip | 6STF25PAR05E20X |
| 37 | 4-40 UNC Threaded rear spacer PCB clip | 6STF37PAR05E20X |
| 50 | 4-40 UNC Threaded rear spacer PCB clip | 6STF50PAR05E20X |

# IP67 C-Filter D-SUB Standard

## Plug connector – Solder pin – Angled – .189"/4.8 mm – Precision machined contacts – Metal bracket

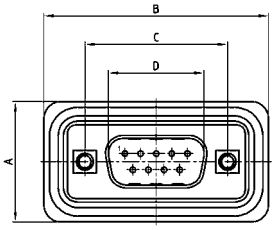


RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 202784

### Description

- Mounting styles:
  - with 4-40 UNC or M3 threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: brass tin plated
- Nickel plated die-cast frame (Black plastic frame on request)

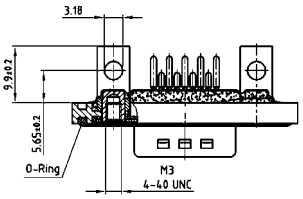
### Product drawing

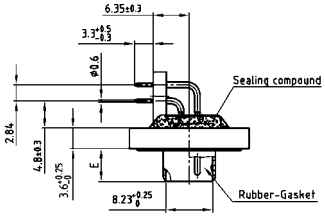



| No. of pos. | A +0.30 | B +0.30 | C | D +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 09 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.79 | 5.82 |
| 15 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 25.12 | 5.82 |
| 25 | 21.10 | 61.40 | 47.04 ±0.13 | 38.84 | 5.69 |
| 37 | 21.10 | 77.90 | 63.50 ±0.13 | 55.30 | 5.69 |

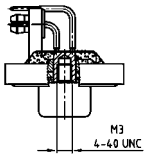
PCB-Layout: Kat1kGSA

Mounting style: Threaded insert




Mounting style: PCB clip, threaded insert




### Order data

## Capacitance 180 pF

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded insert | 6STF09PAT01S10X |
| 15 | M3 Threaded insert | 6STF15PAT01S10X |
| 25 | M3 Threaded insert | 6STF25PAT01S10X |
| 37 | M3 Threaded insert | 6STF37PAT01S10X |
| 09 | 4-40 UNC Threaded insert | 6STF09PAT01S20X |
| 15 | 4-40 UNC Threaded insert | 6STF15PAT01S20X |
| 25 | 4-40 UNC Threaded insert | 6STF25PAT01S20X |
| 37 | 4-40 UNC Threaded insert | 6STF37PAT01S20X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip/M3 Threaded insert | 6STF09PAT01S30X |
| 15 | PCB clip/M3 Threaded insert | 6STF15PAT01S30X |
| 25 | PCB clip/M3 Threaded insert | 6STF25PAT01S30X |
| 37 | PCB clip/M3 Threaded insert | 6STF37PAT01S30X |
| 09 | PCB clip/4-40 UNC Threaded insert | 6STF09PAT01S40X |
| 15 | PCB clip/4-40 UNC Threaded insert | 6STF15PAT01S40X |
| 25 | PCB clip/4-40 UNC Threaded insert | 6STF25PAT01S40X |
| 37 | PCB clip/4-40 UNC Threaded insert | 6STF37PAT01S40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# IP67 C-Filter D-SUB Standard

## Plug connector – Solder pin – Angled – .189"/4.8 mm – Precision machined contacts – Metal bracket

Order data

### Capacitance 370 pF

Plug connector

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded insert | 6STF09PAT03S10X |
| 15 | M3 Threaded insert | 6STF15PAT03S10X |
| 25 | M3 Threaded insert | 6STF25PAT03S10X |
| 37 | M3 Threaded insert | 6STF37PAT03S10X |
| 09 | 4-40 UNC Threaded insert | 6STF09PAT03S20X |
| 15 | 4-40 UNC Threaded insert | 6STF15PAT03S20X |
| 25 | 4-40 UNC Threaded insert | 6STF25PAT03S20X |
| 37 | 4-40 UNC Threaded insert | 6STF37PAT03S20X |

Plug connector

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip/M3 Threaded insert | 6STF09PAT03S30X |
| 15 | PCB clip/M3 Threaded insert | 6STF15PAT03S30X |
| 25 | PCB clip/M3 Threaded insert | 6STF25PAT03S30X |
| 37 | PCB clip/M3 Threaded insert | 6STF37PAT03S30X |
| 09 | PCB clip/4-40 UNC Threaded insert | 6STF09PAT03S40X |
| 15 | PCB clip/4-40 UNC Threaded insert | 6STF15PAT03S40X |
| 25 | PCB clip/4-40 UNC Threaded insert | 6STF25PAT03S40X |
| 37 | PCB clip/4-40 UNC Threaded insert | 6STF37PAT03S40X |

### Capacitance 830 pF

Plug connector

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded insert | 6STF09PAT04S10X |
| 15 | M3 Threaded insert | 6STF15PAT04S10X |
| 25 | M3 Threaded insert | 6STF25PAT04S10X |
| 37 | M3 Threaded insert | 6STF37PAT04S10X |
| 09 | 4-40 UNC Threaded insert | 6STF09PAT04S20X |
| 15 | 4-40 UNC Threaded insert | 6STF15PAT04S20X |
| 25 | 4-40 UNC Threaded insert | 6STF25PAT04S20X |
| 37 | 4-40 UNC Threaded insert | 6STF37PAT04S20X |

Plug connector

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip/M3 Threaded insert | 6STF09PAT04S30X |
| 15 | PCB clip/M3 Threaded insert | 6STF15PAT04S30X |
| 25 | PCB clip/M3 Threaded insert | 6STF25PAT04S30X |
| 37 | PCB clip/M3 Threaded insert | 6STF37PAT04S30X |
| 09 | PCB clip/4-40 UNC Threaded insert | 6STF09PAT04S40X |
| 15 | PCB clip/4-40 UNC Threaded insert | 6STF15PAT04S40X |
| 25 | PCB clip/4-40 UNC Threaded insert | 6STF25PAT04S40X |
| 37 | PCB clip/4-40 UNC Threaded insert | 6STF37PAT04S40X |

### Capacitance 1300 pF

Plug connector

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded insert | 6STF09PAT05S10X |
| 15 | M3 Threaded insert | 6STF15PAT05S10X |
| 25 | M3 Threaded insert | 6STF25PAT05S10X |
| 37 | M3 Threaded insert | 6STF37PAT05S10X |
| 09 | 4-40 UNC Threaded insert | 6STF09PAT05S20X |
| 15 | 4-40 UNC Threaded insert | 6STF15PAT05S20X |
| 25 | 4-40 UNC Threaded insert | 6STF25PAT05S20X |
| 37 | 4-40 UNC Threaded insert | 6STF37PAT05S20X |

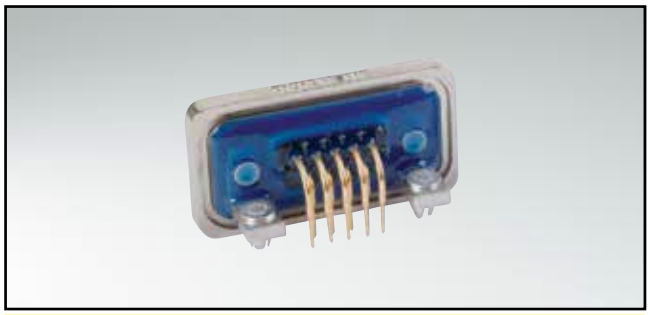
Plug connector

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip/M3 Threaded insert | 6STF09PAT05S30X |
| 15 | PCB clip/M3 Threaded insert | 6STF15PAT05S30X |
| 25 | PCB clip/M3 Threaded insert | 6STF25PAT05S30X |
| 37 | PCB clip/M3 Threaded insert | 6STF37PAT05S30X |
| 09 | PCB clip/4-40 UNC Threaded insert | 6STF09PAT05S40X |
| 15 | PCB clip/4-40 UNC Threaded insert | 6STF15PAT05S40X |
| 25 | PCB clip/4-40 UNC Threaded insert | 6STF25PAT05S40X |
| 37 | PCB clip/4-40 UNC Threaded insert | 6STF37PAT05S40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# IP67 C-Filter D-SUB Standard

## Plug connector – Solder pin – Angled – .276"/7.0 mm – Precision machined contacts – Metal bracket

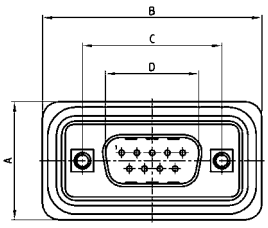


RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 202784

### Description

- Mounting styles:
  - with 4-40 UNC or M3 threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: brass tin plated
- Nickel plated die-cast frame (Black plastic frame on request)

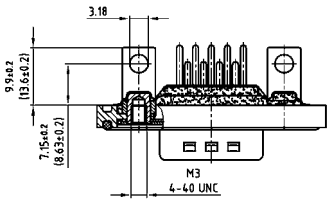
### Product drawing



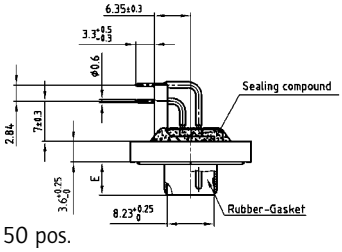

| No. of pos. | A +0.30 | B +0.30 | C | D +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 09 | 21.10 | 39.40 | 25.00 +0.12 -0.13 | 16.79 | 5.82 |
| 15 | 21.10 | 47.70 | 33.30 +0.15 -0.10 | 25.12 | 5.82 |
| 25 | 21.10 | 61.40 | 47.04 ±0.13 | 38.84 | 5.69 |
| 37 | 21.10 | 77.90 | 63.50 ±0.13 | 55.30 | 5.69 |
| 50 | 23.90 | 75.50 | 61.10 +0.14 -0.11 | 52.68 | 5.69 |

PCB-Layout: Kat1kGTA

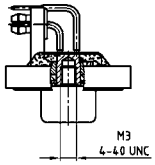
Mounting style: Threaded insert



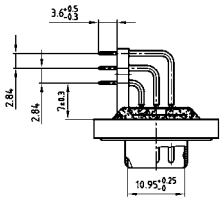

9-37 pos.




Mounting style: PCB clip, threaded insert




50 pos.




### Order data

## Capacitance 180 pF

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded insert | 6STF09PAU01R10X |
| 15 | M3 Threaded insert | 6STF15PAU01R10X |
| 25 | M3 Threaded insert | 6STF25PAU01R10X |
| 37 | M3 Threaded insert | 6STF37PAU01R10X |
| 50 | M3 Threaded insert | 6STF50PAU01R10X |
| 09 | 4-40 UNC Threaded insert | 6STF09PAU01R20X |
| 15 | 4-40 UNC Threaded insert | 6STF15PAU01R20X |
| 25 | 4-40 UNC Threaded insert | 6STF25PAU01R20X |
| 37 | 4-40 UNC Threaded insert | 6STF37PAU01R20X |
| 50 | 4-40 UNC Threaded insert | 6STF50PAU01R20X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip/M3 Threaded insert | 6STF09PAU01R30X |
| 15 | PCB clip/M3 Threaded insert | 6STF15PAU01R30X |
| 25 | PCB clip/M3 Threaded insert | 6STF25PAU01R30X |
| 37 | PCB clip/M3 Threaded insert | 6STF37PAU01R30X |
| 50 | PCB clip/M3 Threaded insert | 6STF50PAU01R30X |
| 09 | PCB clip/4-40 UNC Threaded insert | 6STF09PAU01R40X |
| 15 | PCB clip/4-40 UNC Threaded insert | 6STF15PAU01R40X |
| 25 | PCB clip/4-40 UNC Threaded insert | 6STF25PAU01R40X |
| 37 | PCB clip/4-40 UNC Threaded insert | 6STF37PAU01R40X |
| 50 | PCB clip/4-40 UNC Threaded insert | 6STF50PAU01R40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# IP67 C-Filter D-SUB Standard

## Plug connector – Solder pin – Angled – .276"/7.0 mm – Precision machined contacts – Metal bracket

### Order data

### Capacitance 370 pF

Plug connector

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded insert | 6STF09PAU03R10X |
| 15 | M3 Threaded insert | 6STF15PAU03R10X |
| 25 | M3 Threaded insert | 6STF25PAU03R10X |
| 37 | M3 Threaded insert | 6STF37PAU03R10X |
| 50 | M3 Threaded insert | 6STF50PAU03R10X |
| 09 | 4-40 UNC Threaded insert | 6STF09PAU03R20X |
| 15 | 4-40 UNC Threaded insert | 6STF15PAU03R20X |
| 25 | 4-40 UNC Threaded insert | 6STF25PAU03R20X |
| 37 | 4-40 UNC Threaded insert | 6STF37PAU03R20X |
| 50 | 4-40 UNC Threaded insert | 6STF50PAU03R20X |

Plug connector

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip/M3 Threaded insert | 6STF09PAU03R30X |
| 15 | PCB clip/M3 Threaded insert | 6STF15PAU03R30X |
| 25 | PCB clip/M3 Threaded insert | 6STF25PAU03R30X |
| 37 | PCB clip/M3 Threaded insert | 6STF37PAU03R30X |
| 50 | PCB clip/M3 Threaded insert | 6STF50PAU03R30X |
| 09 | PCB clip/4-40 UNC Threaded insert | 6STF09PAU03R40X |
| 15 | PCB clip/4-40 UNC Threaded insert | 6STF15PAU03R40X |
| 25 | PCB clip/4-40 UNC Threaded insert | 6STF25PAU03R40X |
| 37 | PCB clip/4-40 UNC Threaded insert | 6STF37PAU03R40X |
| 50 | PCB clip/4-40 UNC Threaded insert | 6STF50PAU03R40X |

### Capacitance 830 pF

Plug connector

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded insert | 6STF09PAU04R10X |
| 15 | M3 Threaded insert | 6STF15PAU04R10X |
| 25 | M3 Threaded insert | 6STF25PAU04R10X |
| 37 | M3 Threaded insert | 6STF37PAU04R10X |
| 50 | M3 Threaded insert | 6STF50PAU04R10X |
| 09 | 4-40 UNC Threaded insert | 6STF09PAU04R20X |
| 15 | 4-40 UNC Threaded insert | 6STF15PAU04R20X |
| 25 | 4-40 UNC Threaded insert | 6STF25PAU04R20X |
| 37 | 4-40 UNC Threaded insert | 6STF37PAU04R20X |
| 50 | 4-40 UNC Threaded insert | 6STF50PAU04R20X |

Plug connector

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip/M3 Threaded insert | 6STF09PAU04R30X |
| 15 | PCB clip/M3 Threaded insert | 6STF15PAU04R30X |
| 25 | PCB clip/M3 Threaded insert | 6STF25PAU04R30X |
| 37 | PCB clip/M3 Threaded insert | 6STF37PAU04R30X |
| 50 | PCB clip/M3 Threaded insert | 6STF50PAU04R30X |
| 09 | PCB clip/4-40 UNC Threaded insert | 6STF09PAU04R40X |
| 15 | PCB clip/4-40 UNC Threaded insert | 6STF15PAU04R40X |
| 25 | PCB clip/4-40 UNC Threaded insert | 6STF25PAU04R40X |
| 37 | PCB clip/4-40 UNC Threaded insert | 6STF37PAU04R40X |
| 50 | PCB clip/4-40 UNC Threaded insert | 6STF50PAU04R40X |

### Capacitance 1300 pF

Plug connector

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded insert | 6STF09PAU05R10X |
| 15 | M3 Threaded insert | 6STF15PAU05R10X |
| 25 | M3 Threaded insert | 6STF25PAU05R10X |
| 37 | M3 Threaded insert | 6STF37PAU05R10X |
| 50 | M3 Threaded insert | 6STF50PAU05R10X |
| 09 | 4-40 UNC Threaded insert | 6STF09PAU05R20X |
| 15 | 4-40 UNC Threaded insert | 6STF15PAU05R20X |
| 25 | 4-40 UNC Threaded insert | 6STF25PAU05R20X |
| 37 | 4-40 UNC Threaded insert | 6STF37PAU05R20X |
| 50 | 4-40 UNC Threaded insert | 6STF50PAU05R20X |

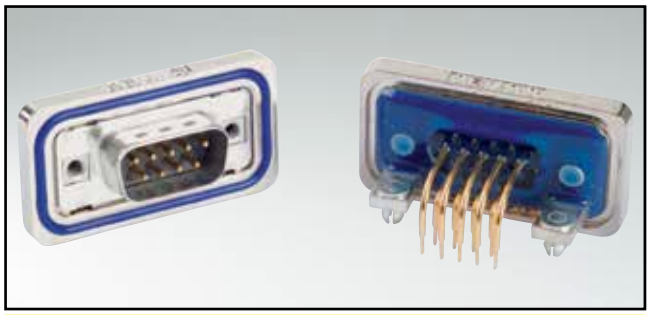
Plug connector

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip/M3 Threaded insert | 6STF09PAU05R30X |
| 15 | PCB clip/M3 Threaded insert | 6STF15PAU05R30X |
| 25 | PCB clip/M3 Threaded insert | 6STF25PAU05R30X |
| 37 | PCB clip/M3 Threaded insert | 6STF37PAU05R30X |
| 50 | PCB clip/M3 Threaded insert | 6STF50PAU05R30X |
| 09 | PCB clip/4-40 UNC Threaded insert | 6STF09PAU05R40X |
| 15 | PCB clip/4-40 UNC Threaded insert | 6STF15PAU05R40X |
| 25 | PCB clip/4-40 UNC Threaded insert | 6STF25PAU05R40X |
| 37 | PCB clip/4-40 UNC Threaded insert | 6STF37PAU05R40X |
| 50 | PCB clip/4-40 UNC Threaded insert | 6STF50PAU05R40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# IP67 C-Filter D-SUB Standard

## Plug connector – Solder pin – Angled – .464" / 11.8 mm – Precision machined contacts – Metal bracket

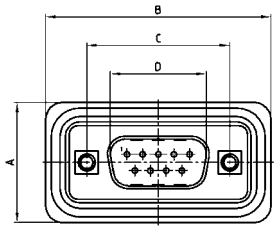


RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 202784

### Description

- Mounting styles:
  - with 4-40 UNC or M3 threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: brass tin plated
- Nickel plated die-cast frame (Black plastic frame on request)

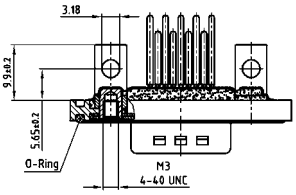
### Product drawing

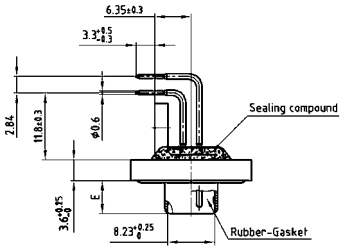



| No. of pos. | A +0.30 | B +0.30 | C | D +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 09 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.79 | 5.82 |
| 15 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 25.12 | 5.82 |
| 25 | 21.10 | 61.40 | 47.04 ±0.13 | 38.84 | 5.69 |
| 37 | 21.10 | 77.90 | 63.50 ±0.13 | 55.30 | 5.69 |

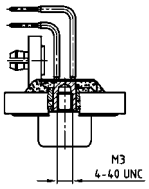
PCB-Layout: Kat1kGUA

Mounting style: Threaded insert




Mounting style: PCB clip, threaded insert




### Order data

## Capacitance 180 pF

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded insert | 6STF09PAZ01S10X |
| 15 | M3 Threaded insert | 6STF15PAZ01S10X |
| 25 | M3 Threaded insert | 6STF25PAZ01S10X |
| 37 | M3 Threaded insert | 6STF37PAZ01S10X |
| 09 | 4-40 UNC Threaded insert | 6STF09PAZ01S20X |
| 15 | 4-40 UNC Threaded insert | 6STF15PAZ01S20X |
| 25 | 4-40 UNC Threaded insert | 6STF25PAZ01S20X |
| 37 | 4-40 UNC Threaded insert | 6STF37PAZ01S20X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip / M3 Threaded insert | 6STF09PAZ01S30X |
| 15 | PCB clip / M3 Threaded insert | 6STF15PAZ01S30X |
| 25 | PCB clip / M3 Threaded insert | 6STF25PAZ01S30X |
| 37 | PCB clip / M3 Threaded insert | 6STF37PAZ01S30X |
| 09 | PCB clip / 4-40 UNC Threaded insert | 6STF09PAZ01S40X |
| 15 | PCB clip / 4-40 UNC Threaded insert | 6STF15PAZ01S40X |
| 25 | PCB clip / 4-40 UNC Threaded insert | 6STF25PAZ01S40X |
| 37 | PCB clip / 4-40 UNC Threaded insert | 6STF37PAZ01S40X |

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness

# IP67 C-Filter D-SUB Standard

## Plug connector – Solder pin – Angled – .464"/11.8 mm – Precision machined contacts – Metal bracket

### Order data

### Capacitance 370 pF

Plug connector

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded insert | 6STF09PAZ03S10X |
| 15 | M3 Threaded insert | 6STF15PAZ03S10X |
| 25 | M3 Threaded insert | 6STF25PAZ03S10X |
| 37 | M3 Threaded insert | 6STF37PAZ03S10X |
| 09 | 4-40 UNC Threaded insert | 6STF09PAZ03S20X |
| 15 | 4-40 UNC Threaded insert | 6STF15PAZ03S20X |
| 25 | 4-40 UNC Threaded insert | 6STF25PAZ03S20X |
| 37 | 4-40 UNC Threaded insert | 6STF37PAZ03S20X |

Plug connector

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip/M3 Threaded insert | 6STF09PAZ03S30X |
| 15 | PCB clip/M3 Threaded insert | 6STF15PAZ03S30X |
| 25 | PCB clip/M3 Threaded insert | 6STF25PAZ03S30X |
| 37 | PCB clip/M3 Threaded insert | 6STF37PAZ03S30X |
| 09 | PCB clip/4-40 UNC Threaded insert | 6STF09PAZ03S40X |
| 15 | PCB clip/4-40 UNC Threaded insert | 6STF15PAZ03S40X |
| 25 | PCB clip/4-40 UNC Threaded insert | 6STF25PAZ03S40X |
| 37 | PCB clip/4-40 UNC Threaded insert | 6STF37PAZ03S40X |

### Capacitance 830 pF

Plug connector

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded insert | 6STF09PAZ04S10X |
| 15 | M3 Threaded insert | 6STF15PAZ04S10X |
| 25 | M3 Threaded insert | 6STF25PAZ04S10X |
| 37 | M3 Threaded insert | 6STF37PAZ04S10X |
| 09 | 4-40 UNC Threaded insert | 6STF09PAZ04S20X |
| 15 | 4-40 UNC Threaded insert | 6STF15PAZ04S20X |
| 25 | 4-40 UNC Threaded insert | 6STF25PAZ04S20X |
| 37 | 4-40 UNC Threaded insert | 6STF37PAZ04S20X |

Plug connector

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip/M3 Threaded insert | 6STF09PAZ04S30X |
| 15 | PCB clip/M3 Threaded insert | 6STF15PAZ04S30X |
| 25 | PCB clip/M3 Threaded insert | 6STF25PAZ04S30X |
| 37 | PCB clip/M3 Threaded insert | 6STF37PAZ04S30X |
| 09 | PCB clip/4-40 UNC Threaded insert | 6STF09PAZ04S40X |
| 15 | PCB clip/4-40 UNC Threaded insert | 6STF15PAZ04S40X |
| 25 | PCB clip/4-40 UNC Threaded insert | 6STF25PAZ04S40X |
| 37 | PCB clip/4-40 UNC Threaded insert | 6STF37PAZ04S40X |

### Capacitance 1300 pF

Plug connector

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | M3 Threaded insert | 6STF09PAZ05S10X |
| 15 | M3 Threaded insert | 6STF15PAZ05S10X |
| 25 | M3 Threaded insert | 6STF25PAZ05S10X |
| 37 | M3 Threaded insert | 6STF37PAZ05S10X |
| 09 | 4-40 UNC Threaded insert | 6STF09PAZ05S20X |
| 15 | 4-40 UNC Threaded insert | 6STF15PAZ05S20X |
| 25 | 4-40 UNC Threaded insert | 6STF25PAZ05S20X |
| 37 | 4-40 UNC Threaded insert | 6STF37PAZ05S20X |

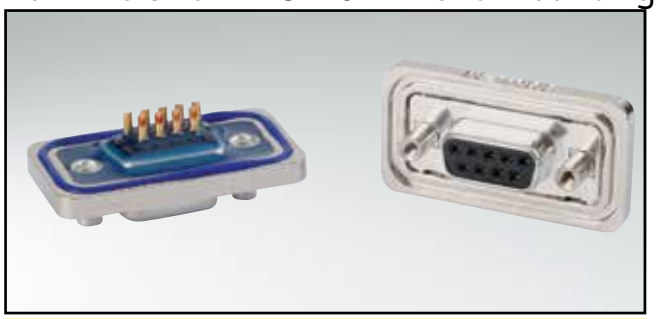
Plug connector

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | PCB clip/M3 Threaded insert | 6STF09PAZ05S30X |
| 15 | PCB clip/M3 Threaded insert | 6STF15PAZ05S30X |
| 25 | PCB clip/M3 Threaded insert | 6STF25PAZ05S30X |
| 37 | PCB clip/M3 Threaded insert | 6STF37PAZ05S30X |
| 09 | PCB clip/4-40 UNC Threaded insert | 6STF09PAZ05S40X |
| 15 | PCB clip/4-40 UNC Threaded insert | 6STF15PAZ05S40X |
| 25 | PCB clip/4-40 UNC Threaded insert | 6STF25PAZ05S40X |
| 37 | PCB clip/4-40 UNC Threaded insert | 6STF37PAZ05S40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# IP67 C-Filter D-SUB Standard

## Plug connector – Solder cup – Precision machined contacts – For wire size AWG 26 – Front mounting

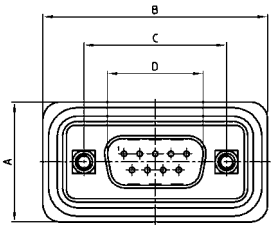


RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 202784

### Description

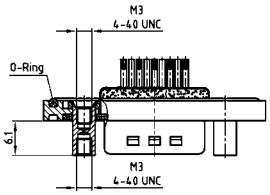
- Suitable for wire size **AWG 26** (AWG 20 available on request)
- Mounting style:
  with M3 or 4-40 UNC front spacer
- Quality class 3 (also available in quality class 1)
- Shell: brass tin plated
- Nickel plated die-cast frame
  (Black plastic frame on request)

### Product drawing

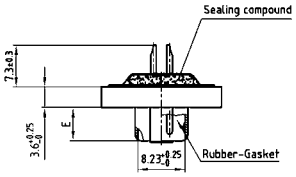



| No. of pos. | A +0.30 | B +0.30 | C | D +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 09 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.79 | 5.82 |
| 15 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 25.12 | 5.82 |
| 25 | 21.10 | 61.40 | 47.04 ±0.13 | 38.84 | 5.69 |
| 37 | 21.10 | 77.90 | 63.50 ±0.13 | 55.30 | 5.69 |
| 50 | 23.90 | 75.50 | 61.10 $^{+0.14}_{-0.11}$ | 52.68 | 5.69 |

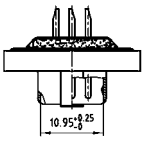
Mounting style: Threaded lock




9-37 pos.




50 pos.




### Order data

## Capacitance 180 pF

**Plug connector**

| No. of pos. | Mounting style M3 | Part Number |
|---|---|---|
| 09 | Front spacer | 6STF09PAM01B40X |
| 15 | Front spacer | 6STF15PAM01B40X |
| 25 | Front spacer | 6STF25PAM01B40X |
| 37 | Front spacer | 6STF37PAM01B40X |
| 50 | Front spacer | 6STF50PAM01B40X |

**Plug connector**

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Front spacer | 6STF09PAM01B50X |
| 15 | Front spacer | 6STF15PAM01B50X |
| 25 | Front spacer | 6STF25PAM01B50X |
| 37 | Front spacer | 6STF37PAM01B50X |
| 50 | Front spacer | 6STF50PAM01B50X |

# IP67 C-Filter D-SUB Standard

## Plug connector – Solder cup – Precision machined contacts – For wire size AWG 26 – Front mounting

Order data

### Capacitance 370 pF

Plug connector

| No. of pos. | Mounting style M3 | Part Number |
|---|---|---|
| 09 | Front spacer | 6STF09PAM03B40X |
| 15 | Front spacer | 6STF15PAM03B40X |
| 25 | Front spacer | 6STF25PAM03B40X |
| 37 | Front spacer | 6STF37PAM03B40X |
| 50 | Front spacer | 6STF50PAM03B40X |

Plug connector

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Front spacer | 6STF09PAM03B50X |
| 15 | Front spacer | 6STF15PAM03B50X |
| 25 | Front spacer | 6STF25PAM03B50X |
| 37 | Front spacer | 6STF37PAM03B50X |
| 50 | Front spacer | 6STF50PAM03B50X |

### Capacitance 830 pF

Plug connector

| No. of pos. | Mounting style M3 | Part Number |
|---|---|---|
| 09 | Front spacer | 6STF09PAM04B40X |
| 15 | Front spacer | 6STF15PAM04B40X |
| 25 | Front spacer | 6STF25PAM04B40X |
| 37 | Front spacer | 6STF37PAM04B40X |
| 50 | Front spacer | 6STF50PAM04B40X |

Plug connector

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Front spacer | 6STF09PAM04B50X |
| 15 | Front spacer | 6STF15PAM04B50X |
| 25 | Front spacer | 6STF25PAM04B50X |
| 37 | Front spacer | 6STF37PAM04B50X |
| 50 | Front spacer | 6STF50PAM04B50X |

### Capacitance 1300 pF

Plug connector

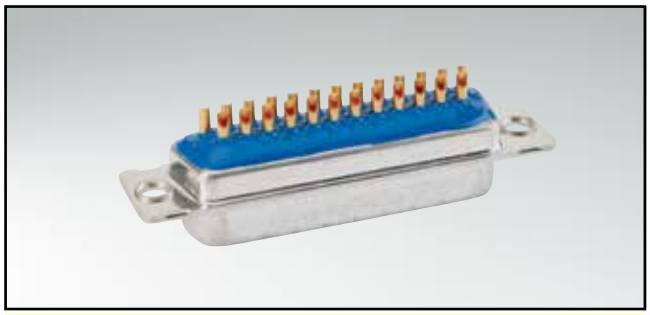
| No. of pos. | Mounting style M3 | Part Number |
|---|---|---|
| 09 | Front spacer | 6STF09PAM05B40X |
| 15 | Front spacer | 6STF15PAM05B40X |
| 25 | Front spacer | 6STF25PAM05B40X |
| 37 | Front spacer | 6STF37PAM05B40X |
| 50 | Front spacer | 6STF50PAM05B40X |

Plug connector

| No. of pos. | Mounting style 4-40 UNC | Part Number |
|---|---|---|
| 09 | Front spacer | 6STF09PAM05B50X |
| 15 | Front spacer | 6STF15PAM05B50X |
| 25 | Front spacer | 6STF25PAM05B50X |
| 37 | Front spacer | 6STF37PAM05B50X |
| 50 | Front spacer | 6STF50PAM05B50X |

# IP67 C-Filter D-SUB Standard

## Plug connector – Solder cup – Precision machined contacts – For wire size AWG 26 – For hood assembly

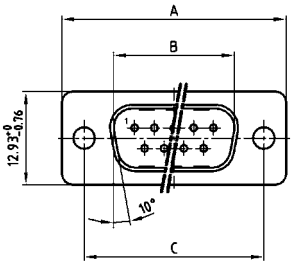


RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 202784

### Description

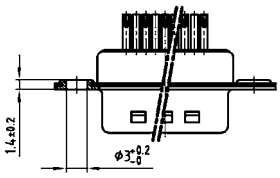
- Suitable for wire size **AWG 26** (AWG 20 available on request)
- Mounting style:
  with through-hole Ø .118" / 3,0 mm
- Quality class 3 (also available in quality class 1)
- Shell: brass tin plated

### Product drawing

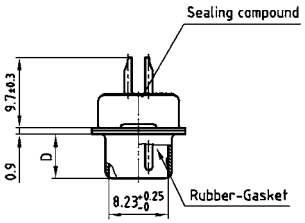



| No. of pos. | A -0.76 | B +0.25 | C | D -0.30 |
|---|---|---|---|---|
| 09 | 31.19 | 16.79 | 25.00 +0.12 -0.13 | 6.12 |
| 15 | 39.52 | 25.12 | 33.30 +0.15 -0.10 | 6.12 |
| 25 | 53.42 | 38.84 | 47.04 ±0.13 | 5.99 |
| 37 | 69.70 | 55.30 | 63.50 ±0.13 | 5.99 |
| 50 | 67.31 | 52.68 | 61.10 +0.14 -0.11 | 5.99 |

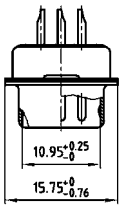
Mounting style: Through-hole




9-37 pos.




50 pos.




### Order data

## Capacitance 180 pF

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 4STF09PAM01A10X |
| 15 | Through-hole | 4STF15PAM01A10X |
| 25 | Through-hole | 4STF25PAM01A10X |
| 37 | Through-hole | 4STF37PAM01A10X |
| 50 | Through-hole | 4STF50PAM01A10X |

# IP67 C-Filter D-SUB Standard

Plug connector – Solder cup – Precision machined contacts –
For wire size AWG 26 – For hood assembly

Order data

## Capacitance 370 pF

Plug connector

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 4STF09PAM03A10X |
| 15 | Through-hole | 4STF15PAM03A10X |
| 25 | Through-hole | 4STF25PAM03A10X |
| 37 | Through-hole | 4STF37PAM03A10X |
| 50 | Through-hole | 4STF50PAM03A10X |

## Capacitance 830 pF

Plug connector

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 4STF09PAM04A10X |
| 15 | Through-hole | 4STF15PAM04A10X |
| 25 | Through-hole | 4STF25PAM04A10X |
| 37 | Through-hole | 4STF37PAM04A10X |
| 50 | Through-hole | 4STF50PAM04A10X |

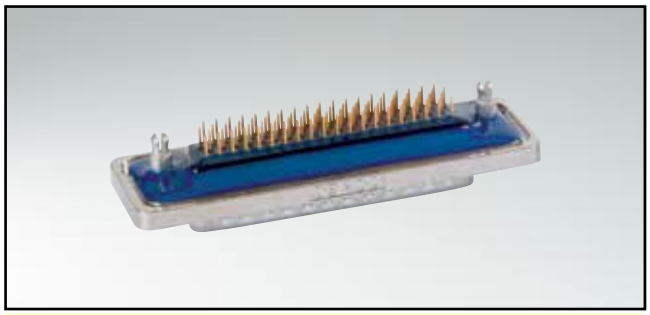
## Capacitance 1300 pF

Plug connector

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 09 | Through-hole | 4STF09PAM05A10X |
| 15 | Through-hole | 4STF15PAM05A10X |
| 25 | Through-hole | 4STF25PAM05A10X |
| 37 | Through-hole | 4STF37PAM05A10X |
| 50 | Through-hole | 4STF50PAM05A10X |

# IP67 C-Filter D-SUB High Density

## Plug connector – Solder pin – Straight – Precision machined contacts

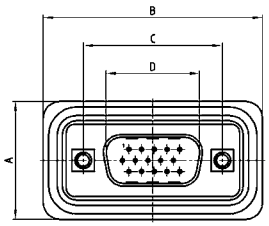


RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 202784

### Description

- Mounting styles:
  - with 4-40 UNC or M3 threaded insert
  - with 4-40 UNC or M3 threaded rear spacer with PCB clip
- Quality class 3 (also available in quality class 1)
- Shell: brass tin plated
- Nickel plated die-cast frame
  (Black plastic frame on request)

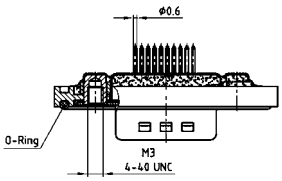
### Product drawing

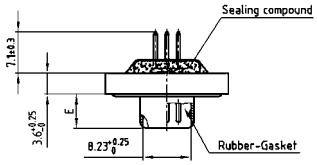



| No. of pos. | A +0.30 | B +0.30 | C | D +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 15 | 21.10 | 39.40 | 25.00 $^{+0.12}_{-0.13}$ | 16.79 | 5.82 |
| 26 | 21.10 | 47.70 | 33.30 $^{+0.15}_{-0.10}$ | 25.12 | 5.82 |
| 44 | 21.10 | 61.40 | 47.04 ±0.13 | 38.84 | 5.69 |
| 62 | 21.10 | 77.90 | 63.50 ±0.13 | 55.30 | 5.69 |

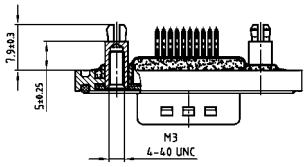
PCB-Layout: Kat1kFWA / Kat1iU0A

Mounting style: Threaded insert




Mounting style: Threaded rear spacer with PCB clip




### Order data

## Capacitance 180 pF

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | M3 Threaded insert | 6HDF15PAR01B20X |
| 26 | M3 Threaded insert | 6HDF26PAR01B20X |
| 44 | M3 Threaded insert | 6HDF44PAR01B20X |
| 62 | M3 Threaded insert | 6HDF62PAR01B20X |
| 15 | 4-40 UNC Threaded insert | 6HDF15PAR01B30X |
| 26 | 4-40 UNC Threaded insert | 6HDF26PAR01B30X |
| 44 | 4-40 UNC Threaded insert | 6HDF44PAR01B30X |
| 62 | 4-40 UNC Threaded insert | 6HDF62PAR01B30X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | M3 Threaded rear spacer PCB clip | 6HDF15PAR01E10X |
| 26 | M3 Threaded rear spacer PCB clip | 6HDF26PAR01E10X |
| 44 | M3 Threaded rear spacer PCB clip | 6HDF44PAR01E10X |
| 62 | M3 Threaded rear spacer PCB clip | 6HDF62PAR01E10X |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 6HDF15PAR01E20X |
| 26 | 4-40 UNC Threaded rear spacer PCB clip | 6HDF26PAR01E20X |
| 44 | 4-40 UNC Threaded rear spacer PCB clip | 6HDF44PAR01E20X |
| 62 | 4-40 UNC Threaded rear spacer PCB clip | 6HDF62PAR01E20X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# IP67 C-Filter D-SUB High Density

## Plug connector – Solder pin – Straight – Precision machined contacts

### Order data

### Capacitance 370 pF

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | M3 Threaded insert | 6HDF15PAR03B20X |
| 26 | M3 Threaded insert | 6HDF26PAR03B20X |
| 44 | M3 Threaded insert | 6HDF44PAR03B20X |
| 62 | M3 Threaded insert | 6HDF62PAR03B20X |
| 15 | 4-40 UNC Threaded insert | 6HDF15PAR03B30X |
| 26 | 4-40 UNC Threaded insert | 6HDF26PAR03B30X |
| 44 | 4-40 UNC Threaded insert | 6HDF44PAR03B30X |
| 62 | 4-40 UNC Threaded insert | 6HDF62PAR03B30X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | M3 Threaded rear spacer PCB clip | 6HDF15PAR03E10X |
| 26 | M3 Threaded rear spacer PCB clip | 6HDF26PAR03E10X |
| 44 | M3 Threaded rear spacer PCB clip | 6HDF44PAR03E10X |
| 62 | M3 Threaded rear spacer PCB clip | 6HDF62PAR03E10X |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 6HDF15PAR03E20X |
| 26 | 4-40 UNC Threaded rear spacer PCB clip | 6HDF26PAR03E20X |
| 44 | 4-40 UNC Threaded rear spacer PCB clip | 6HDF44PAR03E20X |
| 62 | 4-40 UNC Threaded rear spacer PCB clip | 6HDF62PAR03E20X |

### Capacitance 830 pF

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | M3 Threaded insert | 6HDF15PAR04B20X |
| 26 | M3 Threaded insert | 6HDF26PAR04B20X |
| 44 | M3 Threaded insert | 6HDF44PAR04B20X |
| 62 | M3 Threaded insert | 6HDF62PAR04B20X |
| 15 | 4-40 UNC Threaded insert | 6HDF15PAR04B30X |
| 26 | 4-40 UNC Threaded insert | 6HDF26PAR04B30X |
| 44 | 4-40 UNC Threaded insert | 6HDF44PAR04B30X |
| 62 | 4-40 UNC Threaded insert | 6HDF62PAR04B30X |

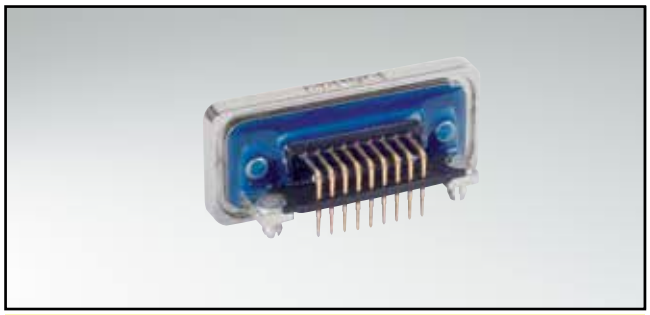
**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | M3 Threaded rear spacer PCB clip | 6HDF15PAR04E10X |
| 26 | M3 Threaded rear spacer PCB clip | 6HDF26PAR04E10X |
| 44 | M3 Threaded rear spacer PCB clip | 6HDF44PAR04E10X |
| 62 | M3 Threaded rear spacer PCB clip | 6HDF62PAR04E10X |
| 15 | 4-40 UNC Threaded rear spacer PCB clip | 6HDF15PAR04E20X |
| 26 | 4-40 UNC Threaded rear spacer PCB clip | 6HDF26PAR04E20X |
| 44 | 4-40 UNC Threaded rear spacer PCB clip | 6HDF44PAR04E20X |
| 62 | 4-40 UNC Threaded rear spacer PCB clip | 6HDF62PAR04E20X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# IP67 C-Filter D-SUB High Density

## Plug connector – Solder pin – Angled – .220"/5.6 mm – Precision machined contacts – Metal bracket

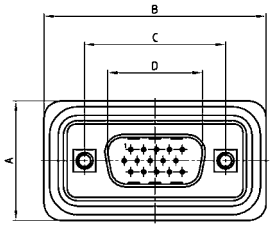


RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 202784

### Description

- Mounting styles:
  - with 4-40 UNC or M3 threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: brass tin plated
- Nickel plated die-cast frame (Black plastic frame on request)

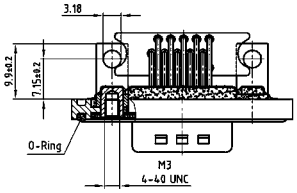
### Product drawing

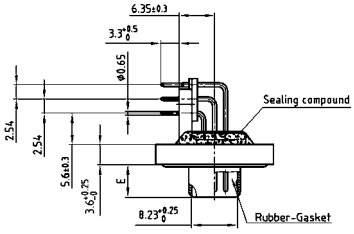



| No. of pos. | A +0.30 | B +0.30 | C | D +0.25 | E -0.30 |
|---|---|---|---|---|---|
| 15 | 21.10 | 39.40 | 25.00 +0.12 -0.13 | 16.79 | 5.82 |
| 26 | 21.10 | 47.70 | 33.30 +0.15 -0.10 | 25.12 | 5.82 |
| 44 | 21.10 | 61.40 | 47.04 ±0.13 | 38.84 | 5.69 |
| 62 | 21.10 | 77.90 | 63.50 ±0.13 | 55.30 | 5.69 |

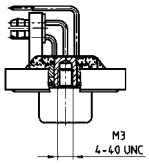
PCB-Layout: Kat1kGWA

Mounting style: Threaded insert




Mounting style: PCB clip, threaded insert




### Order data

## Capacitance 180 pF

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | M3 Threaded insert | 6HDF15PAY01R10X |
| 26 | M3 Threaded insert | 6HDF26PAY01R10X |
| 44 | M3 Threaded insert | 6HDF44PAY01R10X |
| 62 | M3 Threaded insert | 6HDF62PAY01R10X |
| 15 | 4-40 UNC Threaded insert | 6HDF15PAY01R20X |
| 26 | 4-40 UNC Threaded insert | 6HDF26PAY01R20X |
| 44 | 4-40 UNC Threaded insert | 6HDF44PAY01R20X |
| 62 | 4-40 UNC Threaded insert | 6HDF62PAY01R20X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | PCB clip/M3 Threaded insert | 6HDF15PAY01R30X |
| 26 | PCB clip/M3 Threaded insert | 6HDF26PAY01R30X |
| 44 | PCB clip/M3 Threaded insert | 6HDF44PAY01R30X |
| 62 | PCB clip/M3 Threaded insert | 6HDF62PAY01R30X |
| 15 | PCB clip/4-40 UNC Threaded insert | 6HDF15PAY01R40X |
| 26 | PCB clip/4-40 UNC Threaded insert | 6HDF26PAY01R40X |
| 44 | PCB clip/4-40 UNC Threaded insert | 6HDF44PAY01R40X |
| 62 | PCB clip/4-40 UNC Threaded insert | 6HDF62PAY01R40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# IP67 C-Filter D-SUB High Density

## Plug connector – Solder pin – Angled – .220"/5.6 mm – Precision machined contacts – Metal bracket

### Order data

### Capacitance 370 pF

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | M3 Threaded insert | 6HDF15PAY03R10X |
| 26 | M3 Threaded insert | 6HDF26PAY03R10X |
| 44 | M3 Threaded insert | 6HDF44PAY03R10X |
| 62 | M3 Threaded insert | 6HDF62PAY03R10X |
| 15 | 4-40 UNC Threaded insert | 6HDF15PAY03R20X |
| 26 | 4-40 UNC Threaded insert | 6HDF26PAY03R20X |
| 44 | 4-40 UNC Threaded insert | 6HDF44PAY03R20X |
| 62 | 4-40 UNC Threaded insert | 6HDF62PAY03R20X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | PCB clip/M3 Threaded insert | 6HDF15PAY03R30X |
| 26 | PCB clip/M3 Threaded insert | 6HDF26PAY03R30X |
| 44 | PCB clip/M3 Threaded insert | 6HDF44PAY03R30X |
| 62 | PCB clip/M3 Threaded insert | 6HDF62PAY03R30X |
| 15 | PCB clip/4-40 UNC Threaded insert | 6HDF15PAY03R40X |
| 26 | PCB clip/4-40 UNC Threaded insert | 6HDF26PAY03R40X |
| 44 | PCB clip/4-40 UNC Threaded insert | 6HDF44PAY03R40X |
| 62 | PCB clip/4-40 UNC Threaded insert | 6HDF62PAY03R40X |

### Capacitance 830 pF

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | M3 Threaded insert | 6HDF15PAY04R10X |
| 26 | M3 Threaded insert | 6HDF26PAY04R10X |
| 44 | M3 Threaded insert | 6HDF44PAY04R10X |
| 62 | M3 Threaded insert | 6HDF62PAY04R10X |
| 15 | 4-40 UNC Threaded insert | 6HDF15PAY04R20X |
| 26 | 4-40 UNC Threaded insert | 6HDF26PAY04R20X |
| 44 | 4-40 UNC Threaded insert | 6HDF44PAY04R20X |
| 62 | 4-40 UNC Threaded insert | 6HDF62PAY04R20X |

**Plug connector**

| No. of pos. | Mounting style | Part Number |
|---|---|---|
| 15 | PCB clip/M3 Threaded insert | 6HDF15PAY04R30X |
| 26 | PCB clip/M3 Threaded insert | 6HDF26PAY04R30X |
| 44 | PCB clip/M3 Threaded insert | 6HDF44PAY04R30X |
| 62 | PCB clip/M3 Threaded insert | 6HDF62PAY04R30X |
| 15 | PCB clip/4-40 UNC Threaded insert | 6HDF15PAY04R40X |
| 26 | PCB clip/4-40 UNC Threaded insert | 6HDF26PAY04R40X |
| 44 | PCB clip/4-40 UNC Threaded insert | 6HDF44PAY04R40X |
| 62 | PCB clip/4-40 UNC Threaded insert | 6HDF62PAY04R40X |

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

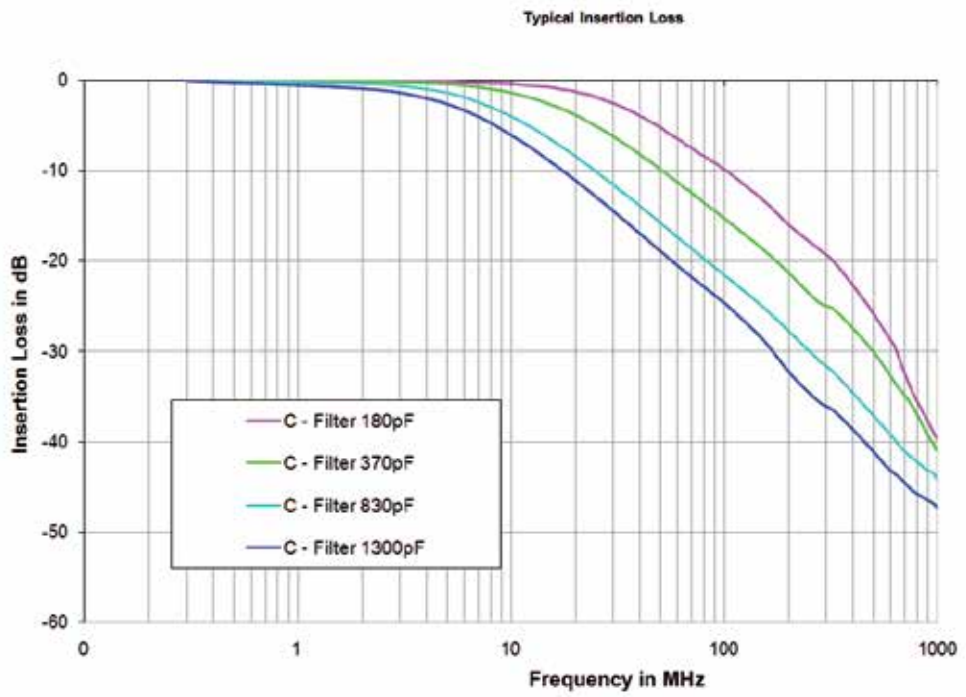
# Technical Data

| Materials | Filter D-SUB Standard IP67<br>9, 15, 25, 37 and 50 position | Filter D-SUB High Density IP67<br>15, 26, 44, and 62 position |
|---|---|---|
| Insulator | Polyester GF UL94 V-0 | |
| Contacts | CU alloy | |
| Contact plating | Gold plated over nickel, solder area tin plated (PCB) | |
| Shell | Brass tin plated | |
| **Mechanical and electrical characteristics** | | |
| Dielectric with standing voltage | Standard 424 VDC | Standard 300 VDC |
| Working voltage | 100 VDC<br>Depending on isolation coordination (refer to DIN VDE 0110/IEC 664-1) | 100 VDC |
| Contact resistance | Max. 10 mΩ prior to stressing, Δ R max. 10 mΩ after stressing per DIN 41652, Part 2 | |
| Insulation resistance | ≥ 1GΩ | |
| Current rating | 7.5 A (UL) / 5 A (CSA, VDE) | 3 A (UL, VDE) / 2.5 A (CSA) |
| Voltage surge 10/700µs | Standard 300 V | Standard 300 V |
| Temperature working range | -25°C to +105°C | -25°C to +85°C |
| Capacitor values<br>For other capacitance values please contact the factory. | 180 pF ± 20% tolerance<br>370 pF ± 20% tolerance<br>830 pF ± 20% tolerance<br>1300 pF ± 20% tolerance | 180 pF ± 20% tolerance<br>370 pF ± 20% tolerance<br>830 pF ± 20% tolerance |
| Mating and unmating forces | 9 pos. ≤ 30 N<br>15 pos. ≤ 50 N<br>25 pos. ≤ 83 N<br>37 pos. ≤ 123 N<br>50 pos. ≤ 167 N | 15 pos. ≤ 50 N<br>26 pos. ≤ 84 N<br>44 pos. ≤ 120 N<br>62 pos. ≤ 170 N |
| Quality class | A = Quality class 3 = 50 mating cycles<br>B = Quality class 2 = 200 mating cycles<br>C = Quality class 1 = 500 mating cycles | |
| Degree of protection | Requirement according to IEC 60529 – IP67 | |

Technical specifications are subject to change without notice.

# Insertion loss

## C-Filter with planar filter technology




# Solder Profile

| Connector Type | Preheating | | Solder terminal dipping parameters | |
|---|---|---|---|---|
| | max. Temperature | Duration | max. Solder bath Temperature | max. Terminal Immersion Time |
| Filter D-SUB | 100°C | 30s | 260°C | 5s |
| Combo D-SUB Filter | 120°C | 120s | 260°C | 5s |
| Filter D-SUB Water Resistant | 100°C | 30s | 240°C | 5s |
| Combo D-SUB Water Resistant | 120°C | 120s | 240°C | 5s |
| D-SUB Water Resistant | 120°C | 120s | 240°C | 5s |
| D-SUB Solid Body Type Water Resistant | 150°C | 180s | 265°C | 8s |
| RJ45 Modular Jack Filtered | 150°C | 180s | 265°C | 8s |
| Filter Plates | 150°C | 180s | 265°C | 8s |

Recommended wave-solder parameters for CONEC connectors.

# IP-Code definitions

| 1. Code figure | Definition | Remark |
|---|---|---|
| 0 | Not protected | |
| 1 | Protected against access to hazardous parts by the back of the hand.<br>Protected against fixed foreign objects Ø ≥ 1.969"/50 mm. | |
| 2 | Protected against access to hazardous parts with a finger.<br>Protected against fixed foreign objects Ø ≥ .492"/12.5 mm. | |
| 3 | Protected against access to hazardous parts with a tool.<br>Protected against fixed foreign objects Ø ≥ .098"/2.5 mm. | |
| 4 | Protected against access to hazardous parts with a wire.<br>Protected against fixed foreign objects Ø ≥ .039"/1 mm. | |
| 5 | Protected against access to hazardous parts with a wire.<br>Dust protected. | Ingress of dust is not completely blocked. But dust may not penetrate to the extent that satisfactory operation of the device or safety is impaired. |
| 6 | Protected against access to hazardous parts with a wire.<br>Dustproof. No ingress of dust. | |

| 2. Code figure | Definition | Remark |
|---|---|---|
| 0 | Not protected | |
| 1 | Protected against dropper. | |
| 2 | Protected against dropper when the shell is tipped as much as 15°. | |
| 3 | Protected against spray water | Up to 60° of either side of the vertical, such spray water shall have no harmful effects. |
| 4 | Protected against splash water | On the shell from all directions, no harmful effects shall be incurred. |
| 5 | Protected against jets of water. | |
| 6 | Protected against strong jets of water. | |
| 7 | Protected against the effects of temporary submersion in water. | Water may not ingress in a volume that would cause harmful effects when the shell is submerged in water for 30 min at a depth of 1 m. |
| 8 | Protected against the effects of continuous submersion in water. | Water may not ingress in a volume that would cause harmful effects when the shell is continuously submerged in water under conditions agreed between manufacturer and user.<br>However, these conditions must be more stringent than those described under code figure 7. |
| 9k | Protected against water from high-pressure or steam cleaning. | |

**Explanation to spray water protected (IP) systems and their environment.**

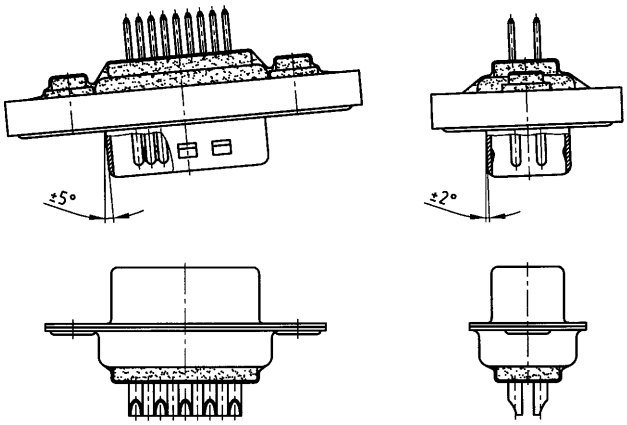
This system, described in IEC 60529, was developed to represent standard values for respective protection:

a) Contact with, and ingress of, fixed foreign objects
b) The ingress of liquids to which the inside is to be exposed.

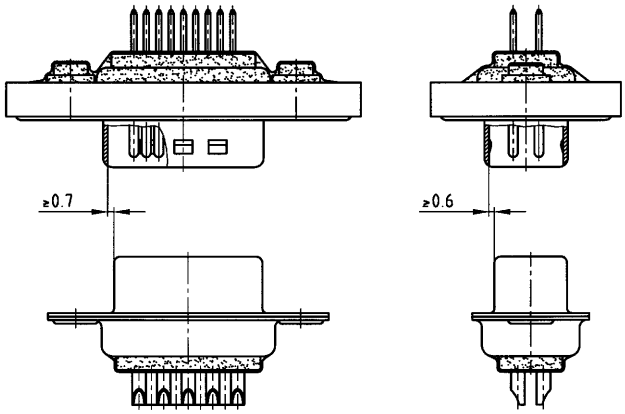
The first digit describes the level of protection for life, contacting objects and the intrusion of foreign bodies. The second digit describes the level of protection against the ingress of liquids. The larger the first and second digits are, the greater afforded protection is, e.g. IP55 must also meet the requirements of all lower protection levels, such as IP22, IP23, IP34 and IP54.

# Mating conditions

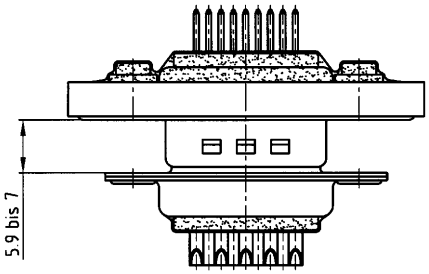
### Float mount tolerance guide




### Rigid mount tolerance guide

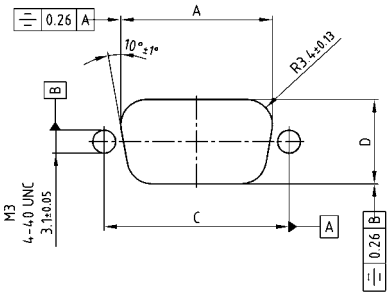



### Rigid mount vertical to tolerance guide

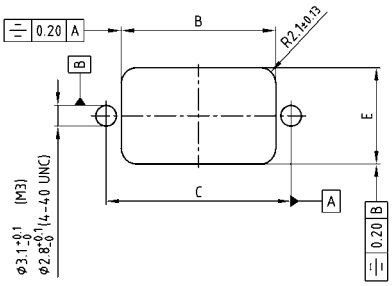



## Panel cut-out

### Rear panel mounting




### Front panel mounting

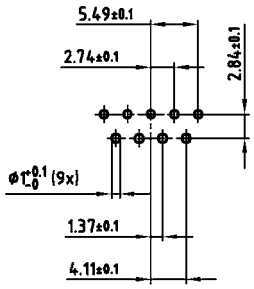



| Shell size | A ± 0.1 | B ± 0.1 | C ± 0.1 | D ± 0.1 | E ± 0.1 |
|---|---|---|---|---|---|
| 9 | 20.50 | 20.90 | 25.00 | 11.40 | 13.00 |
| 15 | 28.80 | 29.20 | 33.30 | 11.40 | 13.00 |
| 25 | 42.50 | 42.90 | 47.04 | 11.40 | 13.00 |
| 37 | 59.10 | 59.40 | 63.50 | 11.40 | 13.00 |
| 50 | 56.30 | 57.00 | 61.10 | 14.10 | 15.80 |

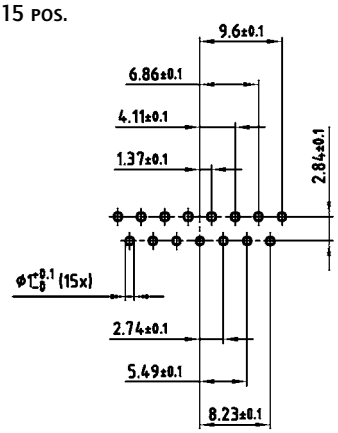
# PCB layout D-SUB Standard

Solder pin, straight – Without rear spacer PCB clip – Plug connector

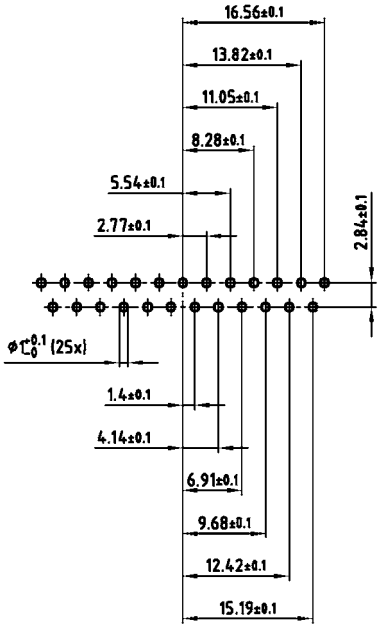
9 pos.



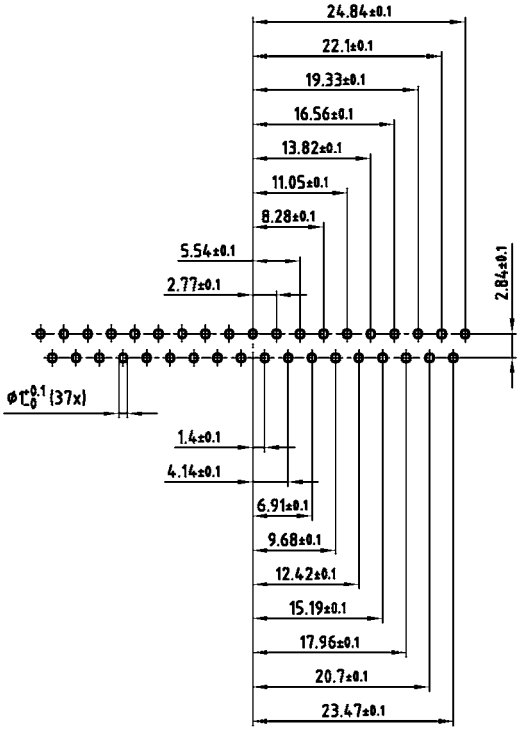

15 pos.



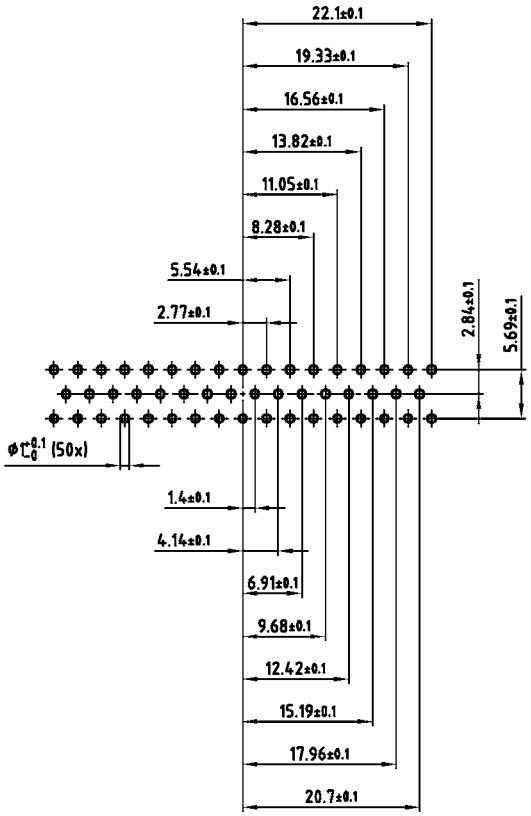

25 pos.




37 pos.




50 pos.

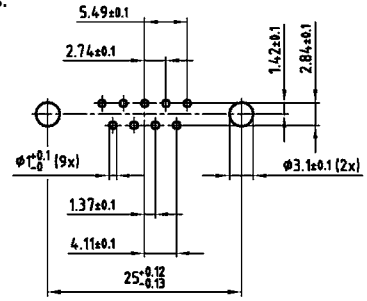



PCB layout Kat1kFVA (View: component side)

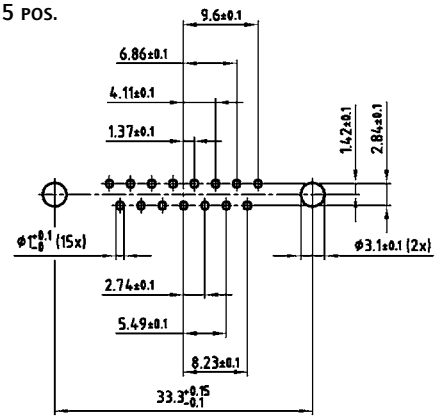
# PCB layout D-SUB Standard

## Solder pin, straight – With rear spacer PCB clip – Plug connector

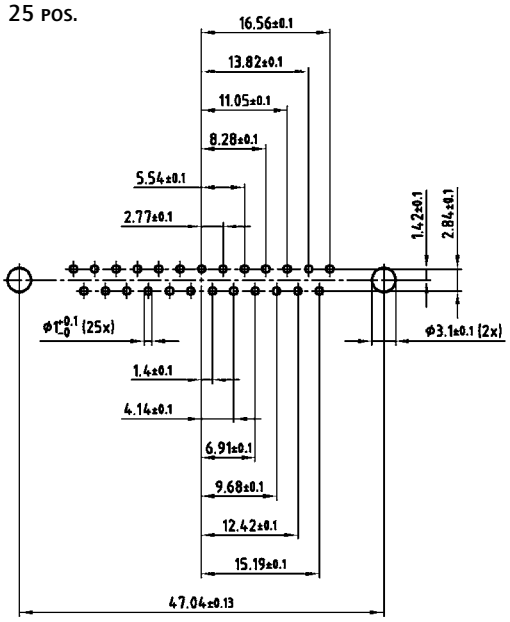
9 pos.



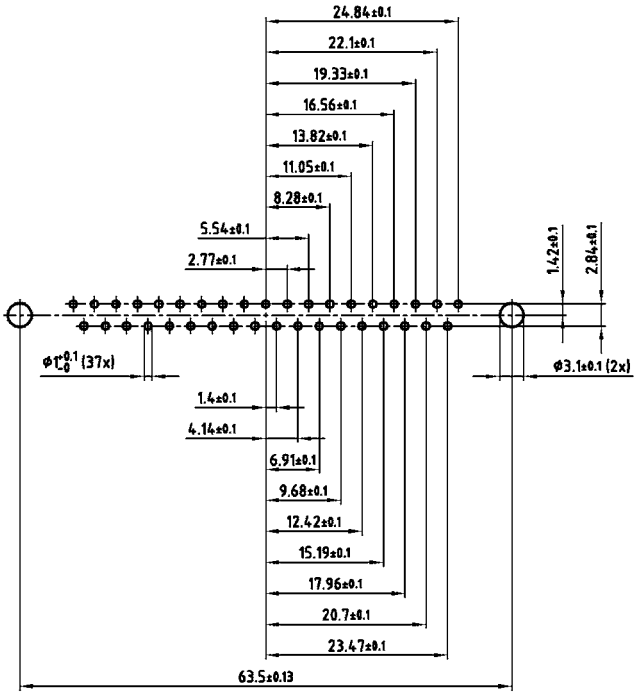

15 pos.



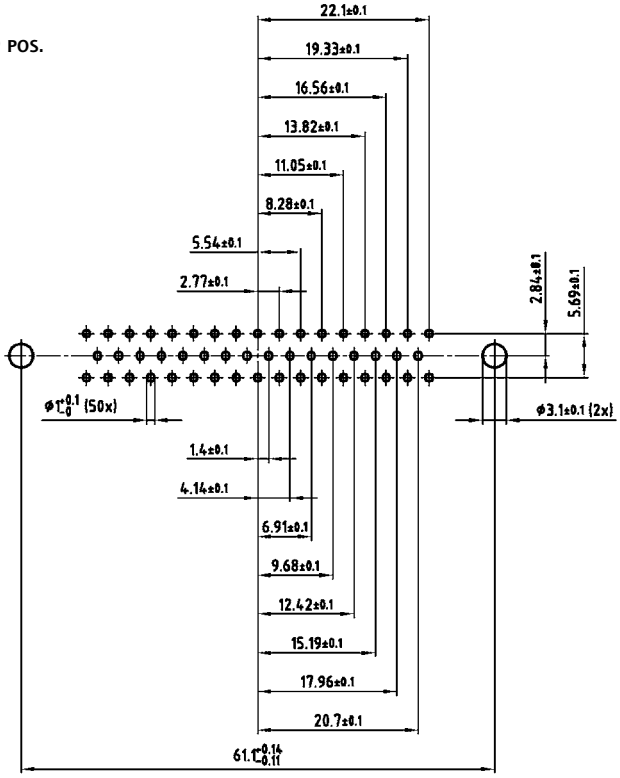

25 pos.




37 pos.




50 pos.

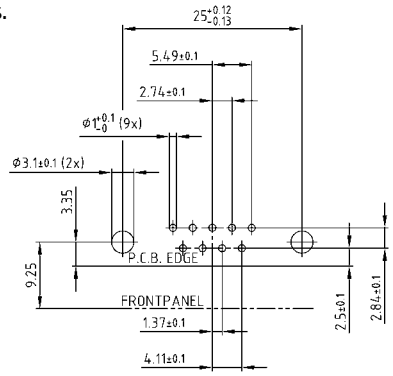



PCB layout Kat1kFUA (View: component side)

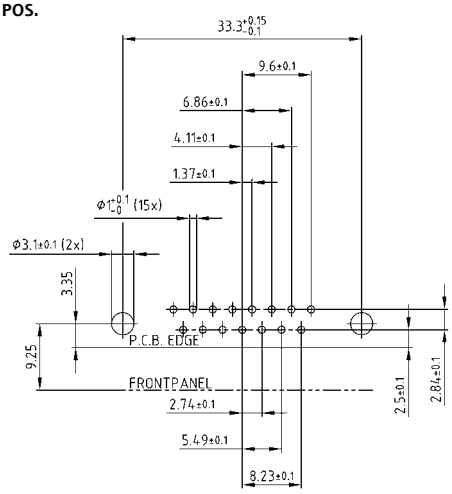
# PCB layout D-SUB Standard

## Solder pin, angled .189"/4.8 mm – Plug connector

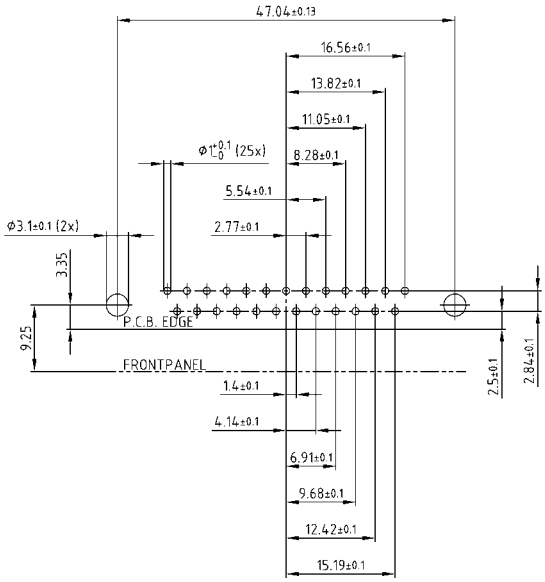
9 pos.



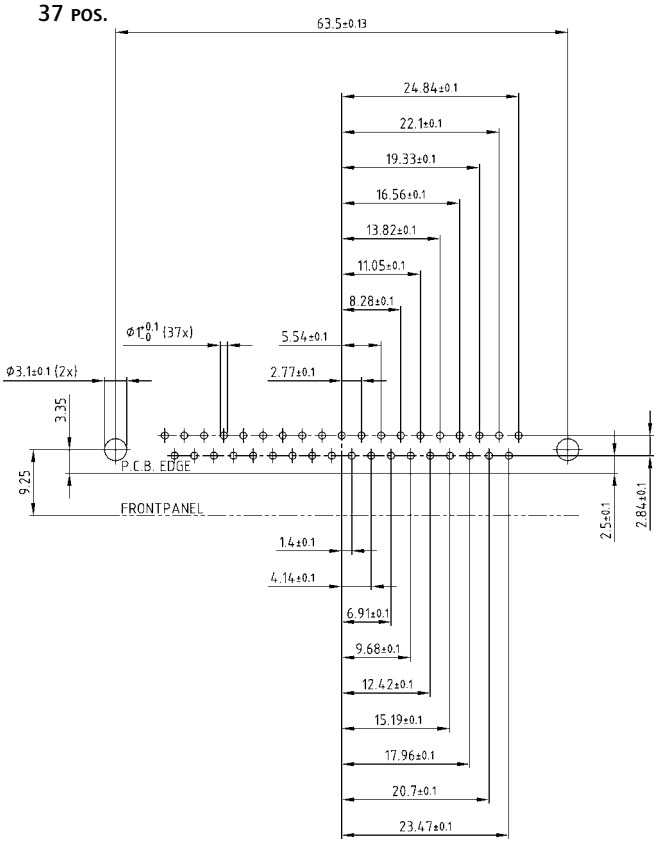

15 pos.



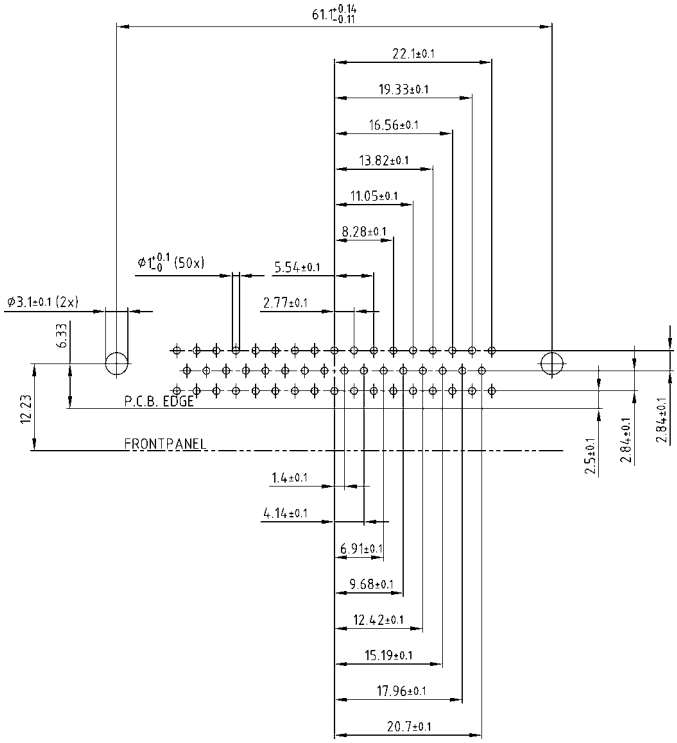

25 pos.




37 pos.




50 pos.

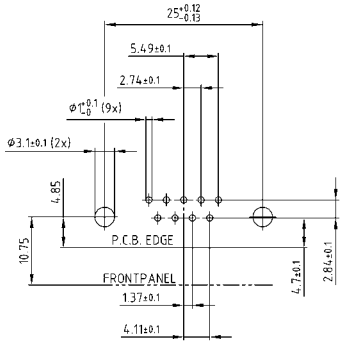



PCB layout Kat1kGSA (View: component side)

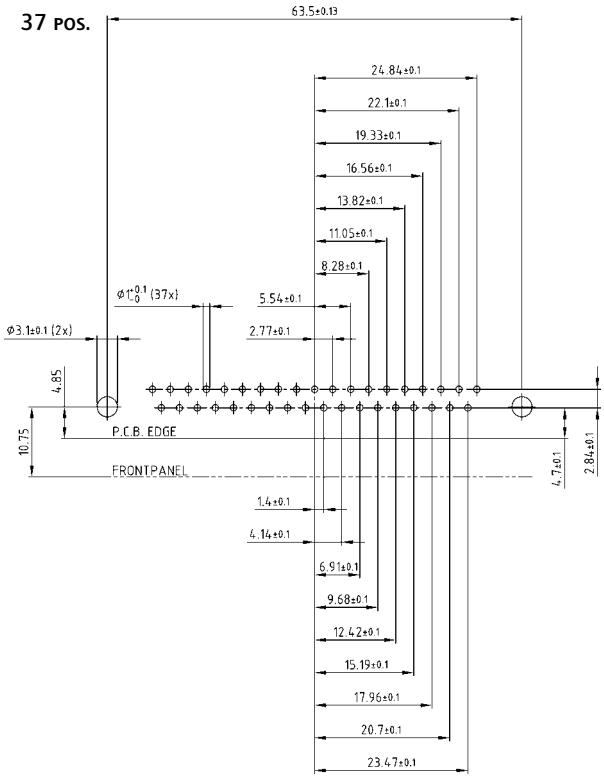
# PCB layout D-SUB Standard

## Solder pin, angled .276" / 7.0 mm – Plug connector

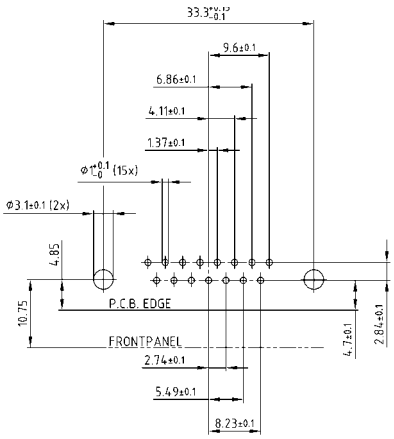
9 pos.



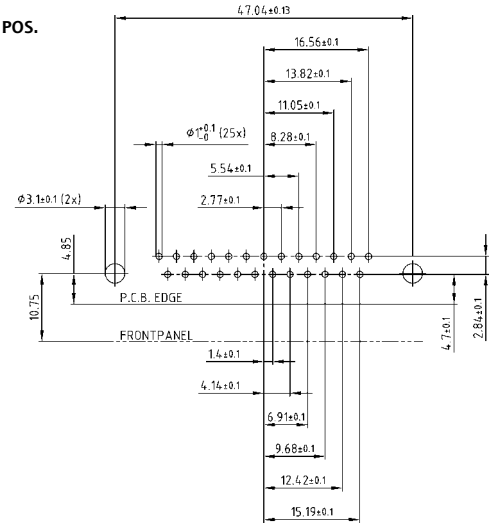

37 pos.



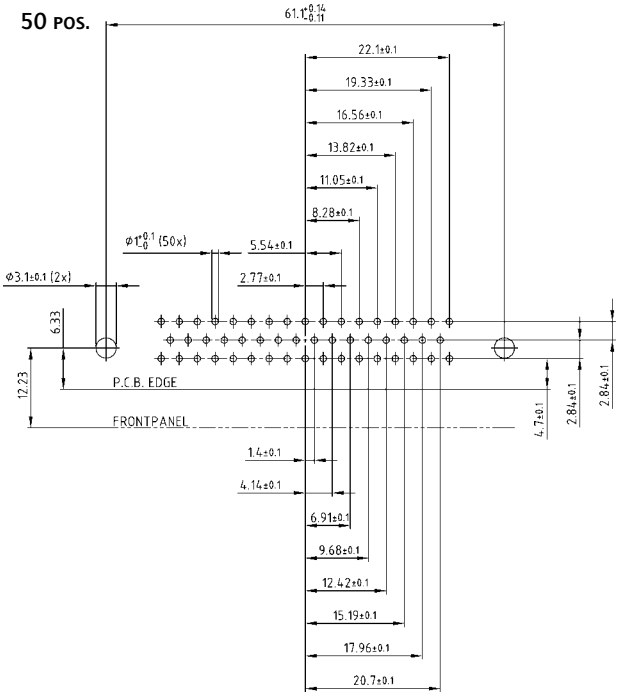

15 pos.




25 pos.




50 pos.

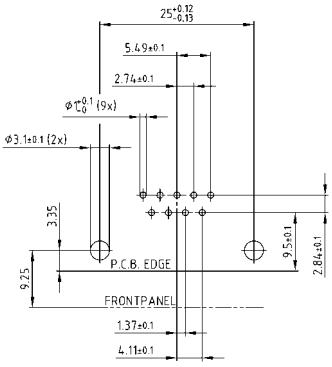



PCB layout Kat1kGTA (View: component side)

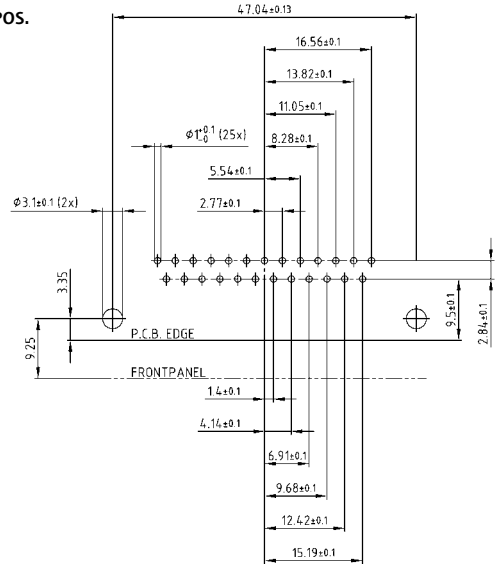
# PCB layout D-SUB Standard

## Solder pin, angled, .464" / 11.8 mm – Plug connector

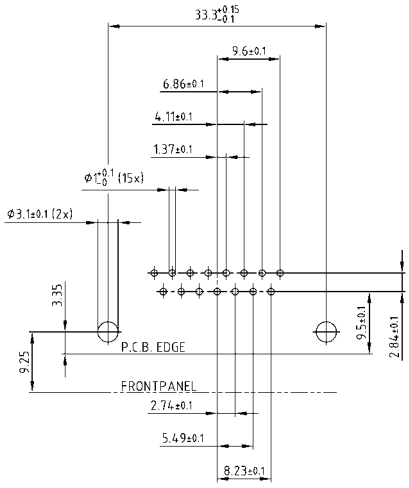
**9 pos.**



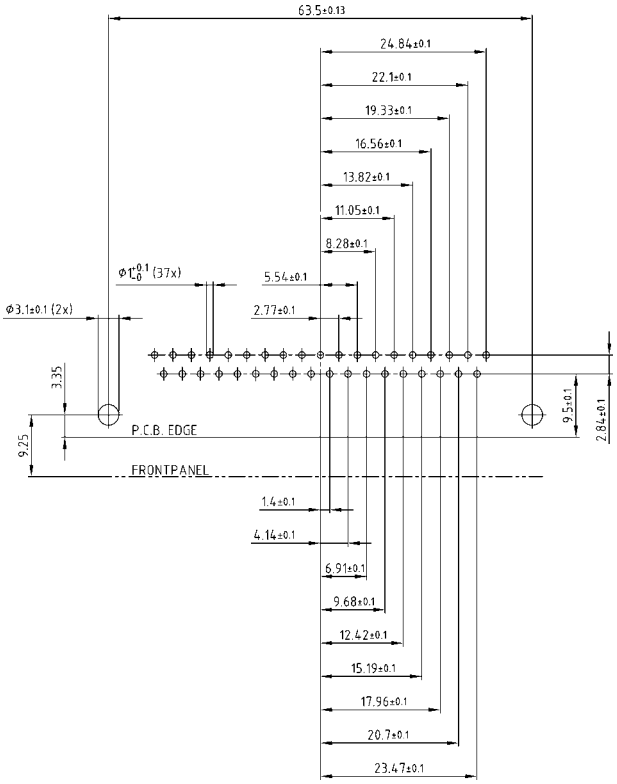

**25 pos.**




**15 pos.**




**37 pos.**

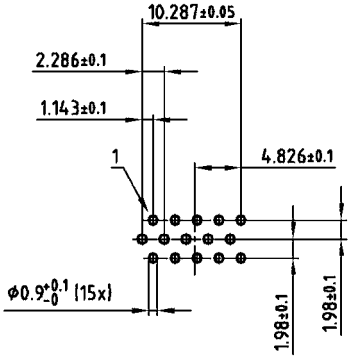



PCB layout Kat1kGUA (View: component side)

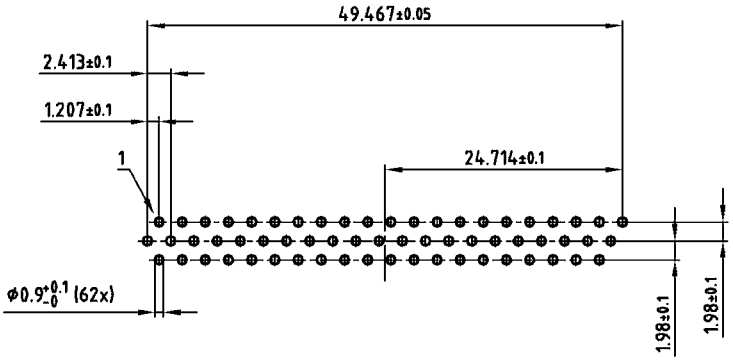
# PCB layout D-SUB High Density

## Solder pin, straight – Without rear spacer PCB clip – Plug connector

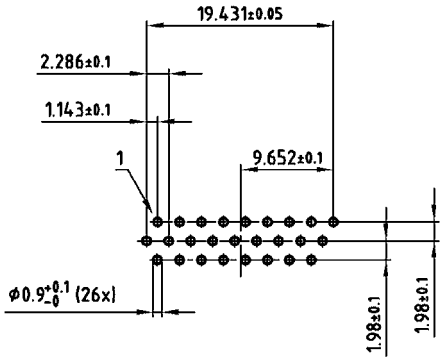
15 pos.



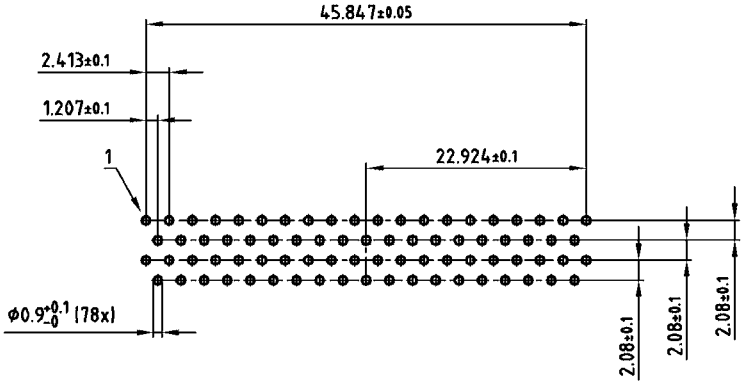

62 pos.



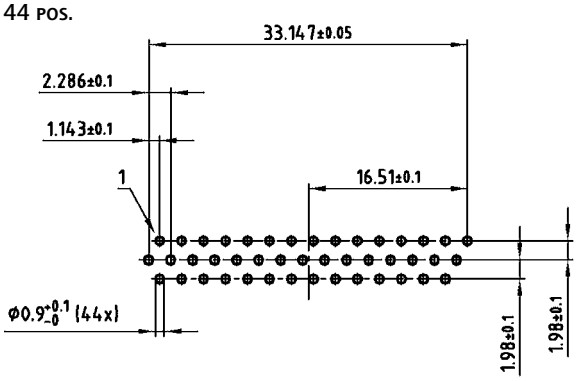

26 pos.




78 pos.




44 pos.

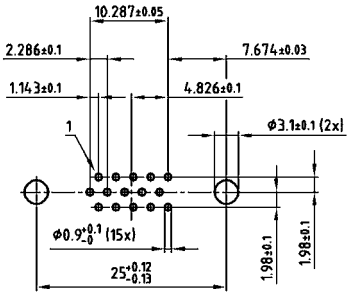



PCB layout Kat1kFWA (View: component side)

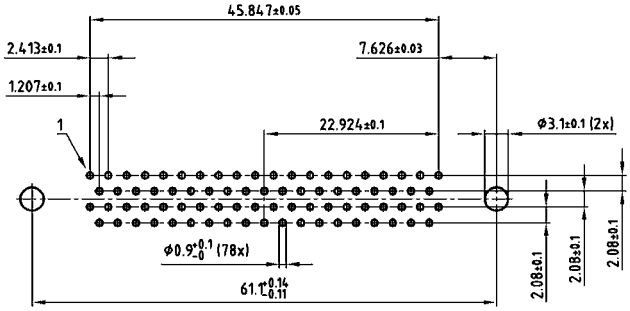
# PCB layout D-SUB High Density

## Solder pin, straight – With rear spacer PCB clip – Plug connector

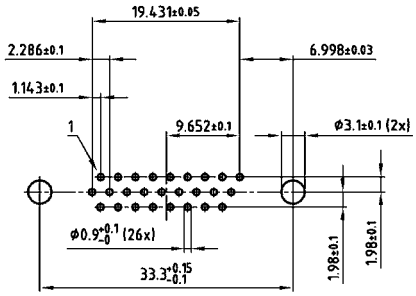
15 pos.



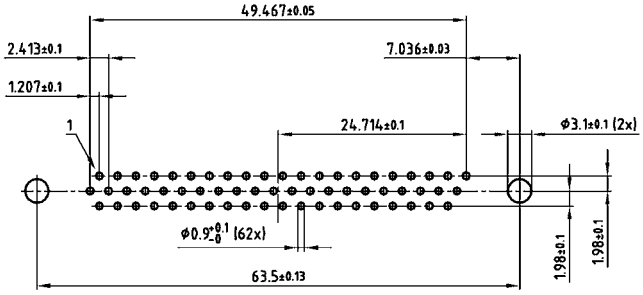

62 pos.



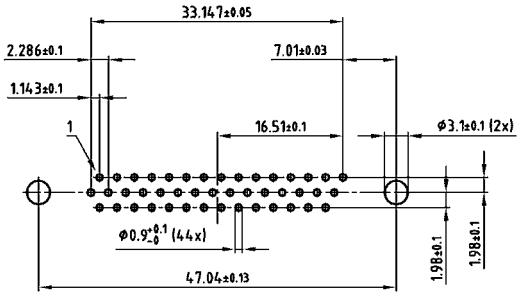

26 pos.




78 pos.




44 pos.

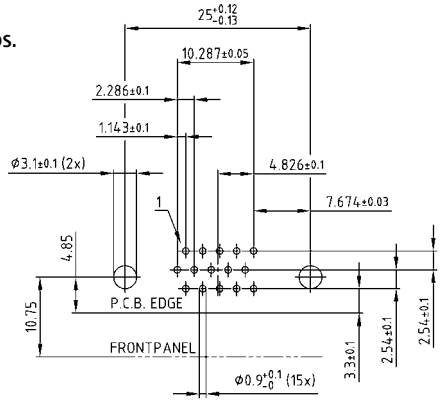



PCB layout Kat1iU0A (View: component side)

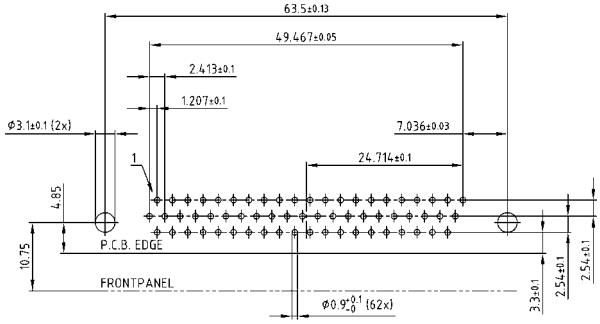
# PCB layout D-SUB High Density

## Solder pin, angled, .220"/5.6 mm – Plug connector

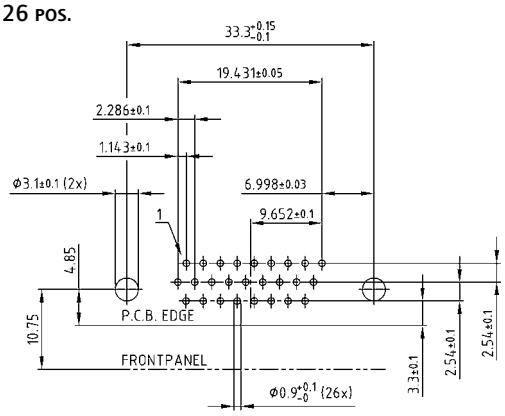
**15 pos.**



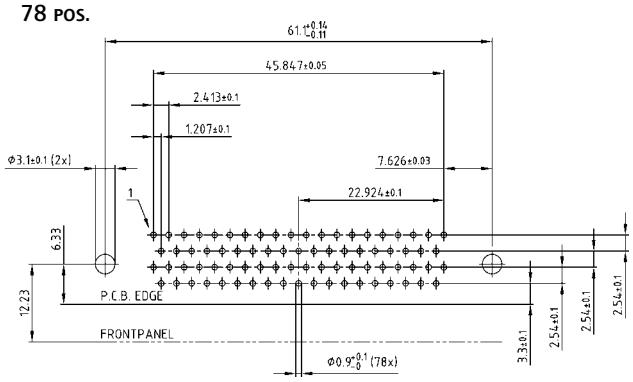

**62 pos.**



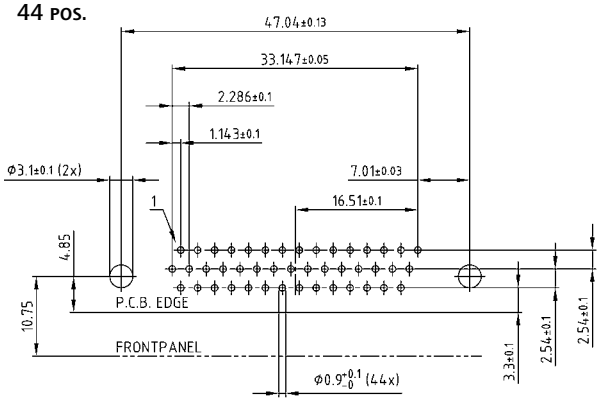

**26 pos.**




**78 pos.**




**44 pos.**




PCB layout Kat1kGWA (View: component side)

Section 11

# RJ45-IP67 Industrial Ethernet Connector System

The RJ45 connector is the most used interface in data communications. CONEC has, based on this connector interface, designed a rugged versatile connector system for Cat. 5e and Cat. 6A, that ensures reliable protection and the convenience of easily mating under the most difficult and harsh environments.

The housing with bayonet couplingmechanism is in compliance with IEC 61076-3-106 and provide increased protection for the connector system against contamination and moisture (IP67 rating). Furthermore, there are also increased demands for mechanical stability, temperature resistance, vibration immunity and protection against EMI and UV radiation. This program is supplemented by preassembled patch cables with IP67 rating in various lengths and designs.

The zinc die-cast version provides an excellent protection against harsh environment.

**Example applications:**

- CNC machines
- Communications equipment
- Mass transportation
- Industrial process control
- Diagnostic and instrument
- Printers, displays
- Factory automation
- Outdoor telecommunications systems

# Technical Data

| Mechanical and electrical characteristics | |
|---|---|
| Interface connector | RJ45 Cat. 5e per EIA/TIA-568-B2/ RJ45 Cat. 6A per EIA/TIA-568-B2 (channel) |
| Lock mechanism | Bayonet socket connector per IEC 61076-3-106 |
| IP Degree of protection | IP67 |
| Temperature range | -40°C to + 85°C |
| Strength of current | 1.2 A max. to 25°C |
| Voltage | 100 VDC |
| Contact resistance | 20 mΩ max. |
| Insulation resistance | 500 MΩ |
| Electric strength contact to contact | 1000 VDC/60 sec. |
| Electric strength contact to metal Housing | 1500 VDC/60 sec. |

| Materials | |
|---|---|
| Housing | PBT (black) or ABS Metallized (nickel plated), flame protection per UL 94-V0, zinc die-cast (nickel plated) |
| Fastening nut | Brass nickel plated |
| Housing sealing | Silicone |
| RJ45 Socket metal housing | Copper alloy, nickel plated |
| RJ45 Socket and plug connector plastic housing | PBT (black), flame protection per UL 94-V0 |
| RJ45 Socket and plug contacts | Phosphor bronze, gold plated |
| Connector housing | PBT (black) or ABS Metallized (nickel plated), flame protection peer UL 94-V0, zinc die-cast (nickel plated) |
| Socket coupling ring | PBT (black) or ABS Metallized (nickel plated), flame protection per UL 94-V0, zinc die-cast (nickel plated) |
| Cable termination | PBT (black) flame protection per UL 94-V0, or brass nickel plated |
| Cable seal | NBR |
| Interface seal | Silicone |
| RJ45 plug connector metal housing | Copper alloy, nickel plated |
| Protection cap | PBT (black) or ABS Metallized (nickel plated), flame protection per UL 94-V0, zinc die-cast (nickel plated) |
| Seal | Silicone |
| Protection cap | PE |

Technical specifications are subject to change without notice.

# RJ45-IP67 Panel mounted receptacle

## Inline coupling Cat. 5e and Cat. 6A – Bayonet locking – Plastic or Zinc die-cast

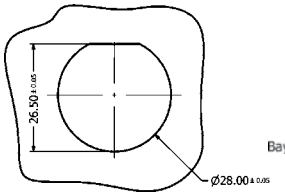
UL listed, File No.: E202784

### Description

- For front- or rear panel mounting up to wall thickness of 3.2 mm
- Designs:
  - Black plastic or metallized,
  - Zinc die-cast nickel plated
- RJ45 Cat. 5e Inline coupling unshielded or shielded
  RJ45 Cat. 6A Inline coupling shielded
- Plastic housing: blue, green, yellow, red and white on request
- Available as a set with protection cap

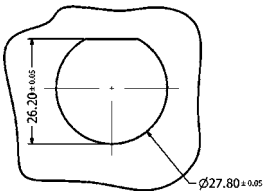
### Product drawing

Recommended Panel Cut-out for plastic version

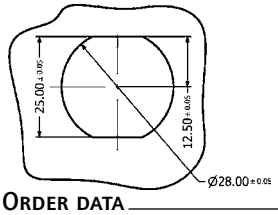



for metal version

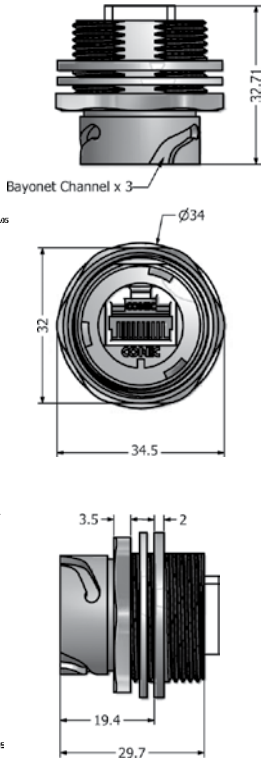
Single-D Panel Cut-out



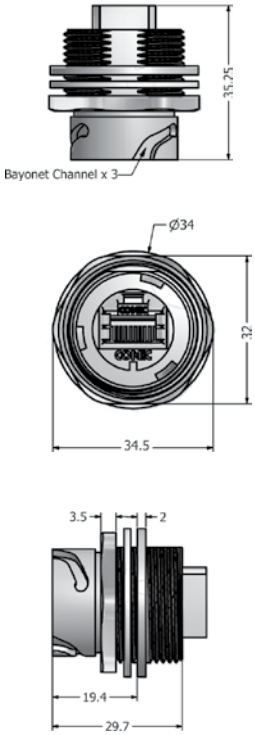

Double-D Panel Cut-out



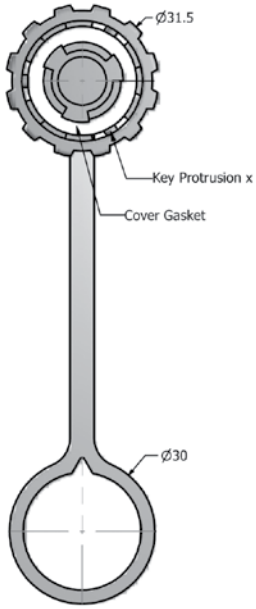

Coupling Cat. 5e



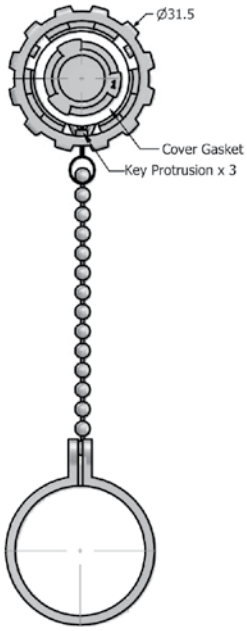

Coupling Cat. 6A




Protection cap plastic




Protection cap metal

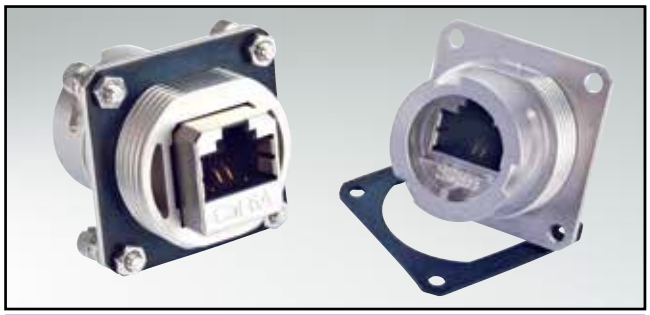



### Order data

| Type | Material | Surface | RJ45 Cat.5e design | Protection cap | Part Number |
|---|---|---|---|---|---|
| Receptacle Cat. 5e | Plastic | black | Inline coupling shielded | | 17-10009 |
| Receptacle Cat. 5e | Plastic | black | Inline coupling unshielded | | 17-10019 |
| Receptacle Cat. 5e | Plastic | metallized | Inline coupling shielded | | 17-10012 |
| Receptacle Cat. 5e | Plastic | black | Inline coupling shielded | with protection cap | 17-10000 |
| Receptacle Cat. 5e | Plastic | black | Inline coupling unshielded | with protection cap | 17-10020 |
| Receptacle Cat. 5e | Plastic | metallized | Inline coupling shielded | with protection cap | 17-10011 |
| Receptacle Cat. 5e | Zinc die-cast | nickel plated | Inline coupling shielded | | 17-101754 |
| Receptacle Cat. 5e | Zinc die-cast | nickel plated | Inline coupling unshielded | | 17-101764 |
| Receptacle Cat. 5e | Zinc die-cast | nickel plated | Inline coupling shielded | with protection cap | 17-101814 |
| Receptacle Cat. 5e | Zinc die-cast | nickel plated | Inline coupling unshielded | with protection cap | 17-101824 |
| Receptacle Cat. 6A | Plastic | black | Inline coupling shielded | | 17-150004 |
| Receptacle Cat. 6A | Plastic | black | Inline coupling shielded | with protection cap | 17-150014 |
| Receptacle Cat. 6A | Plastic | metallized | Inline coupling shielded | | 17-150124 |
| Receptacle Cat. 6A | Plastic | metallized | Inline coupling shielded | with protection cap | 17-150134 |
| Receptacle Cat. 6A | Zinc die-cast | nickel plated | Inline coupling shielded | | 17-150174 |
| Receptacle Cat. 6A | Zinc die-cast | nickel plated | Inline coupling shielded | with protection cap | 17-150184 |

# RJ45-IP67 Panel mounted receptacle

## Inline coupling Cat. 5e and 6A – Square flange – Bayonet locking – Zinc die-cast



UL listed, File No.: E202784

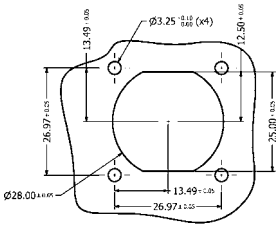
### Description

- For front- or rear panel mounting up to wall thickness of 3.2 mm
- Design:
  - Zinc die-cast nickel plated
- RJ45 Cat. 5e Inline coupling unshielded or shielded
  RJ45 Cat. 6A Inline coupling shielded
- Available as a set with protection cap
- Accessories:
  Gasket and mounting hardware can be ordered separately
- Mounting hardware includes
  4x (screw M3 + nut + flat washer + spring washer)

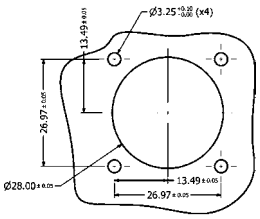
### Product drawing

Recommended Panel Cut-out

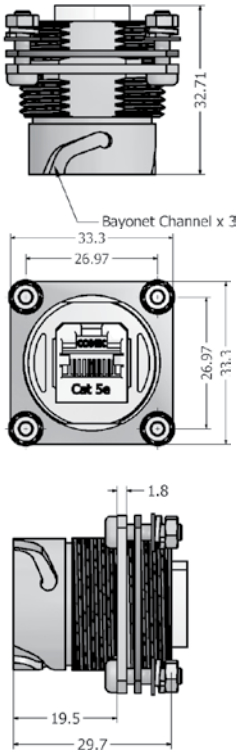
Double-D Panel Cut-out



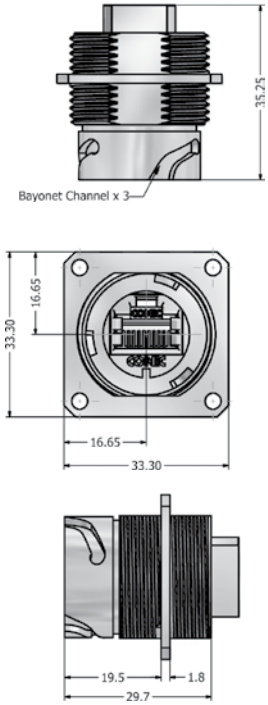

Round Panel Cut-out



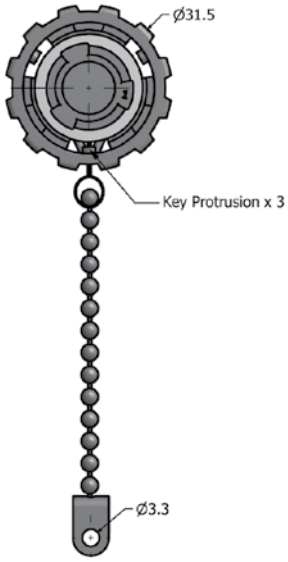

Cat. 5e Version




Cat. 6A Version




Protection cap metal




### Order data

| Type | Material | Surface | RJ45 design | Protection cap | Part Number |
|---|---|---|---|---|---|
| Receptacle Cat 5e with accessories | Zinc die-cast | nickel plated | Inline coupling unshielded | | 17-110224 |
| Receptacle Cat 5e with accessories | Zinc die-cast | nickel plated | Inline coupling unshielded | with protection cap | 17-110244 |
| Receptacle Cat 5e with accessories | Zinc die-cast | nickel plated | Inline coupling shielded | | 17-110214 |
| Receptacle Cat 5e with accessories | Zinc die-cast | nickel plated | Inline coupling shielded | with protection cap | 17-110234 |
| Receptacle Cat 6A without accessories | Zinc die-cast | nickel plated | Inline coupling shielded | | 17-150214 |
| Receptacle Cat 6A with accessories | Zinc die-cast | nickel plated | Inline coupling shielded | | 17-160004 |
| Receptacle Cat 6A with accessories | Zinc die-cast | nickel plated | Inline coupling shielded | with protection cap | 17-160014 |
| Panel gasket | Silicone | | | | 17-103540 |
| Mounting hardware | Stainless steel | | | | 17-103530 |

# RJ45-IP67 Panel mounted receptacle

## Inline coupling Cat. 5e – both sides Bayonet locking – Plastic

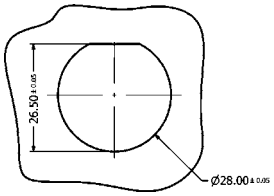
UL listed, File No.: E202784

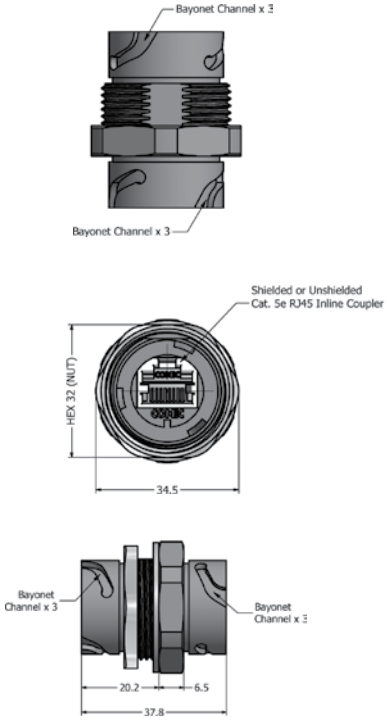
### Description

- For front- or rear panel mounting up to wall thickness of 3.2 mm
- Design: Black plastic
- RJ45 Cat. 5e Inline coupling unshielded or shielded
- IP67 Protection in mated condition
- Available as a set with protection cap

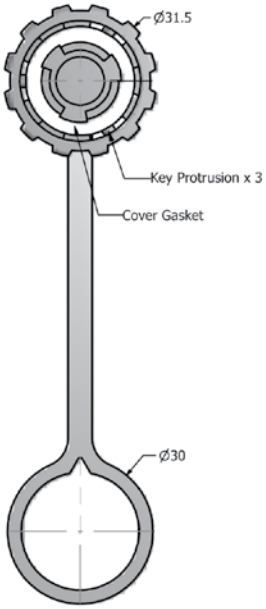
### Product drawing

Recommended Panel Cut-out




Protection cap plastic




### Order data

| Type | Material | Surface | RJ45 Cat.5e design | Protection cap | Part Number |
|---|---|---|---|---|---|
| Receptacle | Plastic | black | Inline coupling shielded | | 17-110004 |
| Receptacle | Plastic | black | Inline coupling unshielded | | 17-110014 |
| Receptacle | Plastic | black | Inline coupling shielded | with protection cap | 17-110024 |
| Receptacle | Plastic | black | Inline coupling unshielded | with protection cap | 17-110034 |

# RJ45-IP67 Panel mounted receptacle

## Screw connection Cat. 5e – Bayonet locking – Plastic or zinc die-cast

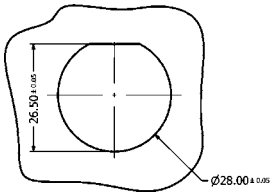
UL listed, File No.: E202784

### Description

- For front- or rear panel mounting up to wall thickness of 3.2 mm
- Design:
  - Black plastic or metallized plastic
  - Zinc die-cast nickel plated
- RJ45 Cat. 5e with 4x2 screw terminations shielded
- Cable cross-section AWG 16-28
- Available as a set with protection cap
- Plastic housing: blue, green, yellow, red and white on request

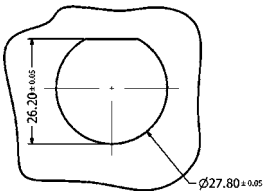
### Product drawing

Recommended Panel Cut-out for plastic version

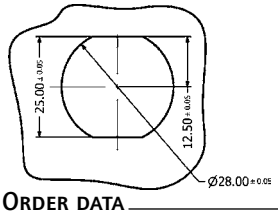


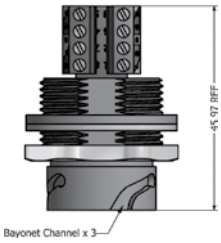

for metal version

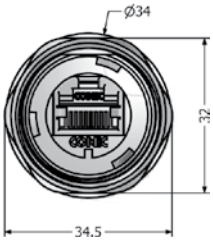
Single-D Panel Cut-out

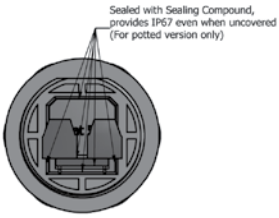


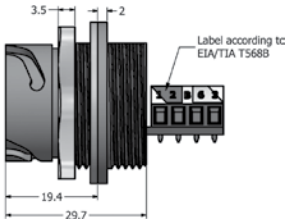

Double-D Panel Cut-out



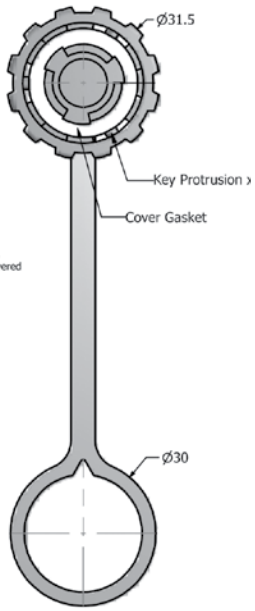



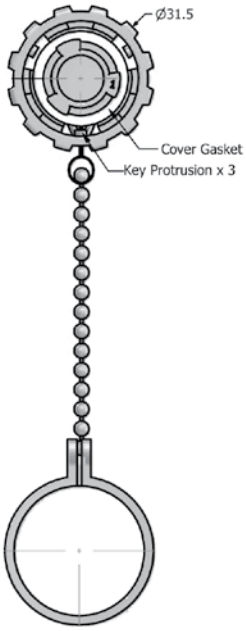




Protection cap plastic




Protection cap metal

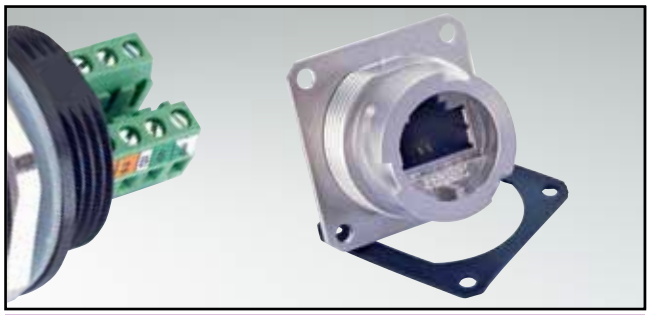



### Order data

| Type | Material | Surface | RJ45 Cat.5e design | Sealing | Protection cap | Part Number |
|---|---|---|---|---|---|---|
| Receptacle | Plastic | black | Terminal block shielded | | | 17-110054 |
| Receptacle | Plastic | black | Terminal block shielded | Sealing compound | | 17-110114 |
| Receptacle | Plastic | black | Terminal block shielded | | with protection cap | 17-110594 |
| Receptacle | Plastic | black | Terminal block shielded | Sealing compound | with protection cap | 17-110654 |
| Receptacle | Plastic | metallized | Terminal block shielded | | | 17-110174 |
| Receptacle | Plastic | metallized | Terminal block shielded | Sealing compound | | 17-110184 |
| Receptacle | Plastic | metallized | Terminal block shielded | | with protection cap | 17-110714 |
| Receptacle | Plastic | metallized | Terminal block shielded | Sealing compound | with protection cap | 17-110724 |
| Receptacle | Zinc die-cast | nickel plated | Terminal block shielded | | | 17-110194 |
| Receptacle | Zinc die-cast | nickel plated | Terminal block shielded | Sealing compound | | 17-110204 |
| Receptacle | Zinc die-cast | nickel plated | Terminal block shielded | | with protection cap | 17-110734 |
| Receptacle | Zinc die-cast | nickel plated | Terminal block shielded | Sealing compound | with protection cap | 17-110744 |

# RJ45-IP67 Panel mounted receptacle

## Screw connection Cat. 5e – Square flange – Bayonet locking – Zinc die-cast



UL listed, File No.: E202784

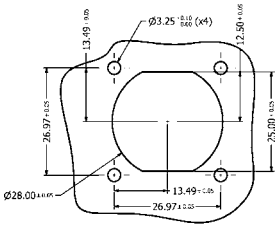
### Description

- For front- or rear panel mounting up to wall thickness of 3.2 mm
- Design:
  - Zinc die-cast nickel plated
- RJ45 Cat. 5e with 4x2 screw terminations shielded
- Cable cross-section AWG 16-28
- Available as a set with protection cap
- Accessories:
  Gasket and mounting hardware can be ordered separately
- Mounting hardware includes
  4x (screw M3 + nut + flat washer + spring washer)

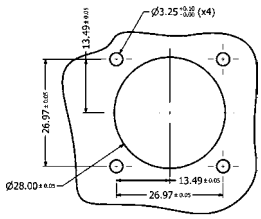
### Product drawing

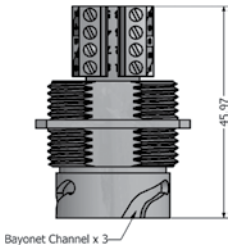
Recommended Panel Cut-out

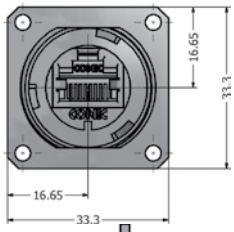
Double-D Panel Cut-out

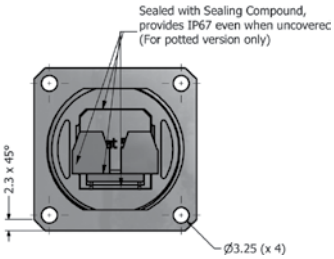


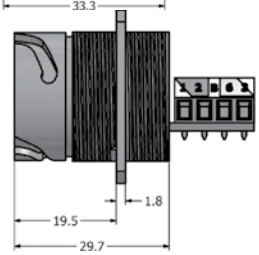

Round Panel Cut-out



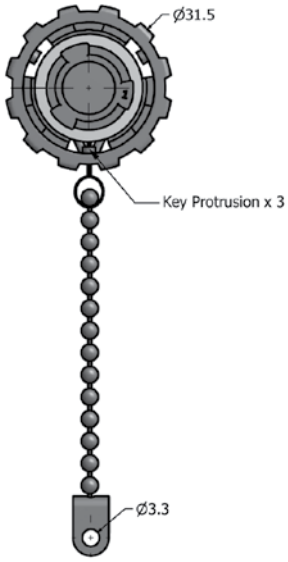




Protection cap metal




### Order data

| Type | Material | Surface | RJ45 Cat.5e design | Sealing | Protection cap | Part Number |
|---|---|---|---|---|---|---|
| Receptacle Cat 5e without accessories | Zinc die-cast | nickel plated | Terminal block shielded | | | 17-111074 |
| Receptacle Cat 5e without accessories | Zinc die-cast | nickel plated | Terminal block shielded | Sealing compound | | 17-111084 |
| Receptacle Cat 5e with accessories | Zinc die-cast | nickel plated | Terminal block shielded | | | 17-111134 |
| Receptacle Cat 5e with accessories | Zinc die-cast | nickel plated | Terminal block shielded | Sealing compound | | 17-111144 |
| Receptacle Cat 5e with accessories | Zinc die-cast | nickel plated | Terminal block shielded | | with protection cap | 17-111194 |
| Receptacle Cat 5e with accessories | Zinc die-cast | nickel plated | Terminal block shielded | Sealing compound | with protection cap | 17-111204 |
| Panel gasket | Silicone | | | | | 17-103540 |
| Mounting hardware | Stainless steel | | | | | 17-103530 |

# RJ45-IP67 Panel mounted receptacle

## Solder termination (PCB) Cat. 5e – Bayonet locking – Plastic or zinc die-cast

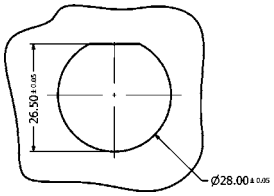
UL listed, File No.: E202784

### Description

- For front- or rear panel mounting up to wall thickness of 3.2 mm
- Design:
  - Black plastic or metallized plastic
  - Zinc die-cast nickel plated
- RJ45 Cat. 5e solder termination shielded with or without grounding
- Available as a set with protection cap
- Plastic housing: blue, green, yellow, red and white on request

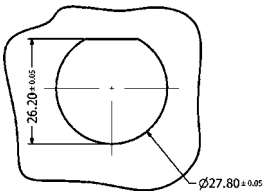
### Product drawing

Recommended Panel Cut-out for plastic version

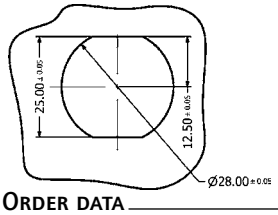



for metal version

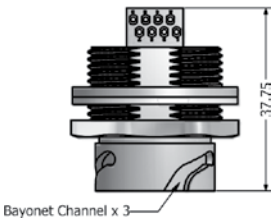
Single-D Panel Cut-out



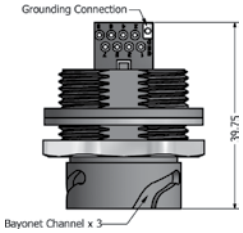

Double-D Panel Cut-out

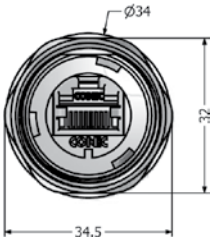


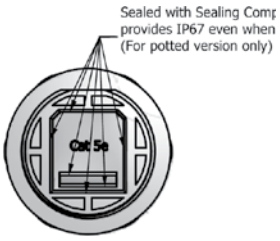

PCB without grounding

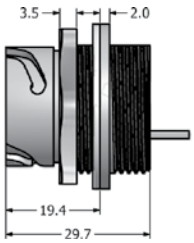



PCB with grounding

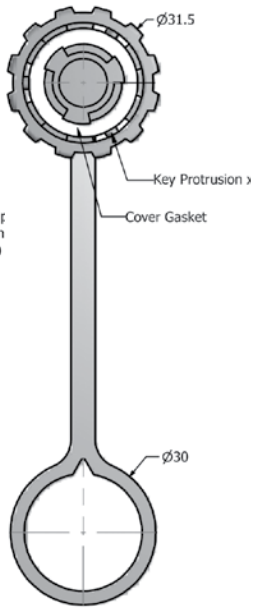


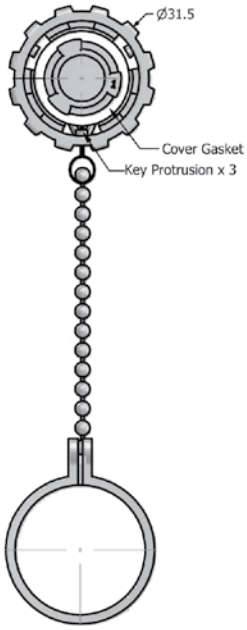




Protection cap plastic




Protection cap metal

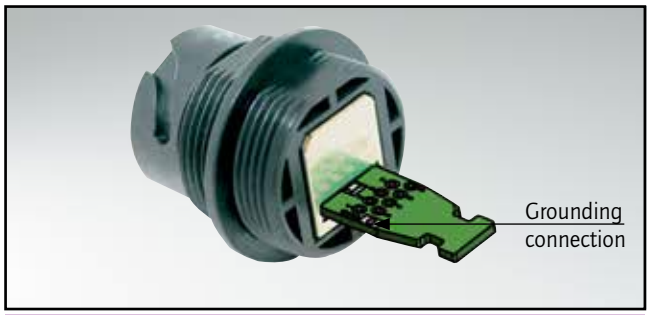



### Order data

| Type | Material | Surface | RJ45 Cat.5e design | Sealing | Protection cap | Part Number PCB with grounding | Part Number PCB without grounding |
|---|---|---|---|---|---|---|---|
| Receptacle | Plastic | black | Solder termination shielded | | | 17-110264 | 17-10017 |
| Receptacle | Plastic | black | Solder termination shielded | Sealing compound | | 17-110324 | 17-10035 |
| Receptacle | Plastic | black | Solder termination shielded | | with protection cap | 17-110754 | 17-10023 |
| Receptacle | Plastic | black | Solder termination shielded | Sealing compound | with protection cap | 17-110814 | 17-10039 |
| Receptacle | Plastic | metallized | Solder termination shielded | | | 17-110384 | 17-10018 |
| Receptacle | Plastic | metallized | Solder termination shielded | Sealing compound | | 17-110394 | 17-10036 |
| Receptacle | Plastic | metallized | Solder termination shielded | | with protection cap | 17-110874 | 17-10024 |
| Receptacle | Plastic | metallized | Solder termination shielded | Sealing compound | with protection cap | 17-110884 | 17-10040 |
| Receptacle | Zinc die-cast | nickel plated | Solder termination shielded | | | 17-110404 | 17-101784 |
| Receptacle | Zinc die-cast | nickel plated | Solder termination shielded | Sealing compound | | 17-110414 | 17-102184 |
| Receptacle | Zinc die-cast | nickel plated | Solder termination shielded | | with protection cap | 17-110894 | 17-101844 |
| Receptacle | Zinc die-cast | nickel plated | Solder termination shielded | Sealing compound | with protection cap | 17-110904 | 17-102204 |

# RJ45-IP67 Panel mounted receptacle

## Solder termination (PCB) Cat. 5e – Bayonet locking – Plastic or zinc die-cast



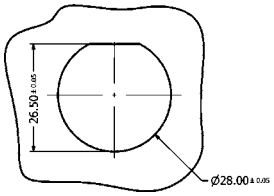

UL listed, File No.: E202784

### Description

- For front- or rear panel mounting up to wall thickness of 3.2 mm
- Design:
  - Black plastic or metallized
  - zinc die-cast nickel plated
- RJ45 Cat. 5e solder termination with grounding connection shielded
- Strain relief version includes a cable tie
- Available as a set with protection cap
- Plastic housing: blue, green, yellow, red and white on request

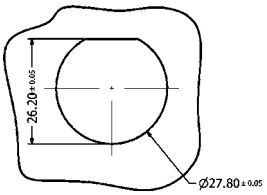
### Product drawing

Recommended Panel Cut-out for plastic version

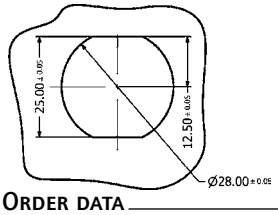



for metal version

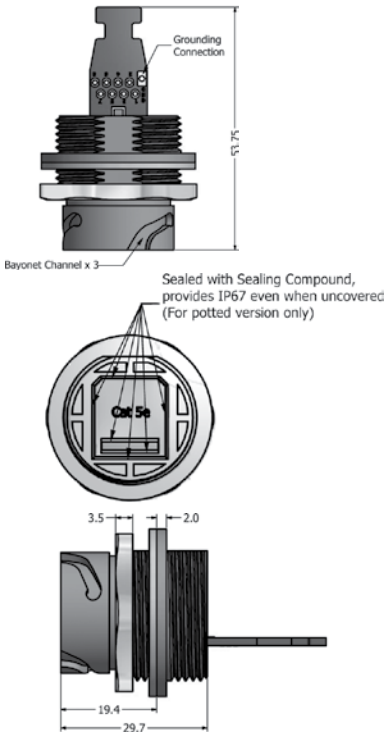
Single-D Panel Cut-out



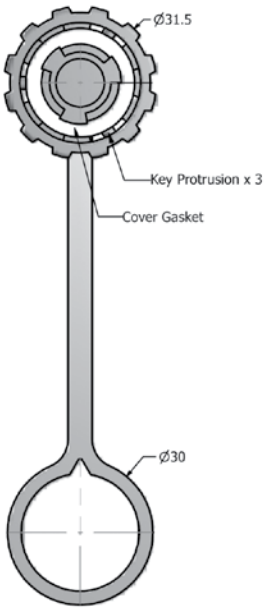

Double-D Panel Cut-out



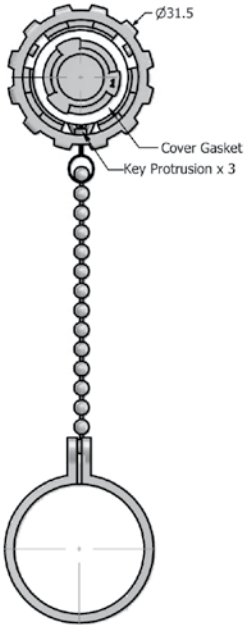

PCB with grounding connection and strain relief area




Protection cap plastic




Protection cap metal

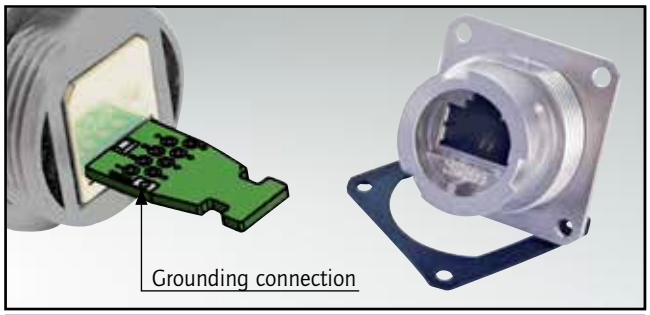



### Order data

| Type | Material | Surface | RJ45 Cat. 5e design | Sealing | Protection cap | Part Number |
|---|---|---|---|---|---|---|
| Receptacle | Plastic | black | Solder termination shielded | | | 17-110424 |
| Receptacle | Plastic | black | Solder termination shielded | Sealing compound | | 17-110484 |
| Receptacle | Plastic | black | Solder termination shielded | | with protection cap | 17-110914 |
| Receptacle | Plastic | black | Solder termination shielded | Sealing compound | with protection cap | 17-110974 |
| Receptacle | Plastic | metallized | Solder termination shielded | | | 17-110544 |
| Receptacle | Plastic | metallized | Solder termination shielded | Sealing compound | | 17-110554 |
| Receptacle | Plastic | metallized | Solder termination shielded | | with protection cap | 17-111034 |
| Receptacle | Plastic | metallized | Solder termination shielded | Sealing compound | with protection cap | 17-111044 |
| Receptacle | Zinc die-cast | nickel plated | Solder termination shielded | | | 17-110564 |
| Receptacle | Zinc die-cast | nickel plated | Solder termination shielded | Sealing compound | | 17-110574 |
| Receptacle | Zinc die-cast | nickel plated | Solder termination shielded | | with protection cap | 17-111054 |
| Receptacle | Zinc die-cast | nickel plated | Solder termination shielded | Sealing compound | with protection cap | 17-111064 |

# RJ45-IP67 Panel mounted receptacle

## Solder termination (PCB) Cat. 5e – Square flange – Bayonet locking – Zinc die-cast




UL listed, File No.: E202784

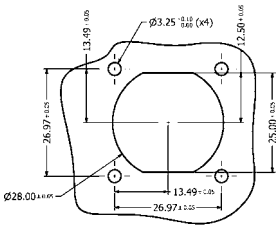
### Description

- For front- or rear panel mounting up to wall thickness of 3.2 mm
- Design:
  - Zinc die-cast nickel plated
- RJ45 Cat. 5e solder termination with grounding connection shielded
- Strain relief version includes a cable tie
- Available as a set with protection cap
- Accessories:
  Gasket and mounting hardware can be ordered separately
- Mounting hardware includes
  4x (screw M3 + nut + flat washer + spring washer)

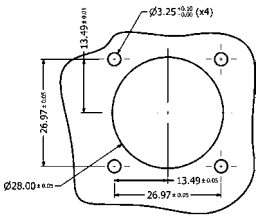
### Product drawing

Recommended Panel Cut-out

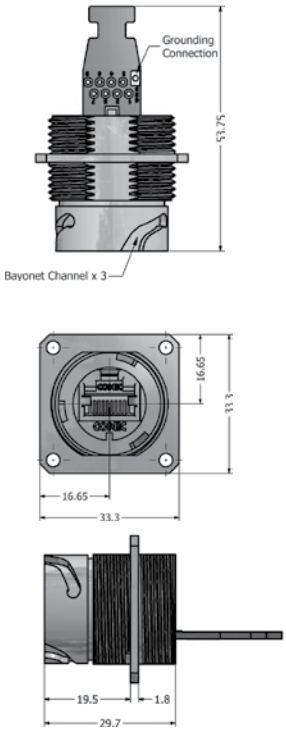
Double-D Panel Cut-out



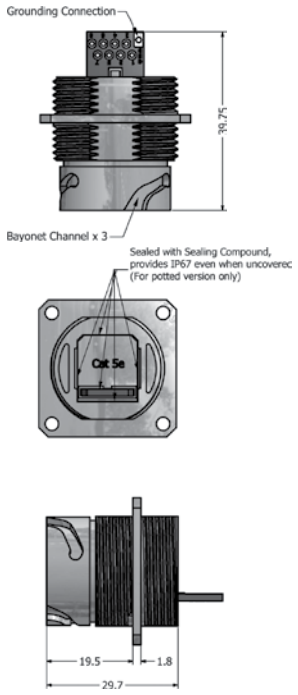

Round Panel Cut-out



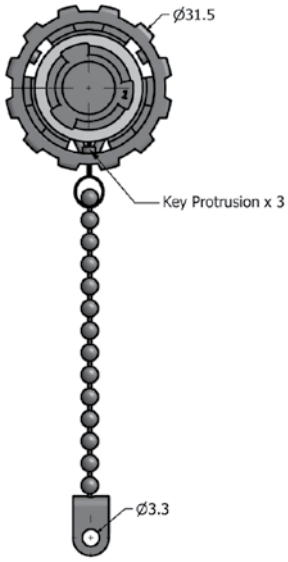

PCB with grounding connection and strain relief area




PCB with grounding connection




Protection cap metal

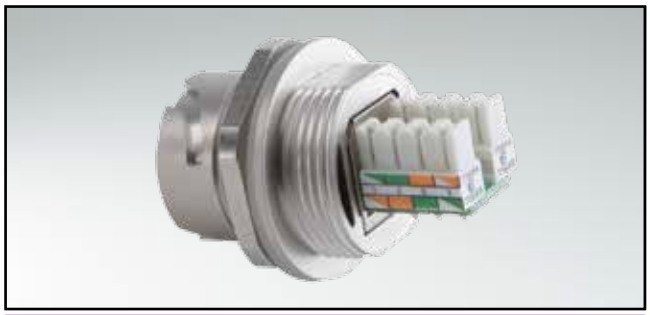



### Order data

| Type | Material | Surface | RJ45 Cat.5e design | Sealing | Grounding connection | Protection cap | Part Number |
|---|---|---|---|---|---|---|---|
| Receptacle without accessories | Zinc die-cast | nickel plated | Solder termination | | Grounding connection | | 17-111094 |
| Receptacle without accessories | Zinc die-cast | nickel plated | Solder termination | Sealing compound | Grounding connection | | 17-111104 |
| Receptacle with accessories | Zinc die-cast | nickel plated | Solder termination | | Grounding connection | | 17-111154 |
| Receptacle with accessories | Zinc die-cast | nickel plated | Solder termination | Sealing compound | Grounding connection | | 17-111164 |
| Receptacle with accessories | Zinc die-cast | nickel plated | Solder termination | | Grounding connection | with protection cap | 17-111214 |
| Receptacle with accessories | Zinc die-cast | nickel plated | Solder termination | Sealing compound | Grounding connection | with protection cap | 17-111224 |
| Receptacle without accessories | Zinc die-cast | nickel plated | Solder termination | | Grounding/Strain relief | | 17-111114 |
| Receptacle without accessories | Zinc die-cast | nickel plated | Solder termination | Sealing compound | Grounding/Strain relief | | 17-111124 |
| Receptacle with accessories | Zinc die-cast | nickel plated | Solder termination | | Grounding/Strain relief | | 17-111174 |
| Receptacle with accessories | Zinc die-cast | nickel plated | Solder termination | Sealing compound | Grounding/Strain relief | | 17-111184 |
| Receptacle with accessories | Zinc die-cast | nickel plated | Solder termination | | Grounding/Strain relief | with protection cap | 17-111234 |
| Receptacle with accessories | Zinc die-cast | nickel plated | Solder termination | Sealing compound | Grounding/Strain relief | with protection cap | 17-111244 |
| Panel gasket | Silicone | | | | | | 17-103540 |
| Mounting hardware | Stainless steel | | | | | | 17-103530 |

# RJ45-IP67 Panel mounted receptacle

## IDC Cat. 5e – Bayonet locking – Plastic or zinc die-cast



UL listed, File No.: E202784

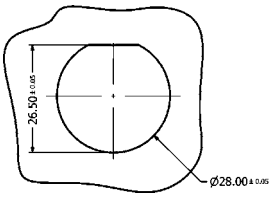
### Description

- For front- or rear panel mounting up to wall thickness of 3.2 mm
- Design:
  - Black plastic or metallized
  - Zinc die-cast nickel plated
- RJ45 Cat. 5e IDC shielded
- Available as a set with protection cap
- Plastic housing: blue, green, yellow, red and white on request

### Product drawing

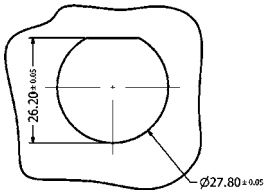
Recommended Panel Cut-out

for plastic version

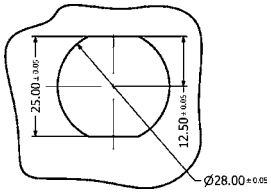


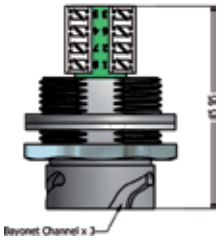

for metal version

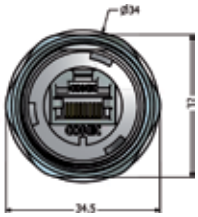
Single-D Panel Cut-out

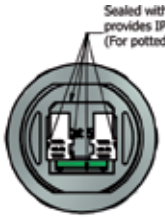


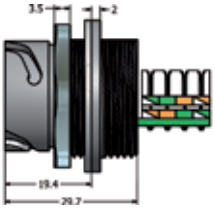

Double-D Panel Cut-out



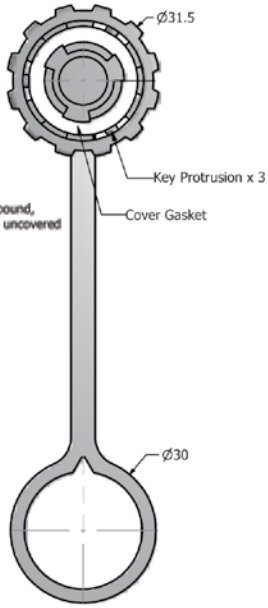



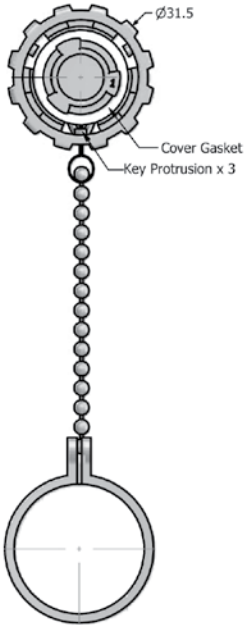




Protection cap plastic




Protection cap metal




### Order data

| Type | Material | Surface | RJ45 Cat.5e design, shielded | Sealing | Protection cap | Part Number |
|---|---|---|---|---|---|---|
| Receptacle | Plastic | black | Socket connector IDC termination | | | 17-10015 |
| Receptacle | Plastic | black | Socket connector IDC termination | Sealing compound | | 17-10033 |
| Receptacle | Plastic | black | Socket connector IDC termination | | with protection cap | 17-10021 |
| Receptacle | Plastic | black | Socket connector IDC termination | Sealing compound | with protection cap | 17-10037 |
| Receptacle | Plastic | metallized | Socket connector IDC termination | | | 17-10016 |
| Receptacle | Plastic | metallized | Socket connector IDC termination | Sealing compound | | 17-10034 |
| Receptacle | Plastic | metallized | Socket connector IDC termination | | with protection cap | 17-10022 |
| Receptacle | Plastic | metallized | Socket connector IDC termination | Sealing compound | with protection cap | 17-10038 |
| Receptacle | Zinc die-cast | nickel plated | Socket connector IDC termination | | | 17-101774 |
| Receptacle | Zinc die-cast | nickel plated | Socket connector IDC termination | Sealing compound | | 17-102174 |
| Receptacle | Zinc die-cast | nickel plated | Socket connector IDC termination | | with protection cap | 17-101834 |
| Receptacle | Zinc die-cast | nickel plated | Socket connector IDC termination | Sealing compound | with protection cap | 17-102194 |

# RJ45-IP67 Panel mounted receptacle

## Inline coupling Cat. 5e and 6A – M28 thread – Metal

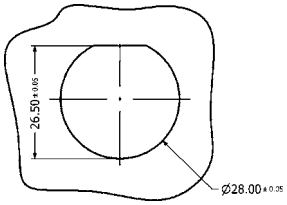
UL listed, File No.: E202784

### Description

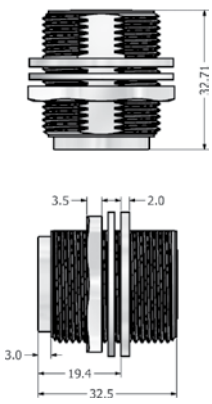
- For front- or rear panel mounting up to wall thickness of 3.2 mm
- Design:
  - Metal design, M28 thread
- RJ45 Cat. 5e Inline coupling unshielded or shielded
  RJ45 Cat. 6A Inline coupling shielded
- Metal protection cap, M28 thread
- Available as a set with protection cap

### Product drawing

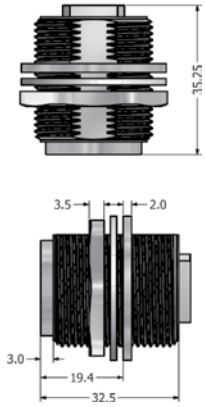
Recommended panel cut-out

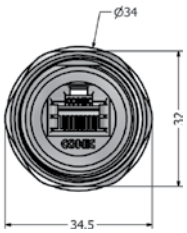



Coupling Cat. 5e

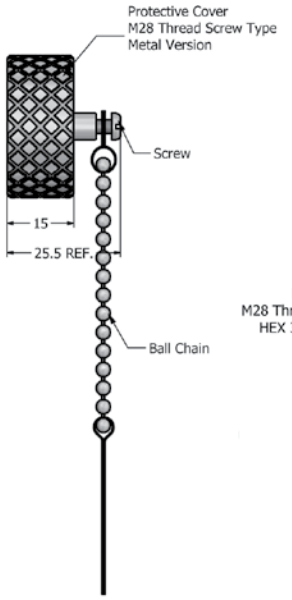



Coupling Cat. 6A

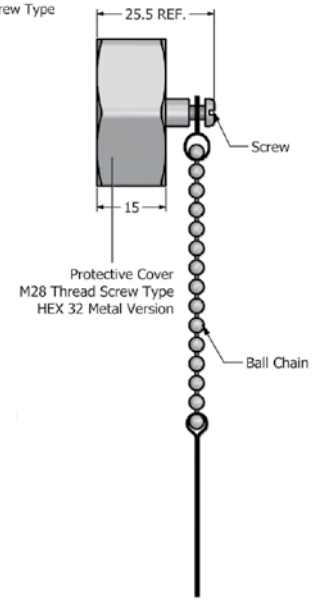



Protection cap Metal Knurled




Protection cap Metal Hex 32




### Order data

| Type | Material | Surface | Design | Protection cap | Part Number |
|---|---|---|---|---|---|
| Receptacle Cat. 5e | Metal | nickel plated | Inline coupling shielded | | 17-100934 |
| Receptacle Cat. 5e | Metal | nickel plated | Inline coupling unshielded | | 17-101494 |
| Receptacle Cat. 5e | Metal | nickel plated | Inline coupling shielded | with knurled protection cap | 17-101604 |
| Receptacle Cat. 5e | Metal | nickel plated | Inline coupling unshielded | with knurled protection cap | 17-101614 |
| Receptacle Cat. 5e | Metal | nickel plated | Inline coupling shielded | with hex protection cap | 17-101884 |
| Receptacle Cat. 5e | Metal | nickel plated | Inline coupling unshielded | with hex protection cap | 17-101894 |
| Receptacle Cat. 6A | Metal | nickel plated | Inline coupling shielded | | 17-150144 |
| Receptacle Cat. 6A | Metal | nickel plated | Inline coupling shielded | with knurled protection cap | 17-150154 |
| Receptacle Cat. 6A | Metal | nickel plated | Inline coupling shielded | with hex protection cap | 17-150164 |

# RJ45-IP67 Panel mounted receptacle

## Solder termination (PCB) Cat. 5e – M28 thread – Metal

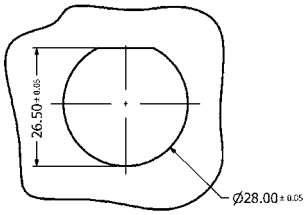
UL listed, File No.: E202784

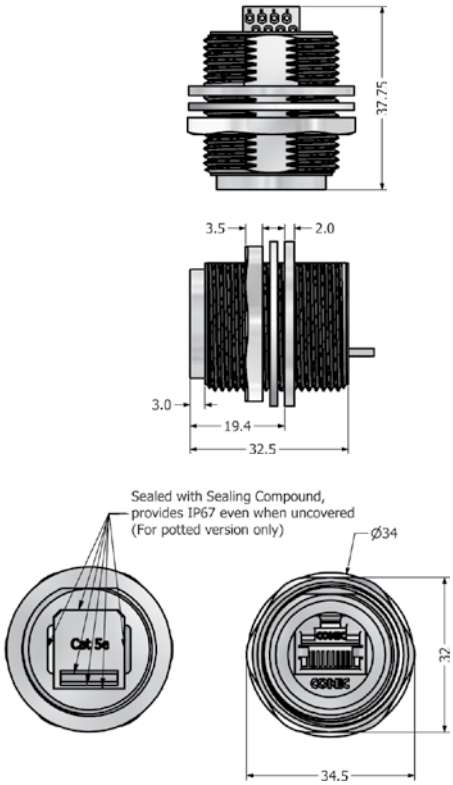
### Description

- For front- or rear panel mounting up to wall thickness of 3.2 mm
- Design:
  - Metal design, M28 thread
- RJ45 Cat. 5e Solder termination shielded
- Available as a set with protection cap

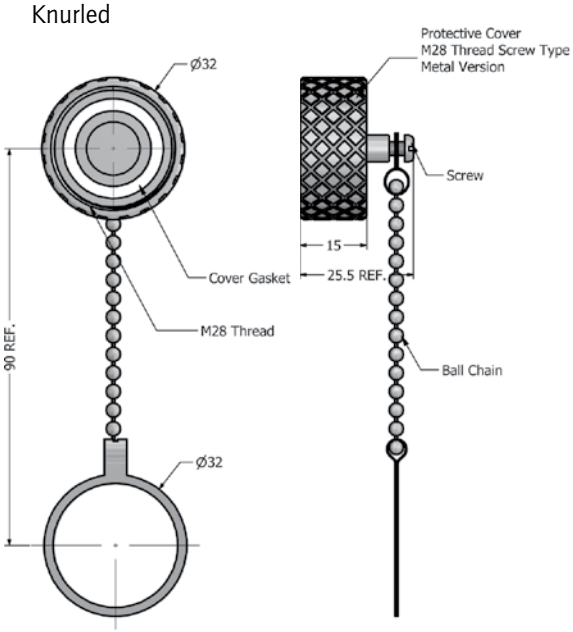
### Product drawing

Recommended panel-cutout




Protection cap Metal
Knurled

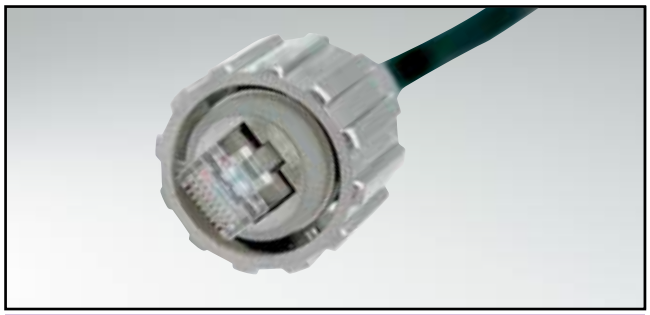



### Order data

| Type | Material | Surface | RJ45 Cat.5e design | Sealing | Protection cap | Part Number |
|---|---|---|---|---|---|---|
| Receptacle | Metal | nickel plated | Inline coupling shielded | | | 17-101594 |
| Receptacle | Metal | nickel plated | Inline coupling shielded | Sealing compound | | 17-101634 |
| Receptacle | Metal | nickel plated | Inline coupling shielded | | with knurled protection cap | 17-101654 |
| Installation housing | Metal | nickel plated | Inline coupling shielded | Sealing compound | with knurled protection cap | 17-101674 |

# RJ45-IP67 Plug kit

## Standard version Cat. 5e and Cat. 6A – Bayonet locking – Plastic and Metal



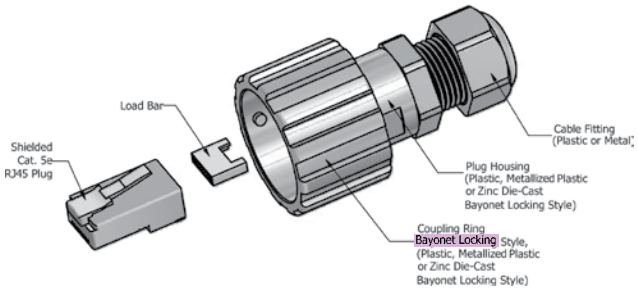
UL listed, File No.: E202784

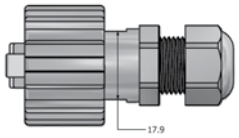
### Description

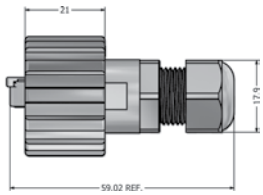
- RJ45 Cat. 5e and Cat. 6A plug connector shielded
- for use with solid or stranded, shielded or unshielded cable size AWG24
- Designs:
  - Black plastic
  - Metallized plastic
  - Zinc die-cast nickel plated

### Product drawing

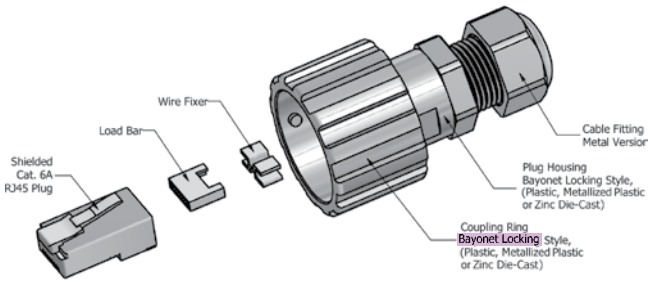
Standard version Cat. 5e

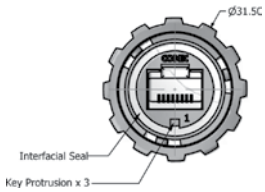



Standard version Cat. 6A




### Order data

| Type | Material Coupling Ring | Material Housing | Material Cable fitting | Surface | Part Number |
|---|---|---|---|---|---|
| Plug kit Cat. 5e | Plastic | Plastic | Plastic | black | 17-10001 |
| Plug kit Cat. 5e | Plastic | Plastic | Metall | metallized/nickel plated | 17-10013 |
| Plug kit Cat. 5e | Zinc die-cast | Plastic | Metall | metallized/nickel plated | 17-10044 |
| Plug kit Cat. 5e | Zinc die-cast | Zinc die-cast | Metall | nickel plated | 17-101794 |
| Plug kit Cat. 6A | Plastic | Plastic | Metall | black/nickel plated | 17-150234 |
| Plug kit Cat. 6A | Plastic | Plastic | Metall | metallized/nickel plated | 17-150244 |
| Plug kit Cat. 6A | Zinc die-cast | Zinc die-cast | Metall | nickel plated | 17-150284 |

# RJ45-IP67 Plug kit

## Screw version Cat. 5e – M28 thread – Metal

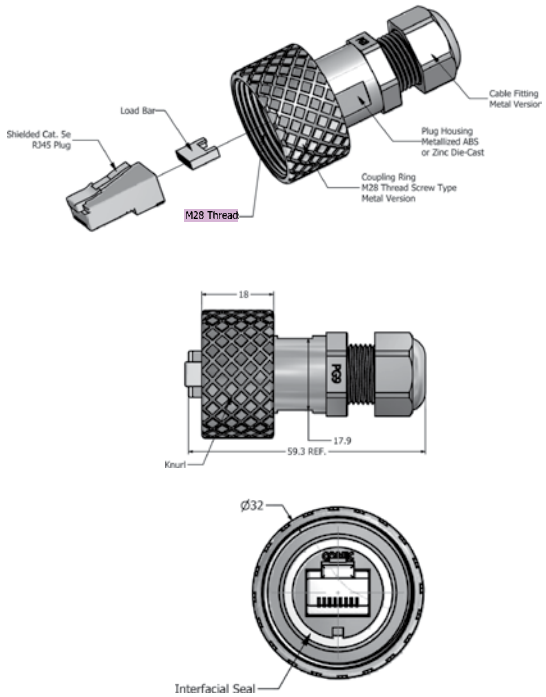
UL listed, File No.: E202784

### Description

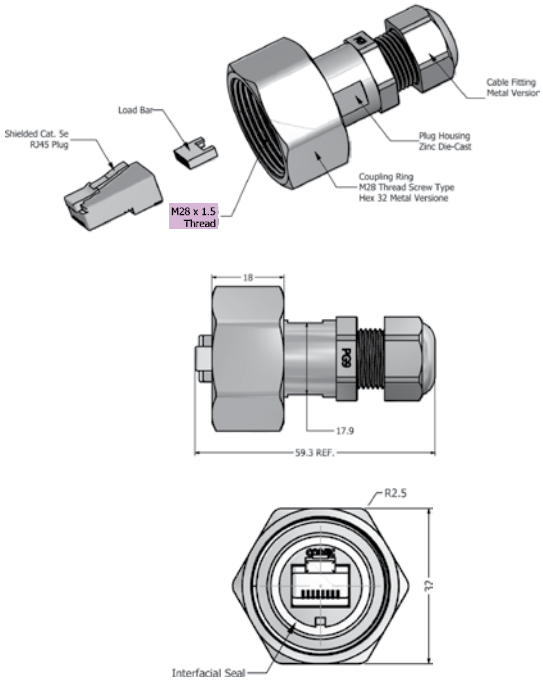
- RJ45 Cat. 5e plug connector shielded
- for use with solid or stranded cable size AWG24
- Designs:
  - Metallized plastic,
  - Metal

### Product drawing

Version Cat. 5e
Knurled




Version Cat. 5e
Hex 32




### Order data

| Type | Version | Material Coupling Ring | Material Housing | Material Cable fitting | Surface | Part Number |
|---|---|---|---|---|---|---|
| Plug kit Cat. 5e | Knurled | Metal | Plastic | Metal | metallized/nickel plated | 17-100944 |
| Plug kit Cat. 5e | Knurled | Metal | Zinc die-cast | Metal | nickel plated | 17-103274 |
| Plug kit Cat. 5e | Hex 32 | Metal | Zinc die-cast | Metal | nickel plated | 17-101864 |

# RJ45-IP67 Plug kit

## Strain Relief version IP20 Cat. 5e and Cat. 6A – M28 thread – Plastic and Metal

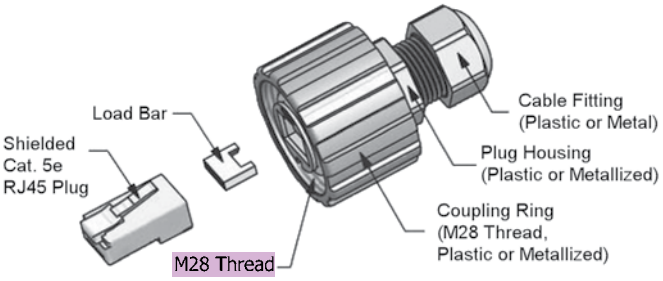
UL listed, File No.: E202784

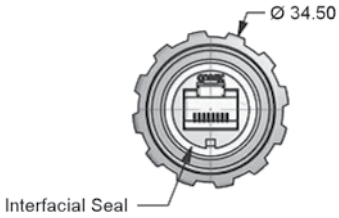
### Description

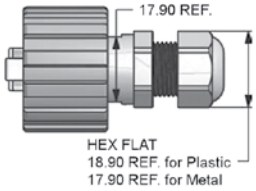
- RJ45 Cat. 5e and Cat. 6A plug connector shielded
- for use with solid or stranded cable size AWG24
- M28 Screw for use inside the enclosure (IP20 protection) suitable for component housings with inline coupler
- Designs:
  - Black plastic
  - Metallized plastic, Cable fitting metal

### Product drawing

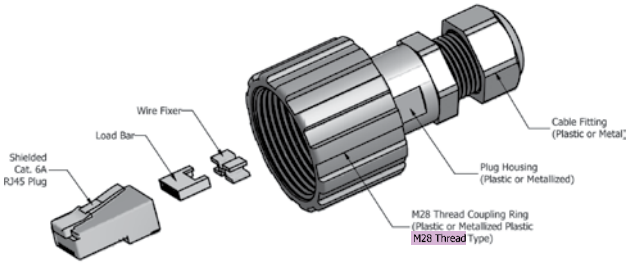
Version Cat. 5e

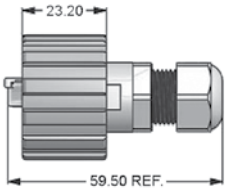



Version Cat. 6A




### Order data

| Type | Material Coupling Ring | Material Housing | Material Cable fitting | Surface | Part Number |
|---|---|---|---|---|---|
| Plug kit Cat. 5e | Plastic | Plastic | Plastic | black | 17-100464 |
| Plug kit Cat. 5e | Plastic | Plastic | Metal | metallized/nickel plated | 17-100474 |
| Plug kit Cat. 6A | Plastic | Plastic | Plastic | black | 17-150254 |
| Plug kit Cat. 6A | Plastic | Plastic | Metal | metallized/nickel plated | 17-150264 |

# RJ45-IP67 Plug kit

## Strain Relief version IP20 Cat. 6A – M28 thread – Metal

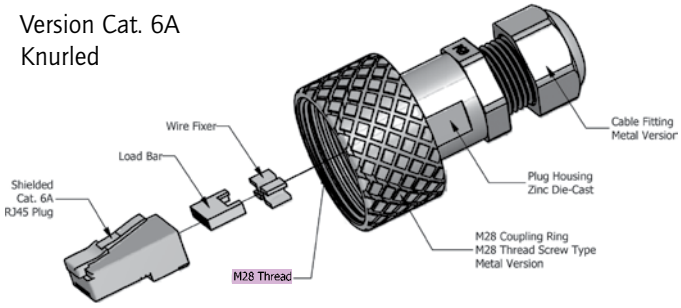
UL listed, File No.: E202784

### Description

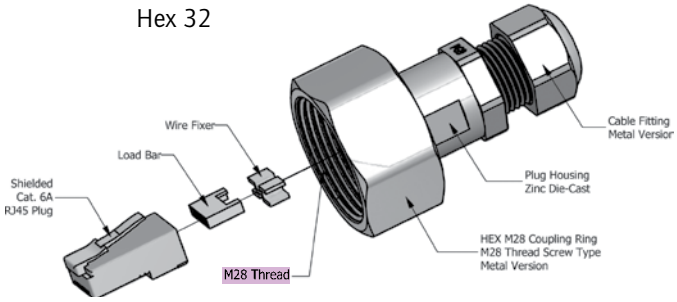
- RJ45 Cat. 6A plug connector shielded
- For use with solid or stranded cable size AWG24
- M28 thread for installation in equipment (IP20-protection) suitable forw component housings with inline coupler
- Design:
  - Metal

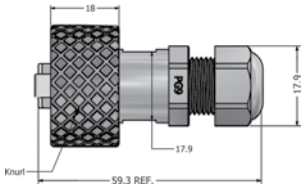
### Product drawing

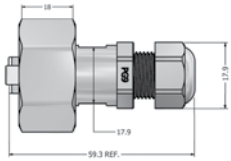
Version Cat. 6A
Knurled

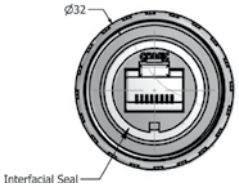


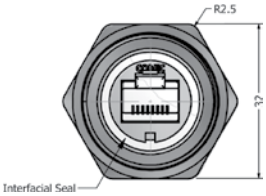

Version Cat. 6A
Hex 32



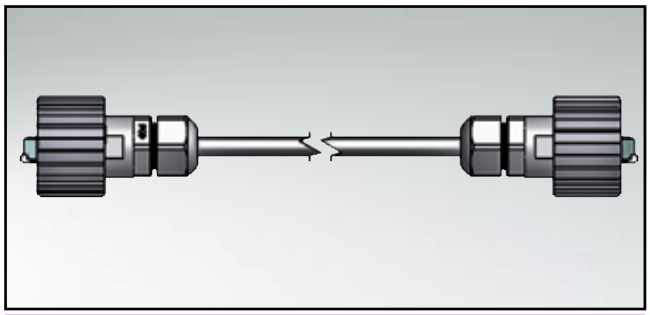




### Order data

| Type | Version | Material Coupling Ring | Material Housing | Material Cable fitting | Surface | Part Number |
|---|---|---|---|---|---|---|
| Plug kit Cat. 6A | Knurled | Metal | Zinc die-cast | Metal | nickel plated | 17-150274 |
| Plug kit Cat. 6A | Hex 32 | Metal | Zinc die-cast | Metal | nickel plated | 17-150754 |

# RJ45 Patch cord

## IP67 to IP67 – Cat. 5e and Cat. 6A – Bayonet locking – Plastic and Metal



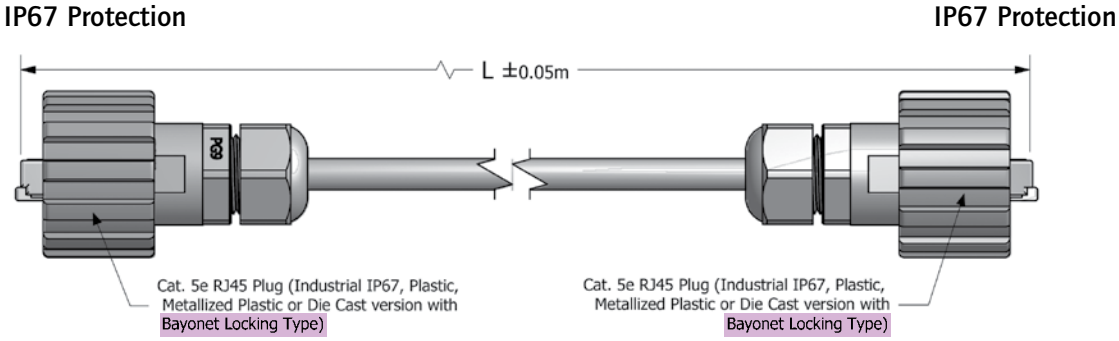
UL listed, File No.: E202784

### Description

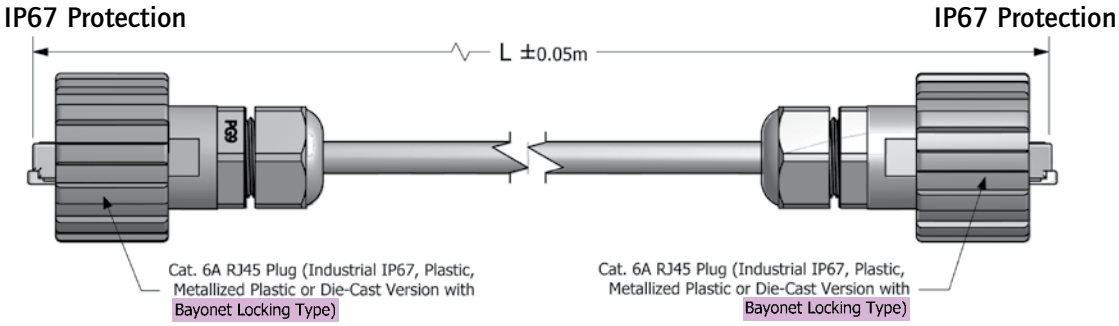
- RJ45 Cat. 5e and Cat. 6A assembled patch cord
- IP67 protection on both cable ends
- Designs:
  - Black plastic
  - Metallized plastic
  - Zinc die-cast
- Cable: UTP unshielded (twisted pair)
  STP, S/STP shielded (twisted pair),
- Outdoor version with cable „Drain wire" and „Waterproof tape"
- Other lengths on request

### Product drawing

#### Patch cord Cat. 5e




#### Patch cord Cat. 6A

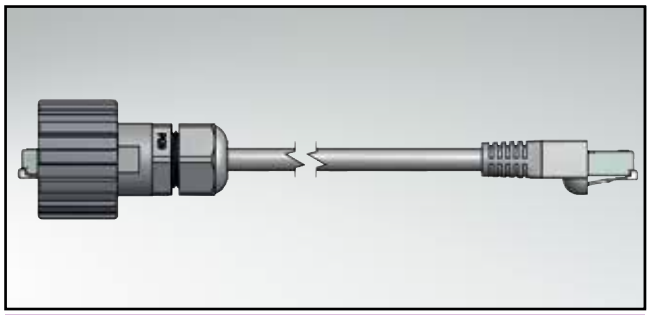



### Order data

| Type Standard | Material Coupling Ring | Material Housing | Material Cable fitting | Surface | Cable | Length (L) | Part Number Standard | Part Number Outdoor |
|---|---|---|---|---|---|---|---|---|
| Patch cord Cat. 5e | Plastic | Plastic | Plastic | black | UTP, unshielded | 2 m | 17-10003 | 17-101144 |
| Patch cord Cat. 5e | Plastic | Plastic | Plastic | black | UTP, unshielded | 4 m | 17-10004 | 17-101154 |
| Patch cord Cat. 5e | Plastic | Plastic | Plastic | black | UTP, unshielded | 5 m | 17-10005 | 17-101164 |
| Patch cord Cat. 5e | Plastic | Plastic | Metal | metallized/nickel plated | STP, shielded | 2 m | 17-10025 | 17-101174 |
| Patch cord Cat. 5e | Plastic | Plastic | Metal | metallized/nickel plated | STP, shielded | 4 m | 17-10026 | 17-101184 |
| Patch cord Cat. 5e | Plastic | Plastic | Metal | metallized/nickel plated | STP, shielded | 5 m | 17-10027 | 17-101194 |
| Patch cord Cat. 5e | Zinc die-cast | Plastic | Metal | metallized/nickel plated | STP, shielded | 2 m | 17-100514 | 17-101204 |
| Patch cord Cat. 5e | Zinc die-cast | Plastic | Metal | metallized/nickel plated | STP, shielded | 4 m | 17-100524 | 17-101214 |
| Patch cord Cat. 5e | Zinc die-cast | Plastic | Metal | metallized/nickel plated | STP, shielded | 5 m | 17-100534 | 17-101224 |
| Patch cord Cat. 5e | Zinc die-cast | Zinc die-cast | Metal | nickel plated | UTP, unshielded | 2 m | 17-102134 | 17-102074 |
| Patch cord Cat. 5e | Zinc die-cast | Zinc die-cast | Metal | nickel plated | UTP, unshielded | 4 m | 17-102144 | 17-102084 |
| Patch cord Cat. 5e | Zinc die-cast | Zinc die-cast | Metal | nickel plated | UTP, unshielded | 5 m | 17-102154 | 17-102094 |
| Patch cord Cat. 5e | Zinc die-cast | Zinc die-cast | Metal | nickel plated | STP, shielded | 2 m | 17-102104 | 17-102044 |
| Patch cord Cat. 5e | Zinc die-cast | Zinc die-cast | Metal | nickel plated | STP, shielded | 4 m | 17-102114 | 17-102054 |
| Patch cord Cat. 5e | Zinc die-cast | Zinc die-cast | Metal | nickel plated | STP, shielded | 5 m | 17-102124 | 17-102064 |
| Patch cord Cat. 6A | Plastic | Plastic | Plastic | black | S/STP, shielded | 2 m | 17-150304 | |
| Patch cord Cat. 6A | Plastic | Plastic | Plastic | black | S/STP, shielded | 4 m | 17-150314 | |
| Patch cord Cat. 6A | Plastic | Plastic | Plastic | black | S/STP, shielded | 5 m | 17-150324 | |
| Patch cord Cat. 6A | Plastic | Plastic | Metal | metallized/nickel plated | S/STP, shielded | 2 m | 17-150334 | |
| Patch cord Cat. 6A | Plastic | Plastic | Metal | metallized/nickel plated | S/STP, shielded | 4 m | 17-150344 | |
| Patch cord Cat. 6A | Plastic | Plastic | Metal | metallized/nickel plated | S/STP, shielded | 5 m | 17-150354 | |
| Patch cord Cat. 6A | Zinc die-cast | Plastic | Metal | metallized/nickel plated | S/STP, shielded | 2 m | 17-150364 | |
| Patch cord Cat. 6A | Zinc die-cast | Plastic | Metal | metallized/nickel plated | S/STP, shielded | 4 m | 17-150374 | |
| Patch cord Cat. 6A | Zinc die-cast | Plastic | Metal | metallized/nickel plated | S/STP, shielded | 5 m | 17-150384 | |

# RJ45 Patch cord

## IP67to IP20 – Cat. 5e and Cat. 6A – Bayonet locking – Plastic and Metal



UL listed, File No.: E202784

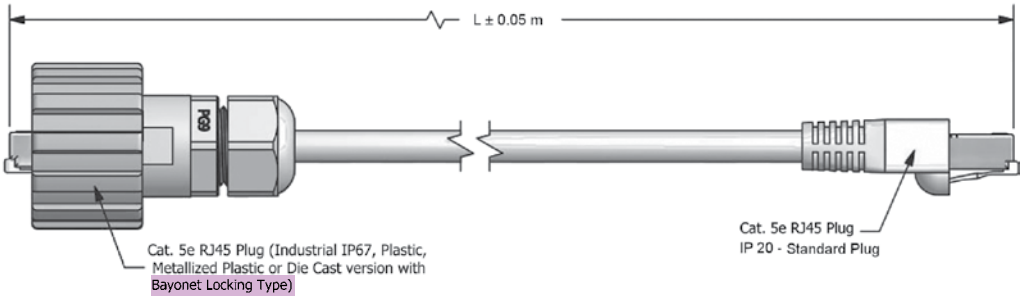
### Description

- RJ45 Cat. 5e and Cat. 6A assembled patch cord
- 1 x Industrial RJ45-IP67 – 1 x Standard RJ45-IP20
- Designs:
  - Black plastic
  - Metallized plastic
  - Zinc die-cast
- Cable: UTP unshielded (twisted pair)
  STP, S/STP shielded (twisted pair),
- Outdoor version with cable „Drain wire" and „Waterproof tape"
- Other lengths on request

### Product drawing

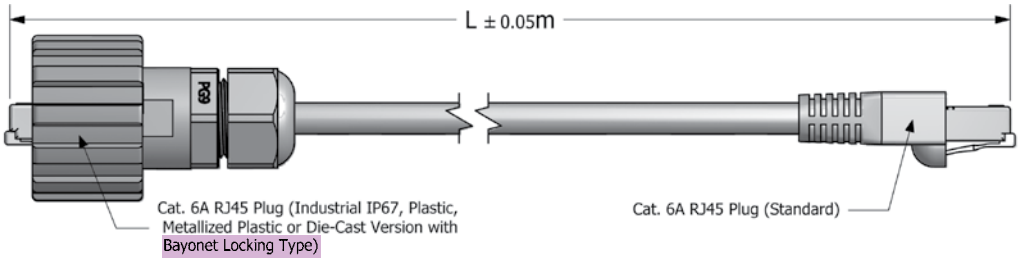
#### Patch cord Cat. 5e

IP67 Protection IP20 Protection




#### Patch cord Cat. 6A

IP67 Protection IP20 Protection

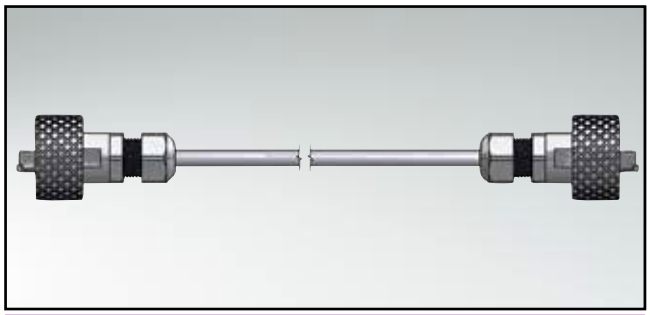



### Order data

| Type Standard | Material Coupling Ring | Material Housing | Material Cable fitting | Surface | Cable | Length (L) | Part Number Standard | Part Number Outdoor |
|---|---|---|---|---|---|---|---|---|
| Patch cord Cat. 5e | Plastic | Plastic | Plastic | black | UTP, unshielded | 2 m | 17-10006 | 17-101234 |
| Patch cord Cat. 5e | Plastic | Plastic | Plastic | black | UTP, unshielded | 4 m | 17-10007 | 17-101244 |
| Patch cord Cat. 5e | Plastic | Plastic | Plastic | black | UTP, unshielded | 5 m | 17-10008 | 17-101254 |
| Patch cord Cat. 5e | Plastic | Plastic | Metal | metallized/nickel plated | STP, shielded | 2 m | 17-10028 | 17-101264 |
| Patch cord Cat. 5e | Plastic | Plastic | Metal | metallized/nickel plated | STP, shielded | 4 m | 17-10029 | 17-101274 |
| Patch cord Cat. 5e | Plastic | Plastic | Metal | metallized/nickel plated | STP, shielded | 5 m | 17-10030 | 17-101284 |
| Patch cord Cat. 5e | Zinc die-cast | Plastic | Metal | metallized/nickel plated | STP, shielded | 2 m | 17-101264 | 17-101294 |
| Patch cord Cat. 5e | Zinc die-cast | Plastic | Metal | metallized/nickel plated | STP, shielded | 4 m | 17-101274 | 17-101304 |
| Patch cord Cat. 5e | Zinc die-cast | Plastic | Metal | metallized/nickel plated | STP, shielded | 5 m | 17-101284 | 17-101314 |
| Patch cord Cat. 5e | Zinc die-cast | Zinc die-cast | Metal | nickel plated | UTP, unshielded | 2 m | 17-102014 | 17-101984 |
| Patch cord Cat. 5e | Zinc die-cast | Zinc die-cast | Metal | nickel plated | UTP, unshielded | 4 m | 17-102024 | 17-101964 |
| Patch cord Cat. 5e | Zinc die-cast | Zinc die-cast | Metal | nickel plated | UTP, unshielded | 5 m | 17-102034 | 17-101974 |
| Patch cord Cat. 5e | Zinc die-cast | Zinc die-cast | Metal | nickel plated | STP, shielded | 2 m | 17-101984 | 17-101924 |
| Patch cord Cat. 5e | Zinc die-cast | Zinc die-cast | Metal | nickel plated | STP, shielded | 4 m | 17-101994 | 17-101934 |
| Patch cord Cat. 5e | Zinc die-cast | Zinc die-cast | Metal | nickel plated | STP, shielded | 5 m | 17-102004 | 17-101944 |
| Patch cord Cat. 6A | Plastic | Plastic | Plastic | black | S/STP, shielded | 2 m | 17-150424 | |
| Patch cord Cat. 6A | Plastic | Plastic | Plastic | black | S/STP, shielded | 4 m | 17-150434 | |
| Patch cord Cat. 6A | Plastic | Plastic | Plastic | black | S/STP, shielded | 5 m | 17-150444 | |
| Patch cord Cat. 6A | Plastic | Plastic | Metal | metallized/nickel plated | S/STP, shielded | 2 m | 17-150454 | |
| Patch cord Cat. 6A | Plastic | Plastic | Metal | metallized/nickel plated | S/STP, shielded | 4 m | 17-150464 | |
| Patch cord Cat. 6A | Plastic | Plastic | Metal | metallized/nickel plated | S/STP, shielded | 5 m | 17-150474 | |
| Patch cord Cat. 6A | Zinc die-cast | Plastic | Metal | metallized/nickel plated | S/STP, shielded | 2 m | 17-150484 | |
| Patch cord Cat. 6A | Zinc die-cast | Plastic | Metal | metallized/nickel plated | S/STP, shielded | 4 m | 17-150494 | |
| Patch cord Cat. 6A | Zinc die-cast | Plastic | Metal | metallized/nickel plated | S/STP, shielded | 5 m | 17-150504 | |

# RJ45 Patch cord

## IP67 to IP67 – Cat. 5e and Cat. 6A – M28 thread – Metal



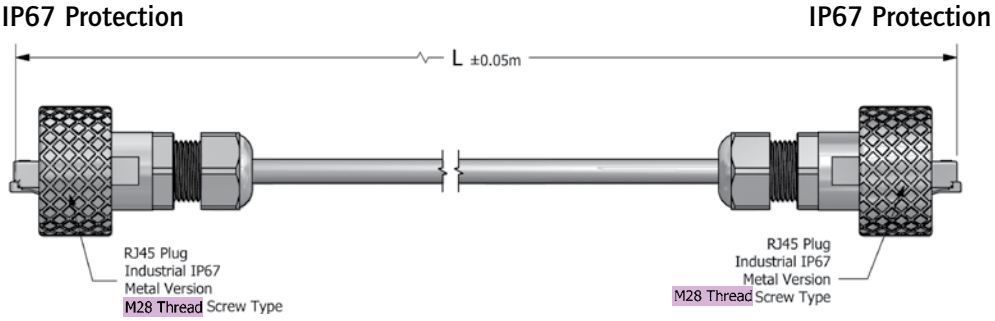
UL listed, File No.: E202784

### Description

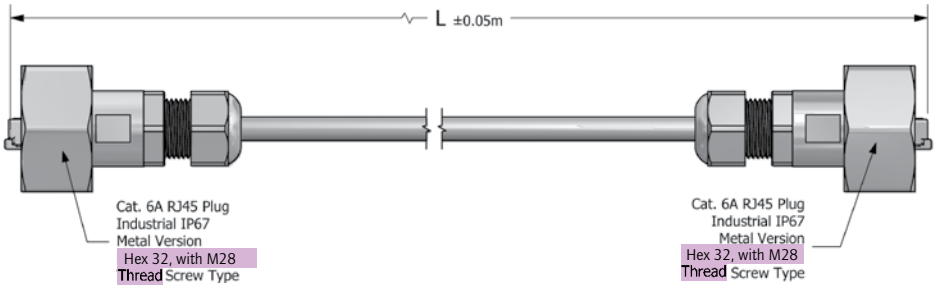
- RJ45 Cat. 5e and Cat. 6A assembled patch cord
- 2 x Metall Industrial RJ45-IP67
- Designs:
  - Metallized plastic
  - Metal
- Cable: UTP unshielded (twisted pair)
  STP, S/STP shielded (twisted pair),
- Outdoor version with „Drain wire" and „Waterproof tape"
- Other lengths on request

### Product drawing

**Patch cord Cat. 5e/Cat 6a**
**Knurled**




**Patch cord Cat. 6A**
**Hex 32**

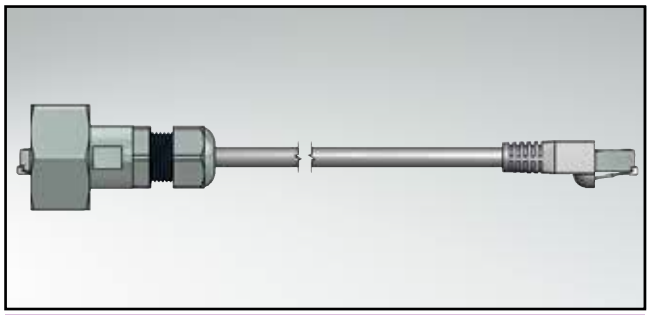



### Order data

| Type Knurled | Material Coupling Ring | Material Housing | Material Cable fitting | Surface | Cable | Length (L) | Part Number Standard | Part Number Outdoor |
|---|---|---|---|---|---|---|---|---|
| Patch cord Cat. 5e | Metal | Plastic | Metal | metallized/nickel plated | UTP, unshielded | 2 m | 17-100994 | 17-101084 |
| Patch cord Cat. 5e | Metal | Plastic | Metal | metallized/nickel plated | UTP, unshielded | 4 m | 17-101004 | 17-101094 |
| Patch cord Cat. 5e | Metal | Plastic | Metal | metallized/nickel plated | UTP, unshielded | 5 m | 17-101014 | 17-101104 |
| Patch cord Cat. 5e | Metal | Plastic | Metal | metallized/nickel plated | STP, shielded | 2 m | | 17-101114 |
| Patch cord Cat. 5e | Metal | Plastic | Metal | metallized/nickel plated | STP, shielded | 4 m | | 17-101124 |
| Patch cord Cat. 5e | Metal | Plastic | Metal | metallized/nickel plated | STP, shielded | 5 m | | 17-101134 |
| Patch cord Cat. 6A | Metal | Plastic | Metal | metallized/nickel plated | S/STP, shielded | 2 m | 17-150724 | |
| Patch cord Cat. 6A | Metal | Plastic | Metal | metallized/nickel plated | S/STP, shielded | 4 m | 17-150734 | |
| Patch cord Cat. 6A | Metal | Plastic | Metal | metallized/nickel plated | S/STP, shielded | 5 m | 17-150744 | |
| **Hex 32** | | | | | | | | |
| Patch cord Cat. 6A | Metal | Plastic | Metal | metallized/nickel plated | S/STP, shielded | 2 m | 17-150794 | |
| Patch cord Cat. 6A | Metal | Plastic | Metal | metallized/nickel plated | S/STP, shielded | 4 m | 17-150804 | |
| Patch cord Cat. 6A | Metal | Plastic | Metal | metallized/nickel plated | S/STP, shielded | 5 m | 17-150814 | |

# RJ45 Patch cord

## IP67 to IP20 – Cat. 5e and Cat. 6A – Bayonet locking – Plastic and Metal



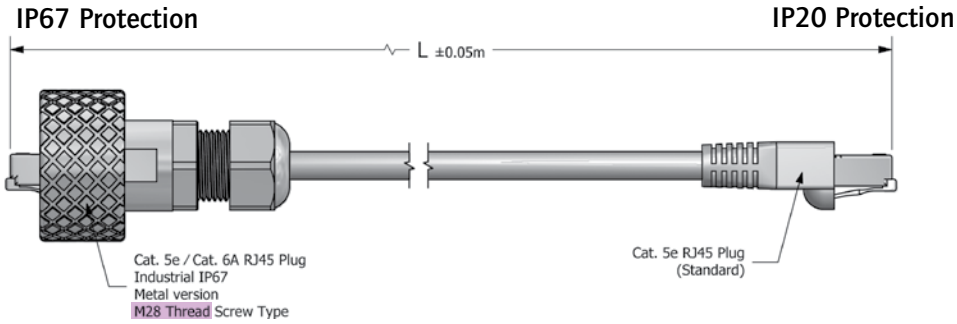
UL listed, File No.: E202784

### Description

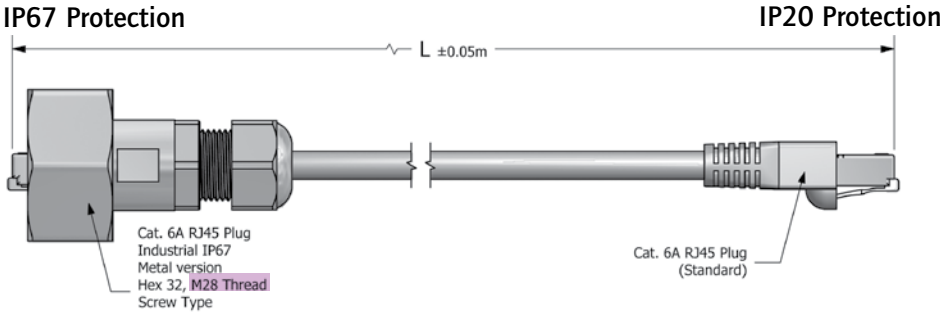
- RJ45 Cat. 5e and Cat. 6A assembled patch cord
- 1 x Industrial RJ45-IP67 – 1 x Standard RJ45-IP20
- Designs:
  - Metallized plastic
  - Metal
- Cable: UTP unshielded (twisted pair)
  STP, S/STP shielded (twisted pair),
- Outdoor version with cable „Drain wire" and „Waterproof tape"
- Other lengths on request

### Product drawing

**Patch cord Cat. 5e and Cat. 6A**
**Knurled**




**Patch cord Cat. 6A**
**Hex 32**

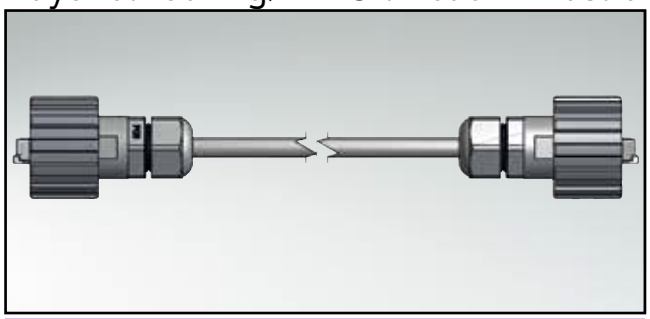



### Order data

| Typ Knurled | Material Coupling Ring | Material Housing | Material Cable fitting | Surface | Cable | Length (L) | Part Number Standard | Part Number Outdoor |
|---|---|---|---|---|---|---|---|---|
| Patch cord Cat. 5e | Metal | Plastic | Metal | metallized/nickel plated | UTP, unshielded | 2 m | | 17-101024 |
| Patch cord Cat. 5e | Metal | Plastic | Metal | metallized/nickel plated | UTP, unshielded | 4 m | | 17-101034 |
| Patch cord Cat. 5e | Metal | Plastic | Metal | metallized/nickel plated | UTP, unshielded | 5 m | | 17-101044 |
| Patch cord Cat. 5e | Metal | Plastic | Metal | metallized/nickel plated | STP, shielded | 2 m | 17-100964 | 17-101054 |
| Patch cord Cat. 5e | Metal | Plastic | Metal | metallized/nickel plated | STP, shielded | 4 m | 17-100974 | 17-101064 |
| Patch cord Cat. 5e | Metal | Plastic | Metal | metallized/nickel plated | STP, shielded | 5 m | 17-100984 | 17-101074 |
| Patch cord Cat. 6A | Metal | Plastic | Metal | metallized/nickel plated | S/STP, shielded | 2 m | 17-150764 | |
| Patch cord Cat. 6A | Metal | Plastic | Metal | metallized/nickel plated | S/STP, shielded | 4 m | 17-150774 | |
| Patch cord Cat. 6A | Metal | Plastic | Metal | metallized/nickel plated | S/STP, shielded | 5 m | 17-150784 | |
| **Hex 32** | | | | | | | | |
| Patch cord Cat. 6A | Metal | Plastic | Metal | metallized/nickel plated | S/STP, shielded | 2 m | 17-150824 | |
| Patch cord Cat. 6A | Metal | Plastic | Metal | metallized/nickel plated | S/STP, shielded | 4 m | 17-150834 | |
| Patch cord Cat. 6A | Metal | Plastic | Metal | metallized/nickel plated | S/STP, shielded | 5 m | 17-150844 | |

# RJ45 Patch cord

## Strain relief version IP20 to IP20 or IP20 to IP67 – Cat. 6A – Bayonet locking/M28 thread – Plastic



UL listed, File No.: E202784

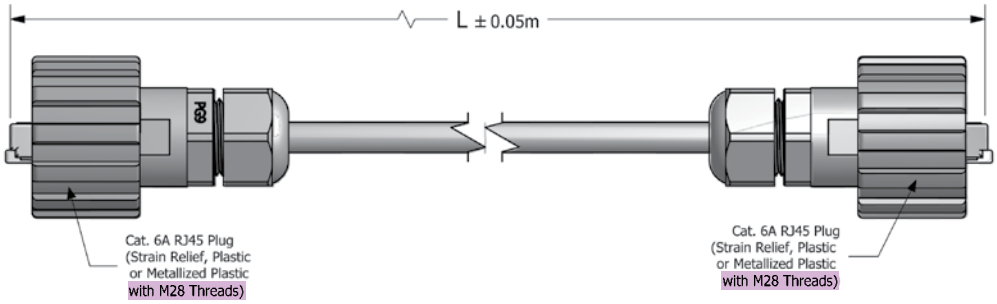
### Description

- RJ45 Cat. 6A assembled patch cord
- 2 x Industrial RJ45
  1 x Industrial RJ45-IP67 – 1 x Standard RJ45-IP20
- Strain relief version:
  - Black plastic and metallized
- IP20 Protection on both cable ends
  IP20 Protection to IP67 Protection
- Cable: S/STP shielded (twisted pair)
- Other lengths on request

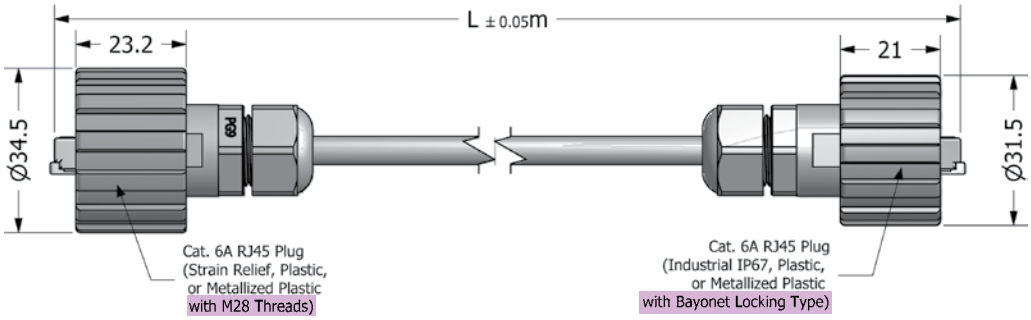
### Product drawing

PatchCord Cat. 6A

IP20 Protection — IP20 Protection




IP20 Protection — IP67 Protection

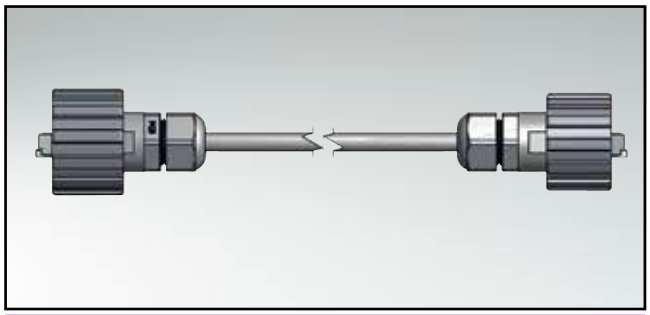



### Order data

| Type Standard | Degree of protection | Material Coupling Ring | Material Housing | Material Cable fitting | Surface | Cable | Length (L) | Part Number |
|---|---|---|---|---|---|---|---|---|
| Patch cord Cat. 6A | IP20/ IP20 | Plastic | Plastic | Plastic | black | S/STP, shielded | 2 m | 17-150604 |
| Patch cord Cat. 6A | IP20/ IP20 | Plastic | Plastic | Plastic | black | S/STP, shielded | 4 m | 17-150614 |
| Patch cord Cat. 6A | IP20/ IP20 | Plastic | Plastic | Plastic | black | S/STP, shielded | 5 m | 17-150624 |
| Patch cord Cat. 6A | IP20/ IP20 | Plastic | Plastic | Plastic | metallized | S/STP, shielded | 2 m | 17-150634 |
| Patch cord Cat. 6A | IP20/ IP20 | Plastic | Plastic | Plastic | metallized | S/STP, shielded | 4 m | 17-150644 |
| Patch cord Cat. 6A | IP20/ IP20 | Plastic | Plastic | Plastic | metallized | S/STP, shielded | 5 m | 17-150654 |
| Patch cord Cat. 6A | IP20/ IP67 | Plastic | Plastic | Plastic | black | S/STP, shielded | 2 m | 17-150544 |
| Patch cord Cat. 6A | IP20/ IP67 | Plastic | Plastic | Plastic | black | S/STP, shielded | 4 m | 17-150554 |
| Patch cord Cat. 6A | IP20/ IP67 | Plastic | Plastic | Plastic | black | S/STP, shielded | 5 m | 17-150564 |
| Patch cord Cat. 6A | IP20/ IP67 | Plastic | Plastic | Plastic | metallized | S/STP, shielded | 2 m | 17-150574 |
| Patch cord Cat. 6A | IP20/ IP67 | Plastic | Plastic | Plastic | metallized | S/STP, shielded | 4 m | 17-150584 |
| Patch cord Cat. 6A | IP20/ IP67 | Plastic | Plastic | Plastic | metallized | S/STP, shielded | 5 m | 17-150594 |

# RJ45 Patch cord

## Strain relief version IP20 to IP67 – M28 thread / Bayonett locking – Cat. 5e



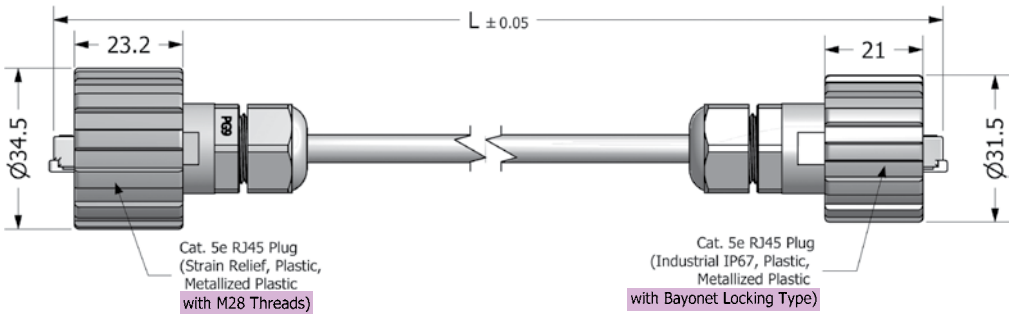
UL listed, File No.: E202784

### Description

- RJ45 Cat. 5e assembled patch cord
  1 x Industrial RJ45-IP67 – 1 x Standard RJ45-IP20
- Strain relief version:
  Design: Black plastic and metallized
- Cable: UTP unshielded (twisted pair)
  STP shielded (twisted pair),
- Outdoor version with „Drain wire" and „Waterproof tape"
- Other lengths on request

### Product drawing

**PatchCord Cat. 5e**



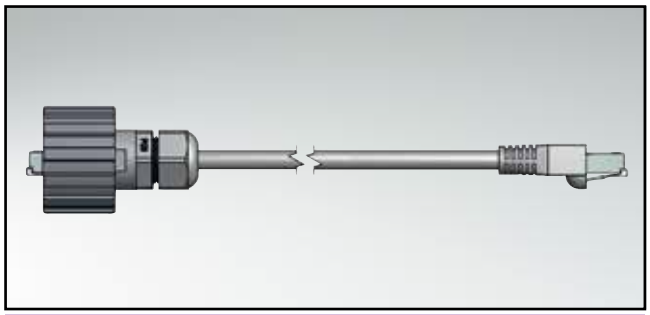

### Order data

| Type Standard | Degree of protection | Material | Cable | Length (L) | Part Number |
|---|---|---|---|---|---|
| Patch cord | IP20/ IP67 | Black plastic | UTP / Unshielded | 2 m | 17-101374 |
| Patch cord | IP20/ IP67 | Black plastic | UTP / Unshielded | 4 m | 17-101384 |
| Patch cord | IP20/ IP67 | Black plastic | UTP / Unshielded | 5 m | 17-101394 |
| Patch cord | IP20/ IP67 | Metallized plastic | STP / Shielded | 2 m | 17-101434 |
| Patch cord | IP20/ IP67 | Metallized plastic | STP / Shielded | 4 m | 17-101444 |
| Patch cord | IP20/ IP67 | Metallized plastic | STP / Shielded | 5 m | 17-101454 |

| Type Outdoor | Degree of protection | Material | Cable | Length (L) | Part Number |
|---|---|---|---|---|---|
| Patch cord | IP20/ IP67 | Black plastic | UTP / Unshielded | 2 m | 17-101404 |
| Patch cord | IP20/ IP67 | Black plastic | UTP / Unshielded | 4 m | 17-101414 |
| Patch cord | IP20/ IP67 | Black plastic | UTP / Unshielded | 5 m | 17-101424 |
| Patch cord | IP20/ IP67 | Metallized plastic | STP / Shielded | 2 m | 17-101464 |
| Patch cord | IP20/ IP67 | Metallized plastic | STP / Shielded | 4 m | 17-101474 |
| Patch cord | IP20/ IP67 | Metallized plastic | STP / Shielded | 5 m | 17-101484 |

# RJ45 Patch cord

## Strain relief version IP20 to IP20 – Cat. 5e to Cat. 6A – M28 thread – Plastic



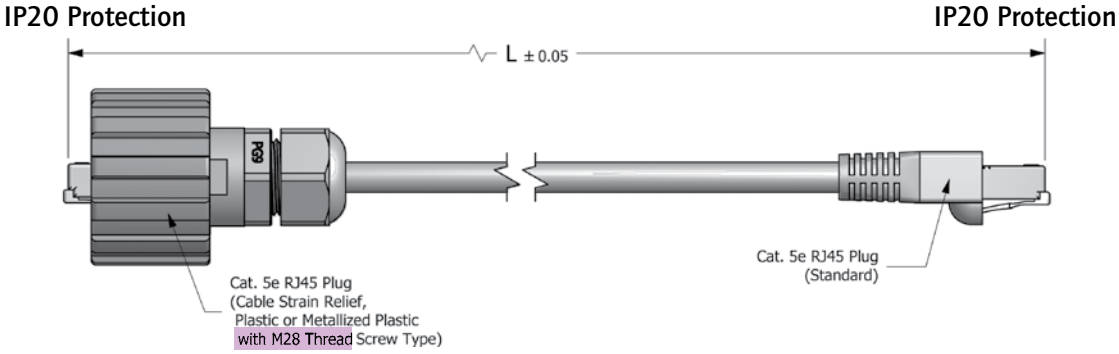
UL listed, File No.: E202784

### Description

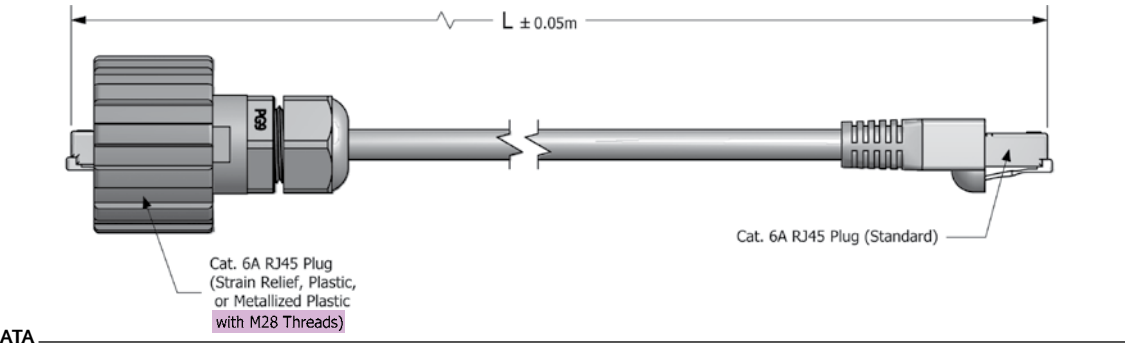
- RJ45 Cat. 5e to Cat. 6A assembled patch cord
- IP20 Protection on both cable ends
- Strain relief version:
  - Black plastic
  - Metallized plastic
- Cable: UTP unshielded (twisted pair)
  STP, S/STP shielded (twisted pair),
- Other lengths on request

### Product drawing

**Patch cord Cat. 5e**




**Patch cord Cat. 6A**

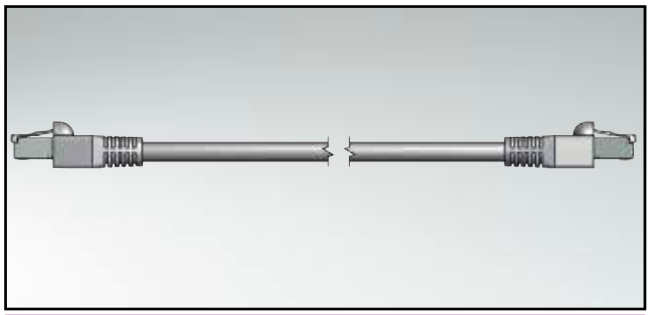



### Order data

| Type Standard | Degree of protection | Material Coupling Ring | Material Housing | Material Cable fitting | Surface | Cable | Length (L) | Part Number |
|---|---|---|---|---|---|---|---|---|
| Patch cord Cat. 5e | IP20/ IP20 | Plastic | Plastic | Plastic | black | UTP/Unshielded | 2 m | 17-100574 |
| Patch cord Cat. 5e | IP20/ IP20 | Plastic | Plastic | Plastic | black | UTP/Unshielded | 4 m | 17-100584 |
| Patch cord Cat. 5e | IP20/ IP20 | Plastic | Plastic | Plastic | black | UTP/Unshielded | 5 m | 17-100594 |
| Patch cord Cat. 5e | IP20/ IP20 | Plastic | Plastic | Plastic | metallized | STP/Shielded | 2 m | 17-100604 |
| Patch cord Cat. 5e | IP20/ IP20 | Plastic | Plastic | Plastic | metallized | STP/Shielded | 4 m | 17-100614 |
| Patch cord Cat. 5e | IP20/ IP20 | Plastic | Plastic | Plastic | metallized | STP/Shielded | 5 m | 17-100624 |
| Patch cord Cat. 6A | IP20/ IP67 | Plastic | Plastic | Plastic | black | S/STP/Shielded | 2 m | 17-150664 |
| Patch cord Cat. 6A | IP20/ IP67 | Plastic | Plastic | Plastic | black | S/STP/Shielded | 4 m | 17-150674 |
| Patch cord Cat. 6A | IP20/ IP67 | Plastic | Plastic | Plastic | black | S/STP/Shielded | 5 m | 17-150684 |
| Patch cord Cat. 6A | IP20/ IP67 | Plastic | Plastic | Plastic | metallized | S/STP/Shielded | 2 m | 17-150694 |
| Patch cord Cat. 6A | IP20/ IP67 | Plastic | Plastic | Plastic | metallized | S/STP/Shielded | 4 m | 17-150704 |
| Patch cord Cat. 6A | IP20/ IP67 | Plastic | Plastic | Plastic | metallized | S/STP/Shielded | 5 m | 17-150714 |

# RJ45 Patch cord

## IP20 to IP20 – Cat. 5e or Cat. 6A



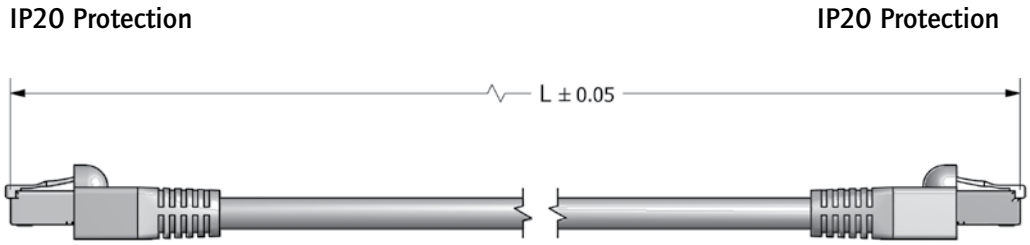
UL listed, File No.: E202784

### Description

- RJ45 Cat. 5e or Cat. 6A assembled patch cord
- IP20 Protection on both cable ends
- Kabel: UTP unshielded (twisted pair)
  STP, S/STP shielded (twisted pair),
- Other lengths on request

### Product drawing

**Patch cord Cat. 5e or 6A**

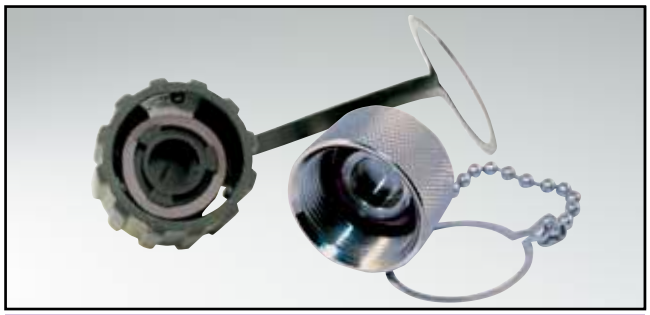



### Order data

| Type Standard | Degree of protection | Cable | Lenght (L) | Part Number black | Part Number blue | Part Number red | Part Number green | Part Number yellow | Part Number white |
|---|---|---|---|---|---|---|---|---|---|
| Patch cord Cat. 5e | IP20/ IP20 | STP/Shielded | 2 m | 17-101324 | | | | | |
| Patch cord Cat. 5e | IP20/ IP20 | STP/Shielded | 4 m | 17-101334 | | | | | |
| Patch cord Cat. 5e | IP20/ IP20 | STP/Shielded | 5 m | 17-101344 | | | | | |
| Patch cord Cat. 5e | IP20/ IP20 | UTP/Unshielded | 2 m | 17-100654 | 17-100684 | 17-100714 | 17-100744 | 17-100774 | 17-100804 |
| Patch cord Cat. 5e | IP20/ IP20 | UTP/Unshielded | 4 m | 17-100664 | 17-100694 | 17-100724 | 17-100754 | 17-100784 | 17-100814 |
| Patch cord Cat. 5e | IP20/ IP20 | UTP/Unshielded | 5 m | 17-100674 | 17-100704 | 17-100734 | 17-100764 | 17-100794 | 17-100824 |
| Patch cord Cat. 6A | IP20/ IP20 | S/STP/Shielded | 2 m | 17-150874 | | | | | |
| Patch cord Cat. 6A | IP20/ IP20 | S/STP/Shielded | 4 m | 17-150894 | | | | | |
| Patch cord Cat. 6A | IP20/ IP20 | S/STP/Shielded | 5 m | 17-150904 | | | | | |

# RJ45 and USB Accessories

## Protection cap plastic – Protection cap metal



UL listed, File No.: E202784

### Description

- IP67 Protection unused interfaces
- Protection cap:
  - Black plastic
  - Metallized plastic
  - Metal
- Termination: Bayonet locking or M28 thread
- With tether or ballchain

### Product drawing

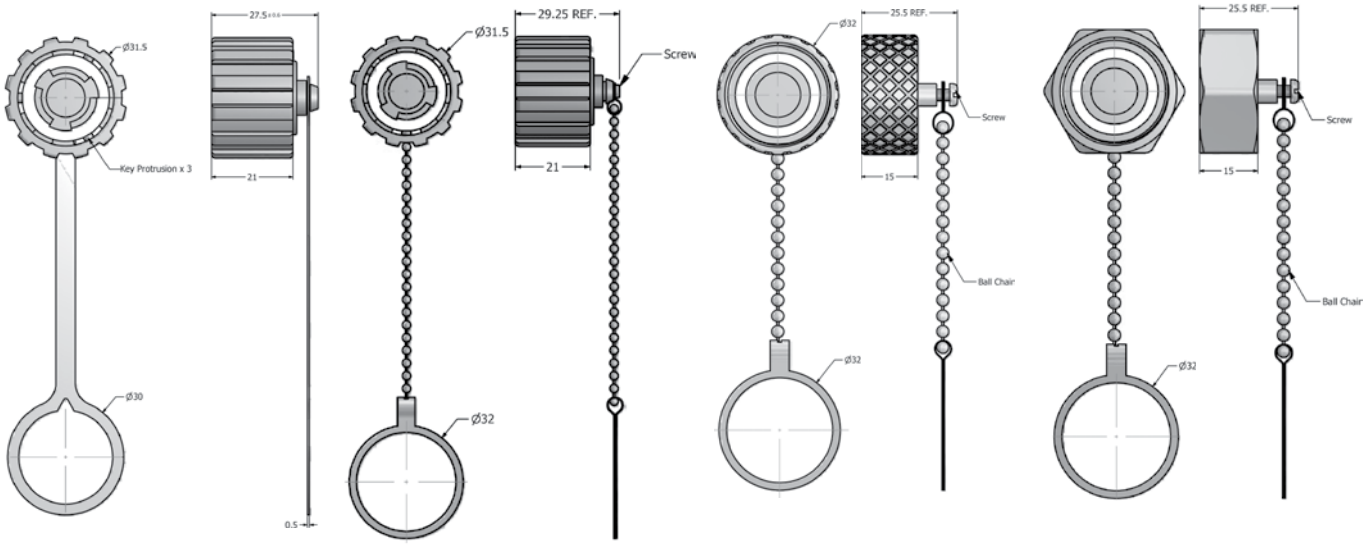
Plastic version
Bayonet locking
Tether

Plastic / Zinc die-cast
Bayonet locking
Ball chain

M28 thread metal

Knurled
Ball chain

Hex 32
Ball chain

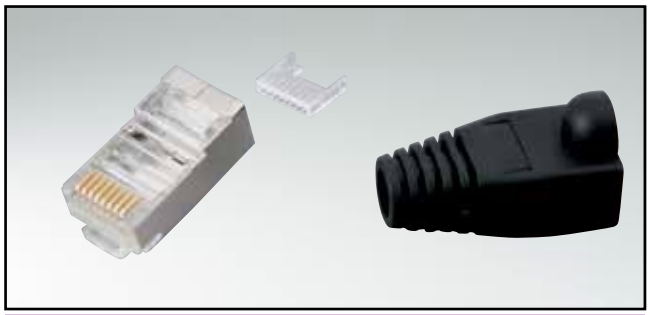



### Order data

| Type | Material Protection cap | Surface | Locking | Fixing | Part Number |
|---|---|---|---|---|---|
| Protection cap | Plastic | Black | Bayonet | Tether | 17-10002 |
| Protection cap | Plastic | Metallized | Bayonet | Tether | 17-10014 |
| Protection cap | Zinc die-cast | Nickel plated | Bayonet | Ball chain | 17-101800 |
| Protection cap | Plastic | Black | Bayonet | Ball chain | 17-101710 |
| Protection cap | Plastic | Metallized metallisiert | Bayonet | Ball chain | 17-101720 |
| Protection cap | Metal | Nickel plated | M28 thread/Hex 32 | Ball chain | 17-101870 |
| Protection cap | Metal | Nickel plated | M28 thread/Knurled | Ball chain | 17-100950 |

# Accessories and Installation tools

## For RJ45 products



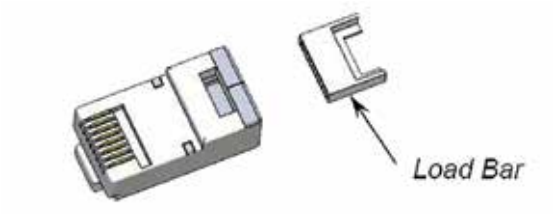
RoHS compliant

### Description

- RJ45 plug connector Cat. 5e or 6A shielded
- Grommets, Color: black, blue, green, yellow, red or white
- RJ45 plug connector crimp tool
- Insertion tool for RJ45 IDC version
- Cable tester

### Product drawing

RJ45 Cat.5e or 6A Plug connector, shielded




Grommets

RJ45 plug connector crimp tool

Multi-Modular cable tester

Insertion toll for RJ45 IDC version

### Order data

| Accessories/Tools | Part Number black | Part Number blue | Part Number green | Part Number yellow | Part Number red | Part Number white | Part Number |
|---|---|---|---|---|---|---|---|
| Grommet | 795-601302 | 795-601303 | 795-601304 | 795-601305 | 795-601306 | 795-601307 | |
| RJ45 Cat. 5e Plug connector, shielded | | | | | | | 391J00039X |
| RJ45 Cat. 6A Plug connector, shielded | | | | | | | 391J00049X |
| Crimp tool for RJ45 plug connector | | | | | | | 360X30029X |
| Insertion tool for RJ45 insulation displacement terminatin version (IDC) | | | | | | | 360X30049X |
| Cable tester | | | | | | | 360X30039X |

Section 12

# Mini USB and USB 2.0-IP67 Connector System

CONEC has added the Mini-USB connector.
This Mini-USB IP67 receptacle and plug family, feature a bayonet coupling for use in harsh environments.
The "quick – connect" bayonet locking mechanism provides an audible and noticeable feedback to ensure the user that an IP67 watertight connection is made.
No further mounting tool is required to make this simple, fast and robust connection.
The product line includes a panel receptacle for PCB installation or termination to a flexible circuit. The overall dimensions are compact and require a 12 mm diameter panel cutout.
The pre – terminated patch cables with an overmolded IP67 Mini USB Type B plug and an overmolded USB Type A are available in 2, 3 and 5 m length.
The housings for the USB 2.0 Type A connectors have a bayonet latching mechanism according to the IEC 61076-3-106 standard. The housing can be mounted on the front or rear side of enclosure panels with thickness up to 3,2 mm. USB 2.0 plug set with solder termination is available for cable side and there are also preassembled patch cords available in various IP protection grades and lengths.

The housings are available in plastic, metalized plastic and nickel plated zinc die-cast.
This robust design with IP67 rating ensures reliable protection and easy connection under harsh environmental conditions. Protective covers are available to keep IP67 protection when not in use.

Custom solutions are available upon request, please contact the factory.

**Typical applications:**

- CNC machines
- Communications equipment
- Outdoor wireless
- Bluetooth adapters
- Industrial process control
- Diagnostic and test instruments
- Outdoor displays
- Factory automation
- Outdoor telecommunications systems
- Oil and gas industries
- Mass transportation
- Outdoor monotoring devices
- Outdoor metering
- Outdoor telecommunication systems

# Technical Data

| Mechanical and electrical characteristics | |
|---|---|
| Interface connector | USB Connector per USB 2.0 specification |
| Locking mechanism | Bayonet locking or screw termination M28 thread |
| IP Degree of protection | IP67 |
| Temperature range | Connector: -40°C to + 85°C / Patch cable: -40°C to +80°C |
| Current rating | 1.5 A max. at 25°C |
| Voltage | 100 VDC |
| Contact resistance | 30 mΩ max. |
| Insulation resistance | 1000 MΩ |
| Electric strength contact to contact | 500 VAC / 60 sec. |
| Electric strength contact to metal shell | 1000 VAC / 60 sec. |

| Materials | |
|---|---|
| Housing | PBT, flame protection per UL 94-V0 or Zinc die-cast nickel plated |
| Fastening nut | Brass nickel plated |
| Shell sealing | Silicone |
| USB Socket metal shell | Steel nickel plated |
| USB Socket and plug connector plastic shell | PBT, flame protection per UL 94-V0 |
| USB Socket and plug contacts | Phosphor bronze, gold plated |
| Connector housing | PBT, flame protection per UL 94-V0 |
| Metal socket coupling ring | PBT, flame protection per UL 94-V0 or Zinc die-cast nickel plated |
| Cable termination | PA, flame protection per UL 94-V0 or brass nickel plated |
| Cable seal | NBR |
| Interface seal | Silicone |
| USB plug connector metal shell | Copper alloy, nickel plated |
| Protection cap | PBT, flame protection per UL 94-V0 or brass/ zinc die-cast nickel plated |
| Seal | Silicone |
| Protection cap | PE or brass/zinc die-cast nickel plated |

Technical specifications are subject to change without notice.

# Mini USB 2.0 Type B IP67 Panel mounted receptacle

## PC Tail termination, for rigid or flex circuit

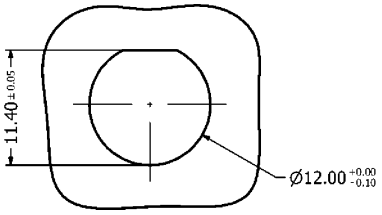
UL listed, File No.: E202784

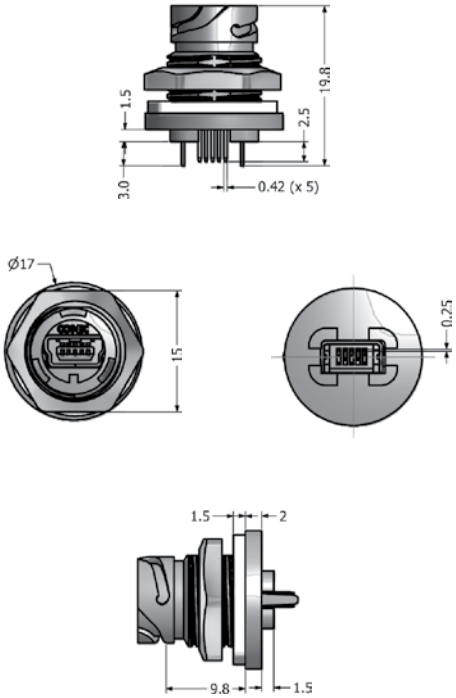
### Description

- For rear panel mounting up to wall thickness of 3.2 mm
- Design: Black plastic
- Bayonet locking, IP67 rated in mated condition
- Available as set with protection cap

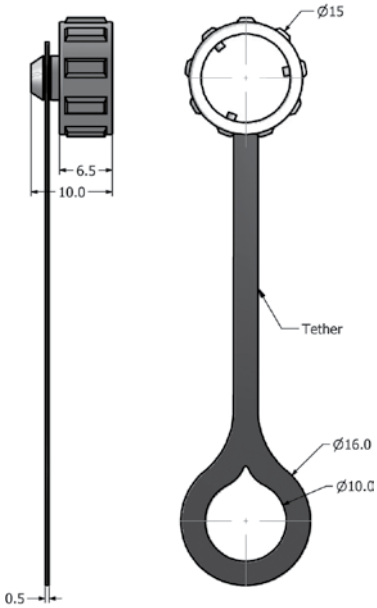
### Product drawing

Recommended Panel Cutout plastic




Protection cap plastic




### Order data

| Type | Material | Termination | Protection cap | Part Number |
|---|---|---|---|---|
| Receptacle kit | Black plastic | Bayonet locking | Without protection cap | 17-250001 |
| Receptacle kit | Black plastic | Bayonet locking | With protection cap | 17-250021 |
| Protection cap | Black plastic | Bayonet locking | | 17-250010 |

# Mini USB 2.0 IP67 Patch cord

## Mini USB 2.0 Type B - Standard USB 2.0 Type A connector

UL listed, File No.: E202784

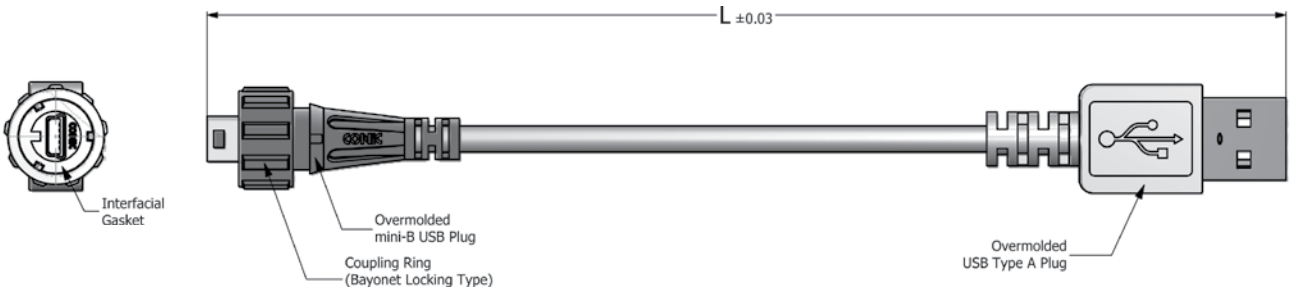
### Description

- Design: Black plastic
- Bayonet locking, IP67 rated in mated condition

### Product drawing

IP67-Protection

IP20-Protection

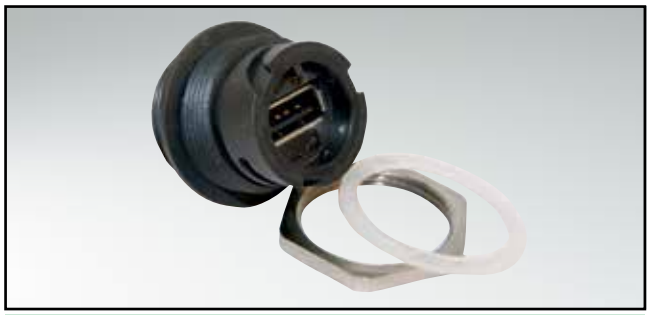



### Order data

| Type | Material | Termination | Length | Part Number |
|---|---|---|---|---|
| Patch cord | Black plastic | Bayonet locking | 2 m | 17-250031 |
| Patch cord | Black plastic | Bayonet locking | 3 m | 17-250041 |
| Patch cord | Black plastic | Bayonet locking | 5 m | 17-250051 |

# USB 2.0 Type A IP67 Panel mounted receptacle

## Inline coupling – Bayonet locking – Plastic or zinc die-cast



UL listed, File No.: E202784

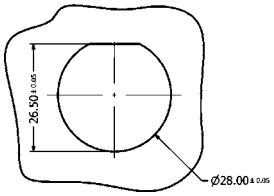
### Description

- For front- and rear panel mounting up to wall thickness of 3.2 mm
- Design: Black plastic or metallized, zinc die-cast nickel plated
- Termination inside USB 2.0 Type A
- Bayonet locking per IEC 61076-3-106
- IP67-Protection in mated condition
- Available as set with protection cap

### Product drawing

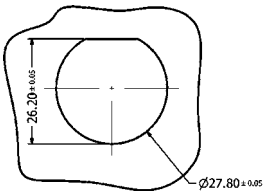
Recommended Panel Cutout

for plastic

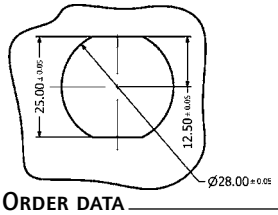


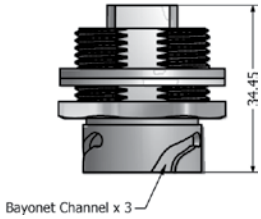

for metal

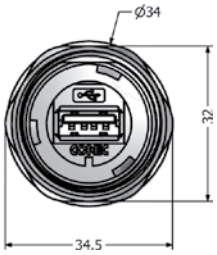
Single-D Panel Cut-out

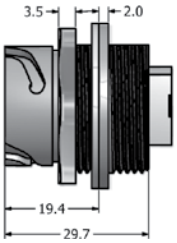



Double-D Panel Cut-out

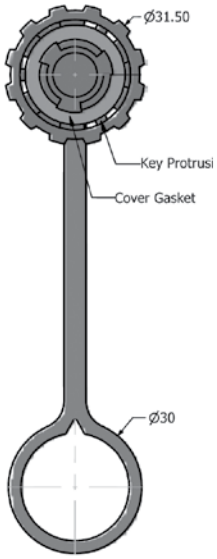


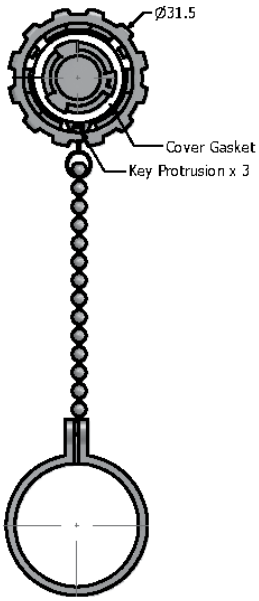




Protection cap plastic




Protection cap metal




### Order data

| Type | Material | Surface | Protection cap | Part Number |
|---|---|---|---|---|
| Installation housing set | Plastic | black | Without protection cap | 17-200001 |
| Installation housing set | Plastic | black | With protection cap | 17-200161 |
| Installation housing set | Plastic | metallized | Without protection cap | 17-200011 |
| Installation housing set | Plastic | metallized | With protection cap | 17-200721 |
| Installation housing set | Zinc die-cast | nickel plated | Without protection cap | 17-200601 |
| Installation housing set | Zinc die-cast | nickel plated | With protection cap | 17-200611 |

# USB 2.0 Type A IP67 Panel mounted receptacle

## Solder termination (PCB) – Bayonet locking – Plastic or zinc die-cast

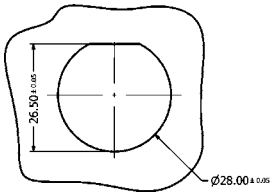
UL listed, File No.: E202784

### Description

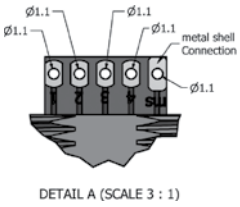
- For front- and rear panel mounting up to wall thickness of 3.2 mm
- Design: Black plastic or metallized, zinc die-cast nickel plated
- Solder termination inside (PCB)
- Bayonet locking per IEC 61076-3-106
- Low profile version for rear panel mounting up to wall thickness of 2.0 mm
- IP67 Protection in mated condition

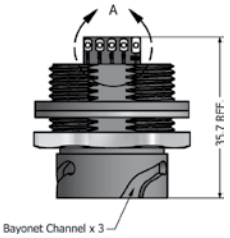
### Product drawing

Recommended Panel Cutout for plastic version

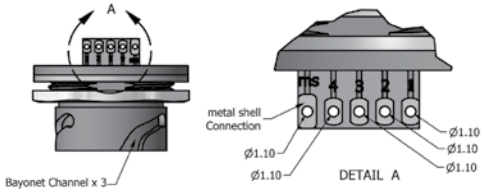



Standard version



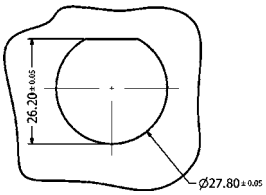




Low profile version

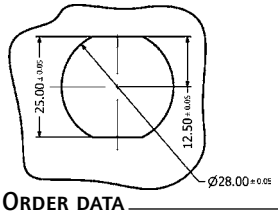


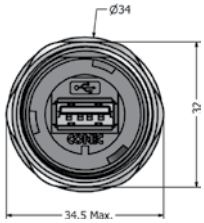

for metal version

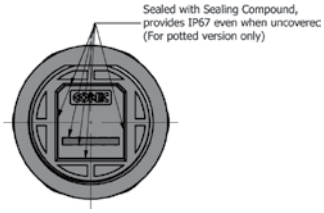
Single-D Panel Cut-out

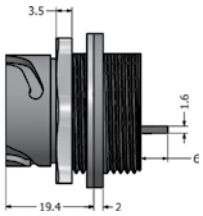


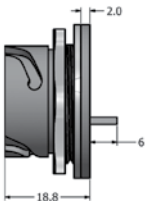

Double-D Panel Cut-out



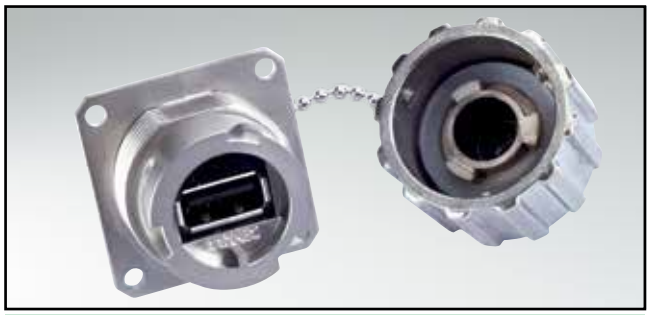




### Order data

| Type | Material | Surface | Sealing | Part Number |
|---|---|---|---|---|
| Receptacle connector standard | Plastic | black | | 17-200881 |
| Receptacle connector standard | Plastic | black | Sealing compound | 17-210001 |
| Receptacle connector standard | Plastic | metallized | | 17-200891 |
| Receptacle connector standard | Plastic | metallized | Sealing compound | 17-210011 |
| Receptacle connector standard | Zinc die-cast | nickel plated | | 17-210151 |
| Receptacle connector standard | Zinc die-cast | nickel plated | Sealing compound | 17-210161 |
| Receptacle connector Low profile | Plastic | black | | 17-210021 |
| Receptacle connector Low profile | Plastic | black | Sealing compound | 17-210041 |
| Receptacle connector Low profile | Plastic | metallized | | 17-210031 |
| Receptacle connector Low profile | Plastic | metallized | Sealing compound | 17-210051 |

# USB 2.0 Type A IP67 Panel mounted receptacle

## Inline coupling – Bayonet locking – Square flange – Zinc die-cast



UL listed, File No.: E202784

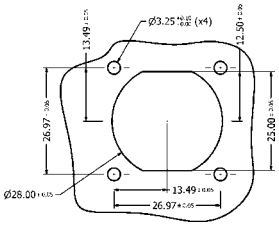
### Description

- For front- and rear panel mounting up to wall thickness of 3.2 mm
- Design: Zinc die-cast nickel plated
- Termination inside USB 2.0 Type A
- Bayonet locking per IEC 61076-3-106
- IP67-Protection in mated condition
- Available as set with protection cap
- Accessories:
  Gasket and mounting hardware can be ordered separately
- Mounting hardware includes
  4x (screw M3 + nut + flat washer + spring washer)

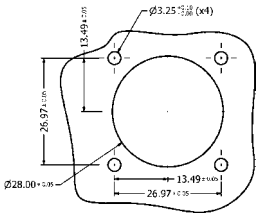
### Product drawing

Recommended Panel Cutout

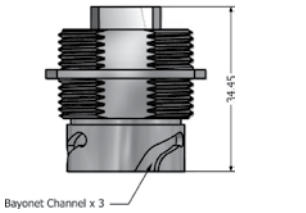
Double-D Panel Cut-out

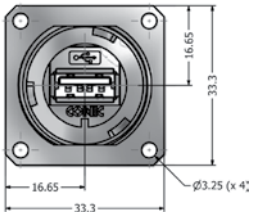


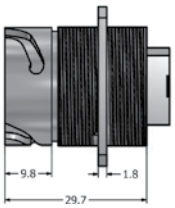

Round Panel Cut-out



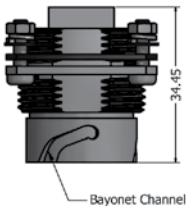

without assembly

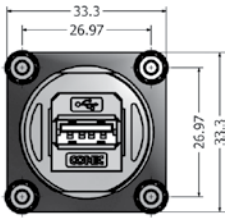


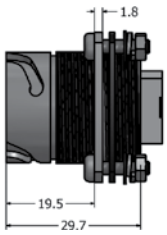



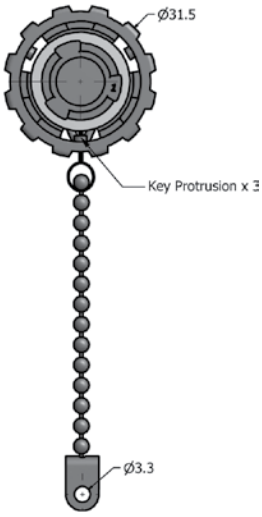

with assembly




Protection cap metal




### Order data

| Type | Material | Surface | Protection cap | Part Number |
|---|---|---|---|---|
| Receptacle without assembly | Zinc die-cast | nickel plated | without Protection cap | 17-200781 |
| Panel gasket | Silicone | | | 17-103540 |
| Mounting hardware | Stainless steel | | | 17-103530 |
| Receptacle with assembly | Zinc die-cast | nickel plated | without Protection cap | 17-210111 |
| Receptacle with assembly | Zinc die-cast | nickel plated | with Protection cap | 17-210121 |

# USB 2.0 Type A IP67 Panel mounted receptacle

## Inline coupling – both sides Bayonet locking – Plastic

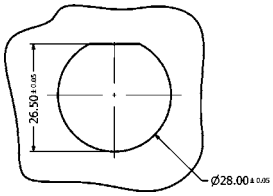
UL listed, File No.: E202784

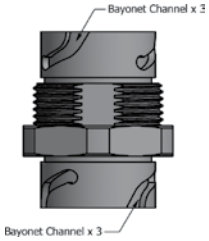
### Description

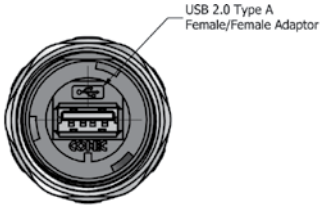
- For front- and rear panel mounting up to wall thickness of 3.2 mm
- Design: Black plastic
- Bayonet locking per IEC 61076-3-106
- IP67 protection in mated condition
- Available as set with protection cap

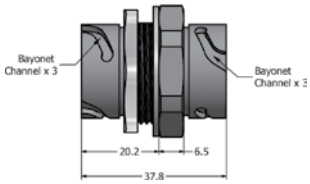
### Product drawing

Recommended Panel Cutout

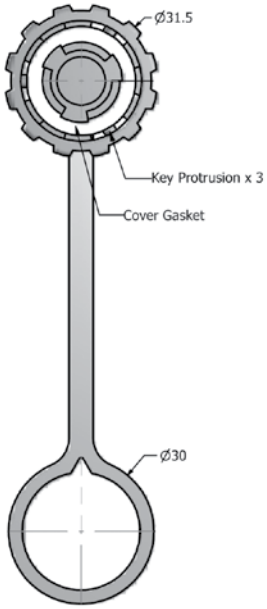



Protection cap plastic

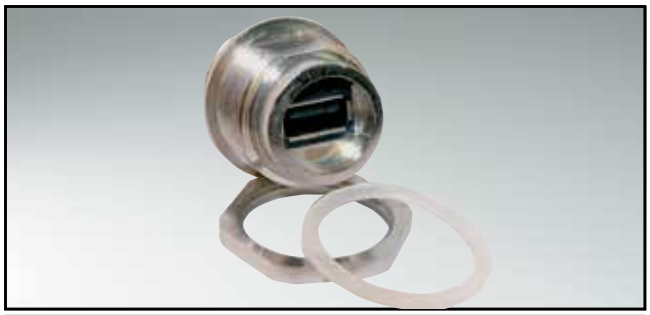



### Order data

| Type | Material | Surface | Protection cap | Part Number |
|---|---|---|---|---|
| Receptacle | Plastic | black | without Protection cap | 17-210131 |
| Receptacle | Plastic | black | with Protection cap | 17-210141 |

# USB 2.0 Type A IP67 Panel mounted receptacle

## Inline coupling – M28 thread– Zinc die-cast



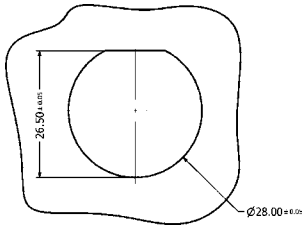
UL listed, File No.: E202784

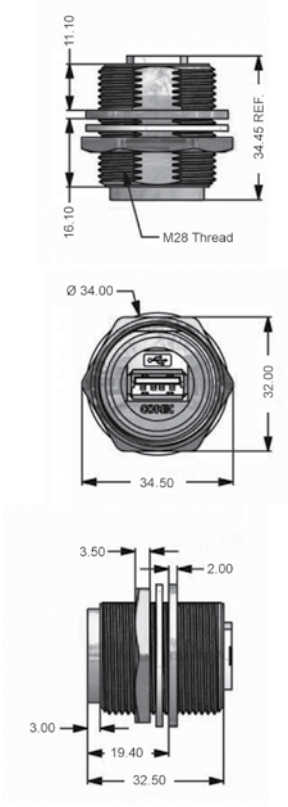
### Description

- For front- and rear panel mounting up to wall thickness of 3.2 mm
- Design: Zinc die-cast nickel plated
- Termination inside USB 2.0 Type A
- IP67 protection over M28 thread
- Available as set with or without protection cap

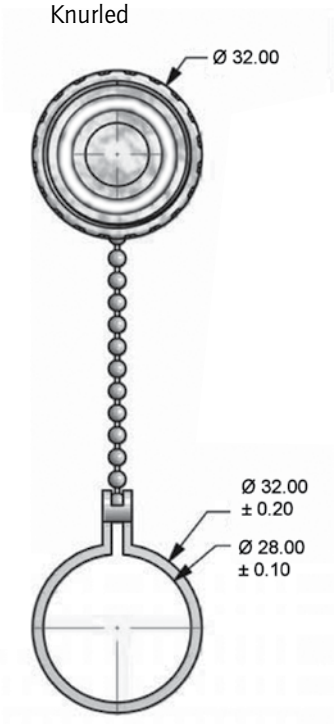
### Product drawing

Recommended Panel Cutout




Protection cap metal
Knurled

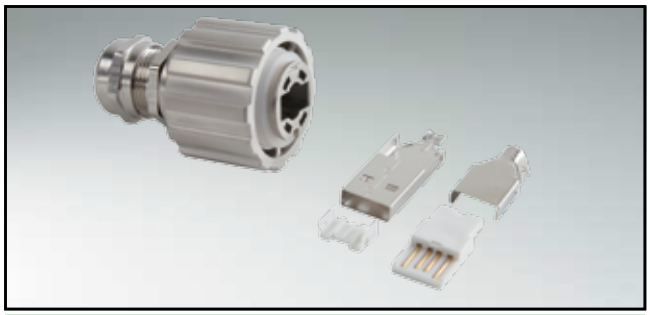



### Order data

| Type | Material | Surface | Design | Protection cap | Part Number |
|---|---|---|---|---|---|
| Receptacle | Zinc die-cast | nickel plated | Inline coupling | Without protection cap | 17-200321 |
| Receptacle | Zinc die-cast | nickel plated | Inline coupling | With protection cap | 17-200431 |

# USB 2.0 Type A IP67 Plug kit

## Standard version – Bayonet locking – Plastic and metal

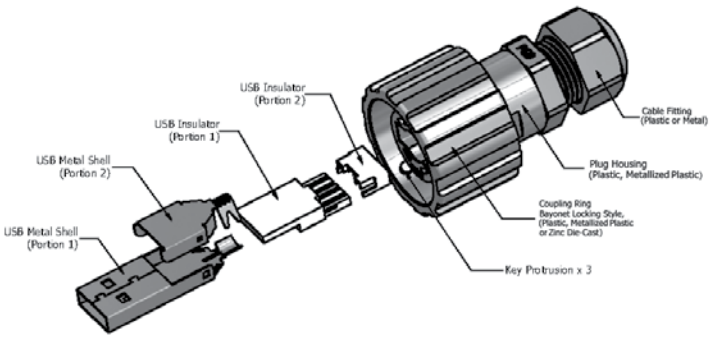


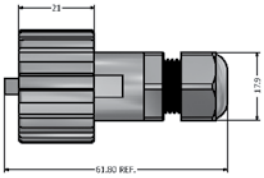
UL listed, File No.: E202784

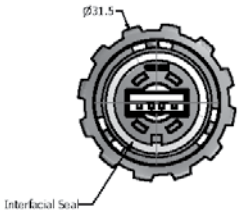
### Description

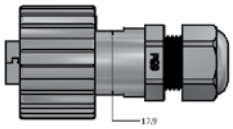
- Design: Black plastic and metallized, Zinc die-cast nickel plated
- USB Connector per USB 2.0 specification Type A
- Bayonet locking per IEC 61076-3-106
- USB 2.0 Type A can be ordered separately

### Product drawing





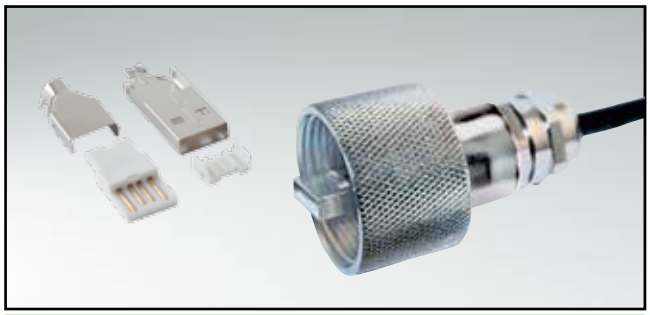




### Order data

| Type | Material Coupling ring | Material Housing | Material Cable fitting | Surface | Part Number |
|---|---|---|---|---|---|
| Plug kit | Plastic | Plastic | Plastic | black | 17-200121 |
| Plug kit | Plastic | Plastic | Metal | metallized/nickel plated | 17-200131 |
| Plug kit | Zinc die-cast | Plastic | Metal | metallized/nickel plated | 17-200591 |
| Plug USB 2.0 Type A | | | | | 39-500101 |

# USB 2.0 Type A IP67 Plug kit

## Standard-/Strain relief version – M28 thread – Plastic and Metal



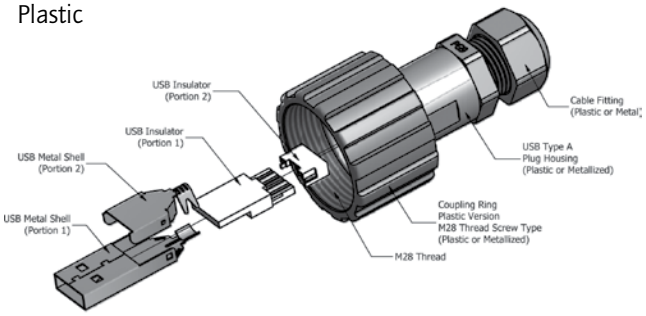
UL listed, File No.: E202784

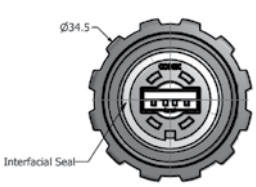
### Description

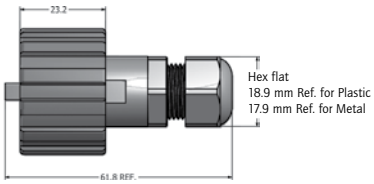
- Strain relief version, threads onto the internal M28 threads of a Receptacle Housing
- Design:
  - Black plastic
  - Metallized plastic
  - Metal version
- USB Connector per USB 2.0 Spezification Type A
- M28 thread
- USB 2.0 Type A can be ordered separately

### Product drawing

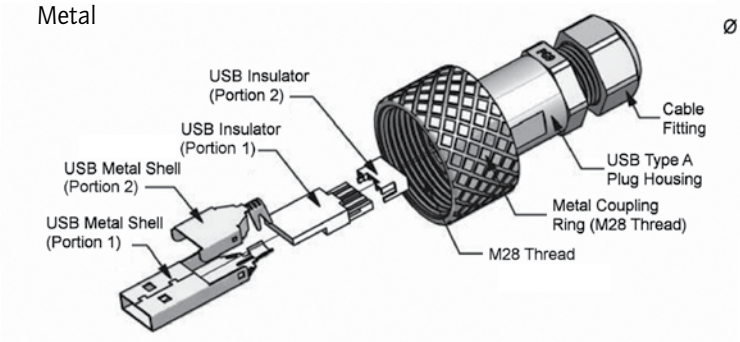
Strain relief version
Plastic

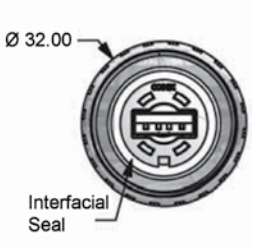


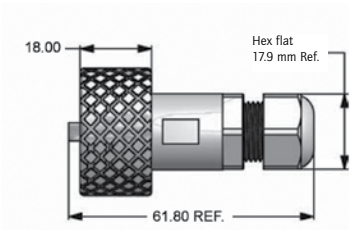




Metal



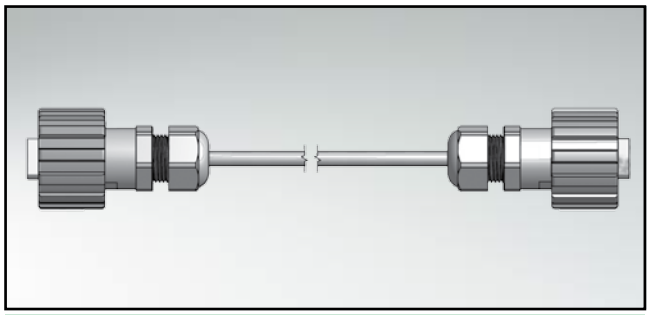




### Order data

| Type | Material Coupling ring | Material Housing | Material Cable fitting | Surface | Part Number |
|---|---|---|---|---|---|
| Plug kit | Plastic | Plastic | Plastic | black | 17-200151 |
| Plug kit | Plastic | Plastic | Metal | metallized/nickel plated | 17-200731 |
| Plug kit | Metal | Plastic | Metal | metallized/nickel plated | 17-200331 |
| Plug USB 2.0 Type A | | | | | 39-500101 |

# USB 2.0 Type A to Type A Patch cord

## IP67 to IP67 – Bayonet locking



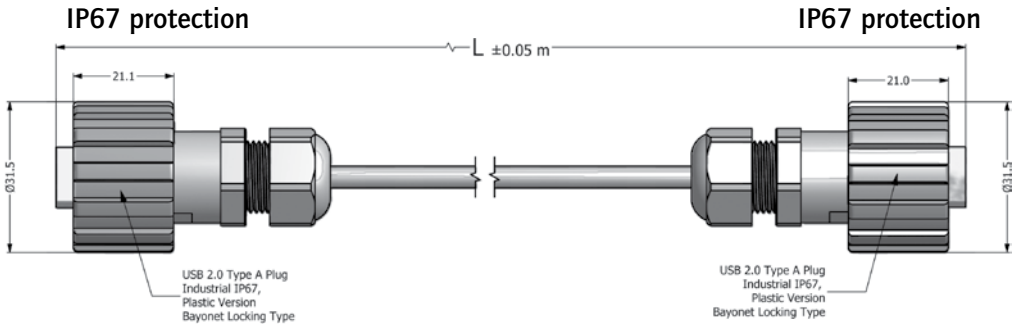
UL listed, File No.: E202784

### Description

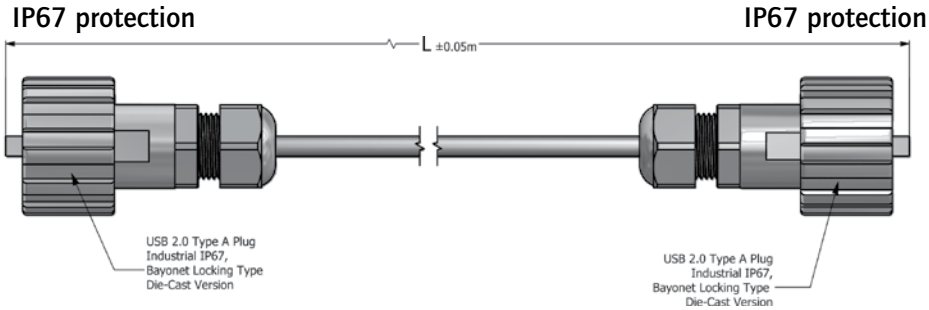
- Assembled patch cord
- Design:
  - Black plastic
  - Zinc die-cast nickel plated
- IP67 protection on both cable ends
- Other lengths on request

### Product drawing

Plastic design




Metal design

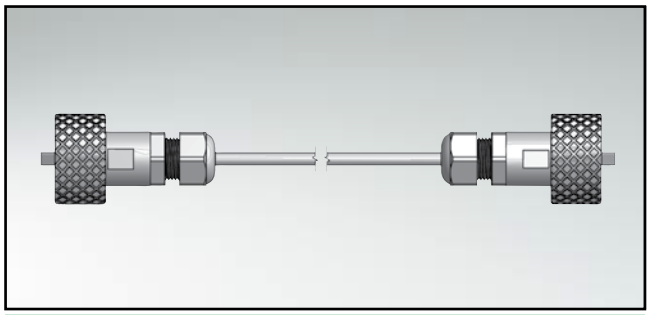



### Order data

| Type | Degree of Protection | Material Coupling ring | Material Housing | Material Cable fitting | Surface | Cable | Length (L) | Part Number |
|---|---|---|---|---|---|---|---|---|
| Patch cord | IP67-IP67 | Plastic | Plastic | Plastic | black | AWM 2725, black | 2 m | 17-200281 |
| Patch cord | IP67-IP67 | Plastic | Plastic | Plastic | black | AWM 2725, black | 3 m | 17-200291 |
| Patch cord | IP67-IP67 | Plastic | Plastic | Plastic | black | AWM 2725, black | 4,5m | 17-200311 |
| Patch cord | IP67-IP67 | Zinc die-cast | Plastic | Plastic | metallized/nickel plated/black | AWM 2725, black | 2 m | 17-200621 |
| Patch cord | IP67-IP67 | Zinc die-cast | Plastic | Plastic | metallized/nickel plated/black | AWM 2725, black | 3 m | 17-200631 |
| Patch cord | IP67-IP67 | Zinc die-cast | Plastic | Plastic | metallized/nickel plated/black | AWM 2725, black | 4,5m | 17-200641 |

# USB 2.0 Type A to Type A Patch cord

## IP20 to IP20/IP67 to IP67 – M28 thread



UL listed, File No.: E202784

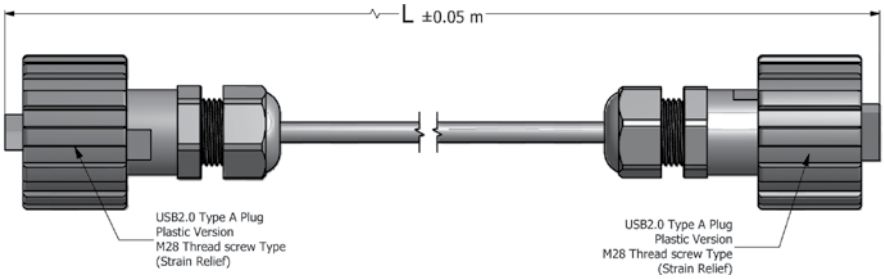
### Description

- Assembled patch cord
- Strain relief version
  Design: Black plastic
- IP20 Protection on both cable ends
- Metal version
- IP67 Protection on both cable ends
- Other lengths on request

### Product drawing

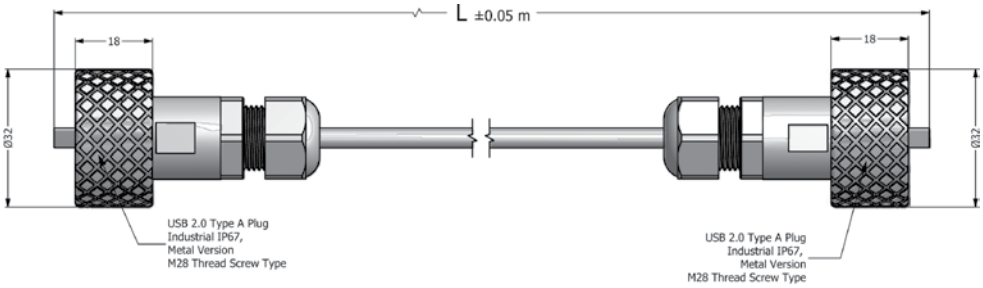
Strain relief version
Plastic

IP20 protection IP20 protection




Metal

IP67 protection IP67 protection

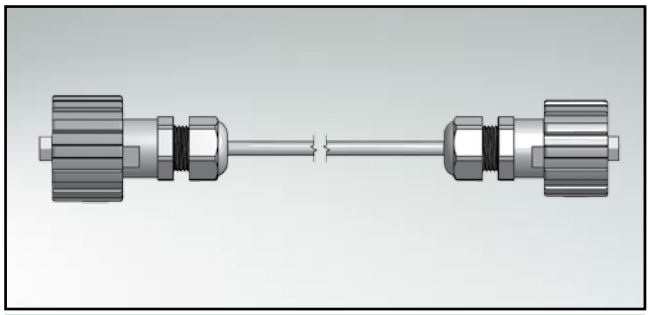



### Order data

| Type | Degree of Protection | Material Coupling ring | Material Housing | Material Cable fitting | Surface | Cable | Length (L) | Part Number |
|---|---|---|---|---|---|---|---|---|
| Patch cord | IP20-IP20 | Plastic | Plastic | Plastic | black | AWM 2725, black | 2 m | 17-200811 |
| Patch cord | IP20-IP20 | Plastic | Plastic | Plastic | black | AWM 2725, black | 3 m | 17-200821 |
| Patch cord | IP20-IP20 | Plastic | Plastic | Plastic | black | AWM 2725, black | 4,5m | 17-200831 |
| Patch cord | IP67-IP67 | Metal | Plastic | Plastic | metallized/nickel plated/black | AWM 2725, black | 2 m | 17-200401 |
| Patch cord | IP67-IP67 | Metal | Plastic | Plastic | metallized/nickel plated/black | AWM 2725, black | 3 m | 17-200411 |
| Patch cord | IP67-IP67 | Metal | Plastic | Plastic | metallized/nickel plated/black | AWM 2725, black | 4,5m | 17-200421 |

# USB 2.0 Type A to Type A Patchcord

## Strain relief version – IP20 to IP67 – M28 thread/Bayonet locking



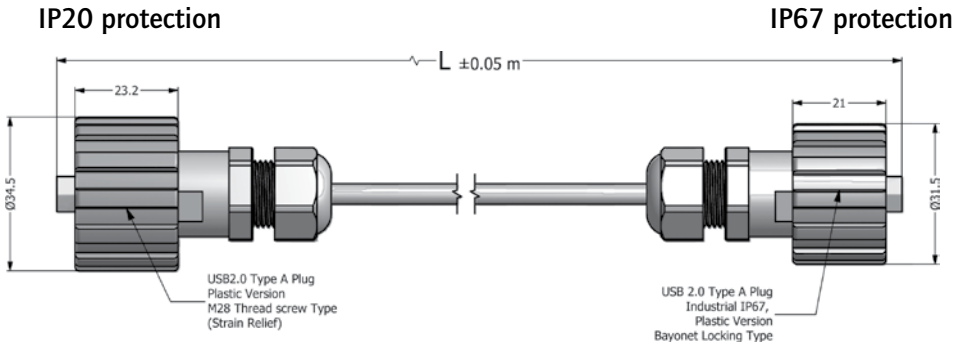
UL listed, File No.: E202784

### Description

- Strain relief version, threads onto the internal M28 threads of a Receptacle Housing
- Assembled patch cord
- Design:
  - Black plastic
- Other lengths on request

### Product drawing

Strain relief version
Plastic

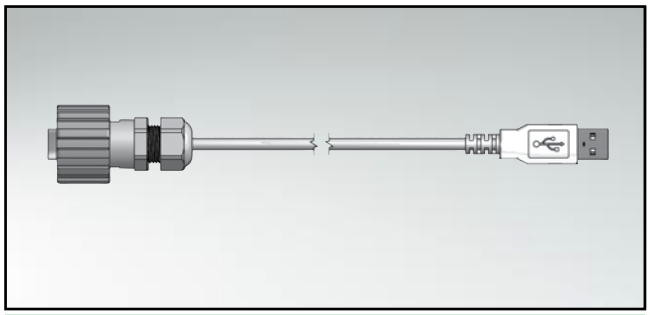



### Order data

| Type | Degree of protection | Material Coupling ring | Material Housing | Material Cable fitting | Surface | Cable | Length (L) | Part Number |
|---|---|---|---|---|---|---|---|---|
| Patchcord | IP20-IP67 | Plastic | Plastic | Plastic | black | AWM 2725, black | 2 m | 17-200541 |
| Patchcord | IP20-IP67 | Plastic | Plastic | Plastic | black | AWM 2725, black | 3 m | 17-200551 |
| Patchcord | IP20-IP67 | Plastic | Plastic | Plastic | black | AWM 2725, black | 4,5m | 17-200561 |

# USB 2.0 Type A to Type A Patch cord

## IP67 to IP20 – Bayonet locking



UL listed, File No.: E202784

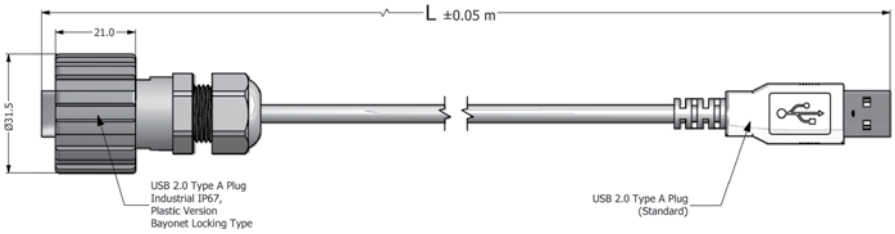
### Description

- Assembled patch cord
- USB 2.0 Type A Bayonet locking to USB 2.0 Type A Standard
- Design:
  - Black plastic and metallized
  - Zinc die-cast nickel plated
- Other lengths on request

### Product drawing

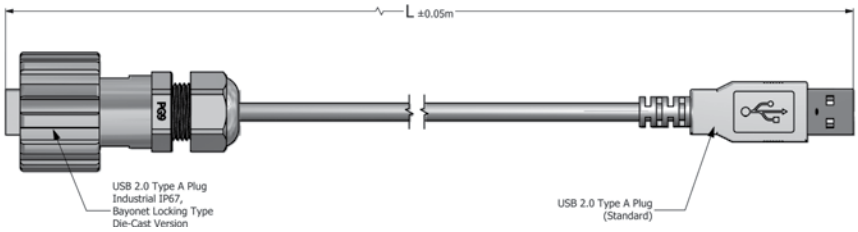
Plastic version

**IP67 protection** **IP20 protection**




Metal version

**IP67 protection** **IP20 protection**

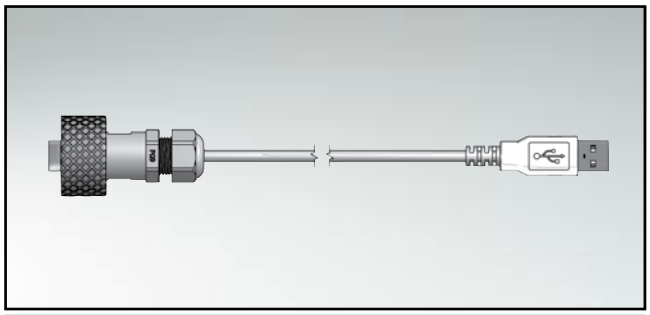



### Order data

| Type | Degree of protection | Material Coupling ring | Material Housing | Material Cable fitting | Surface | Cable | Length (L) | Part Number |
|---|---|---|---|---|---|---|---|---|
| Patchcord | IP67–IP20 | Plastic | Plastic | Plastic | black | AWM 2725, black | 2 m | 17-200231 |
| Patchcord | IP67–IP20 | Plastic | Plastic | Plastic | black | AWM 2725, black | 3 m | 17-200241 |
| Patchcord | IP67–IP20 | Plastic | Plastic | Plastic | black | AWM 2725, black | 4,5m | 17-200261 |
| Patchcord | IP67–IP20 | Zinc die-cast | Plastic | Metal | metallized/nickel plated | AWM 2725, black | 2 m | 17-200681 |
| Patchcord | IP67–IP20 | Zinc die-cast | Plastic | Metal | metallized/nickel plated | AWM 2725, black | 3 m | 17-200691 |
| Patchcord | IP67–IP20 | Zinc die-cast | Plastic | Metal | metallized/nickel plated | AWM 2725, black | 4,5m | 17-200701 |

# USB 2.0 Type A to Type A Patch cord

## Strain relief version – IP20 to IP20/IP67 to IP20 – M28 thread



UL listed, File No.: E202784

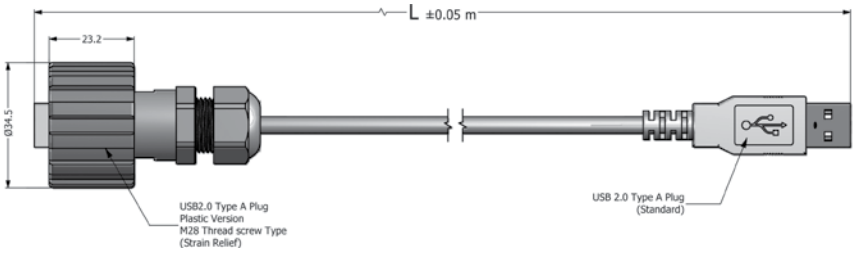
### Description

- Strain relief version, threads onto the internal M28 threads of a Receptacle Housing
- Assembled patch cord
- Strain relief version
  Design: Black plastic
- IP20 Protectionon both cable ends
- Metal version
- IP67 Protection on one cable end
- Other lengths on request

### Product drawing

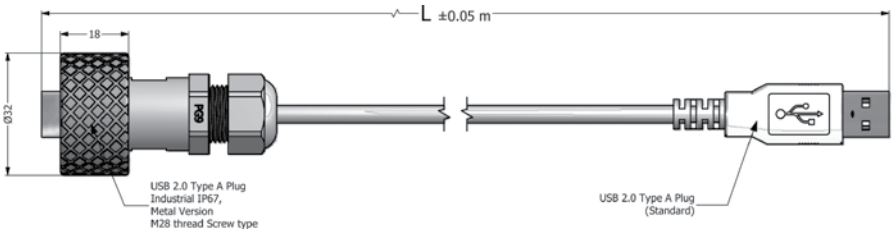
Strain relief version
Plastic

**IP20 Protection** **IP20 Protection**




Metal

**IP67 Protection** **IP20 Protection**

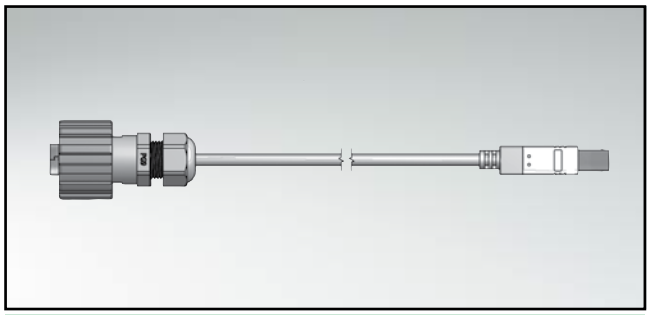



### Order data

| Type | Degree of protection | Material Coupling ring | Material Housing | Material Cable fitting | Surface | Cable | Length (L) | Part Number |
|---|---|---|---|---|---|---|---|---|
| Patch cord | IP20–IP20 | Plastic | Plastic | Plastic | black | AWM 2725, black | 2 m | 17-200511 |
| Patch cord | IP20–IP20 | Plastic | Plastic | Plastic | black | AWM 2725, black | 3 m | 17-200521 |
| Patch cord | IP20–IP20 | Plastic | Plastic | Plastic | black | AWM 2725, black | 4,5m | 17-200531 |
| Patch cord | IP67–IP20 | Metal | Plastic | Metal | metallized/nickel plated | AWM 2725, black | 2 m | 17-200371 |
| Patch cord | IP67–IP20 | Metal | Plastic | Metal | metallized/nickel plated | AWM 2725, black | 3 m | 17-200381 |
| Patch cord | IP67–IP20 | Metal | Plastic | Metal | metallized/nickel plated | AWM 2725, black | 4,5m | 17-200391 |

# USB 2.0 Type A to Type B Patch cord

## IP67 to IP20 – Bayonet locking



UL listed, File No.: E202784

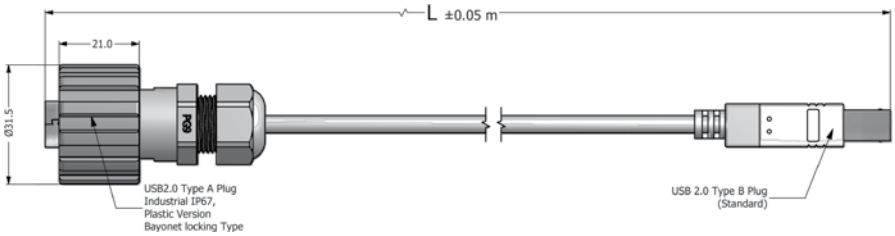
### Description

- Assembled patch cord
- USB 2.0 Type A Bayonet locking to USB 2.0 Type B Standard
- Design:
  - Black plastic
  - Zinc die-cast nickel plated
- Other lengths on request

### Product drawing

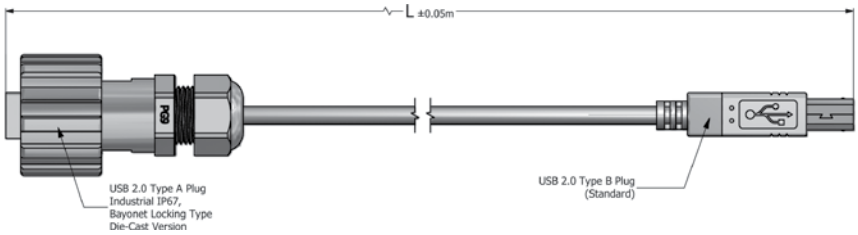
Plastic design

**IP67 Protection** **IP20 Protection**




Metal design

**IP67 Protection** **IP20 Protection**

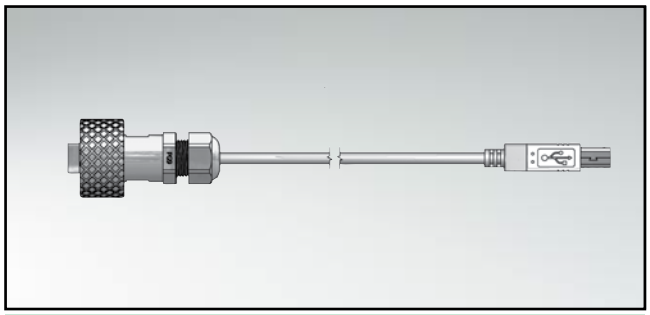



### Order data

| Type | Degree of protection | Material Coupling ring | Material Housing | Material Cable fitting | Surface | Cable | Length (L) | Part Number |
|---|---|---|---|---|---|---|---|---|
| Patch cord | IP67–IP20 | Plastic | Plastic | Plastic | black | AWM 2725, black | 2 m | 17-200181 |
| Patch cord | IP67–IP20 | Plastic | Plastic | Plastic | black | AWM 2725, black | 3 m | 17-200191 |
| Patch cord | IP67–IP20 | Plastic | Plastic | Plastic | black | AWM 2725, black | 4,5m | 17-200211 |
| Patch cord | IP67–IP20 | Zinc die-cast | Plastic | Metal | metallized/nickel plated | AWM 2725, black | 2 m | 17-200651 |
| Patch cord | IP67–IP20 | Zinc die-cast | Plastic | Metal | metallized/nickel plated | AWM 2725, black | 3 m | 17-200661 |
| Patch cord | IP67–IP20 | Zinc die-cast | Plastic | Metal | metallized/nickel plated | AWM 2725, black | 4,5m | 17-200671 |

# USB 2.0 Type A to Type B Patch cord

## Strain relief version – IP20 to IP20/IP67 to IP20 – M28 thread



UL listed, File No.: E202784

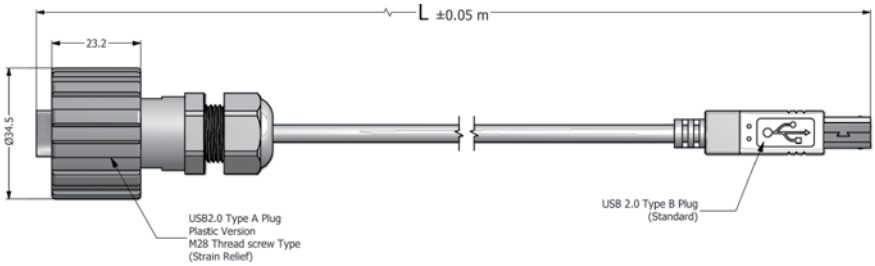
### Description

- Strain relief version, threads onto the internal M28 threads of a Receptacle Housing
- Assembled patch cord
- Strain relief version
  Design: Black plastic
- IP20 Protectionon both cable ends
- Metal version
- IP67 Protection on one cable end
- Other lengths on request

### Product drawing

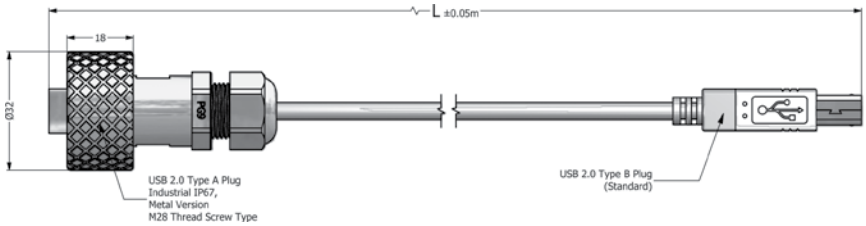
Strain relief version
Plastic

**IP20 Protection** **IP20 Protection**




Metal

**IP67 Protection** **IP20 Protection**

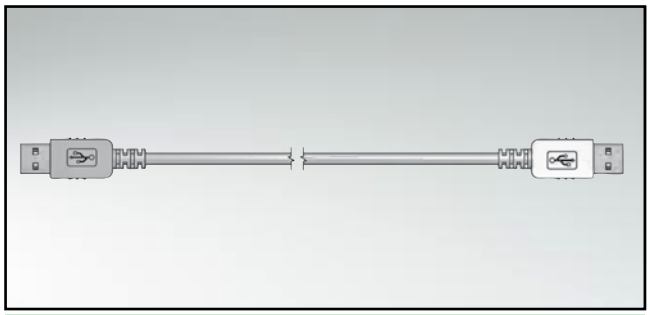



### Order data

| Type | Degree of protection | Material Coupling ring | Material Housing | Material Cable fitting | Surface | Cable | Length (L) | Part Number |
|---|---|---|---|---|---|---|---|---|
| Patch cord | IP20–IP20 | Plastic | Plastic | Plastic | black | AWM 2725, black | 2 m | 17-200481 |
| Patch cord | IP20–IP20 | Plastic | Plastic | Plastic | black | AWM 2725, black | 3 m | 17-200491 |
| Patch cord | IP20–IP20 | Plastic | Plastic | Plastic | black | AWM 2725, black | 4,5m | 17-200501 |
| Patch cord | IP67–IP20 | Metal | Plastic | Metal | metallized/nickel plated | AWM 2725, black | 2 m | 17-200341 |
| Patch cord | IP67–IP20 | Metal | Plastic | Metal | metallized/nickel plated | AWM 2725, black | 3 m | 17-200351 |
| Patch cord | IP67–IP20 | Metal | Plastic | Metal | metallized/nickel plated | AWM 2725, black | 4,5m | 17-200361 |

# USB 2.0 Type A to Type A or Type B Patch cord

## IP20 to IP20



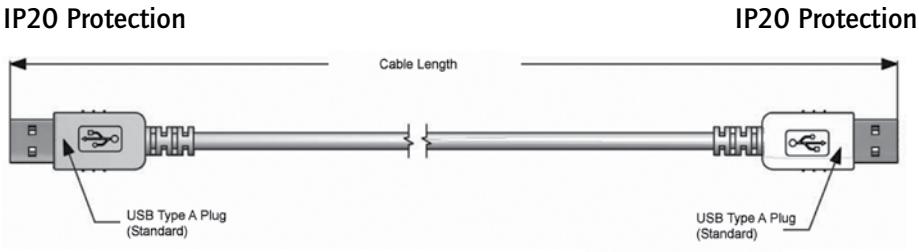
UL listed, File No.: E202784

### Description

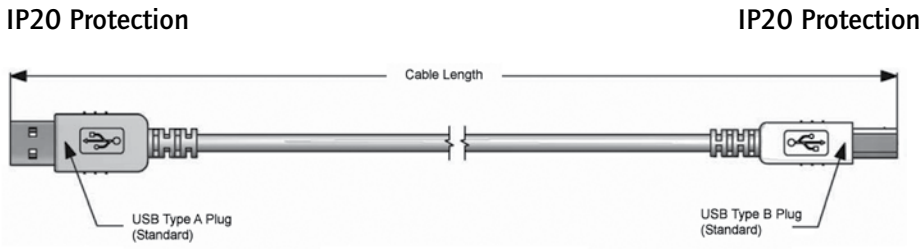
- Assembled patch cord
- IP20 Protectionon both cable ends
- USB 2.0 Connector Type A to Typ A or Type A to Type B
- Other lengths on request

### Product drawing

Type A to type A




Type A to type B




### Order data

| Type | Degree of protection | Material | Cable | Length (L) | Part Number |
|---|---|---|---|---|---|
| Patch cord | IP20 Type A-IP20 Type A | Plastic | AWM 2725, black | 2 m | 17-201031 |
| Patch cord | IP20 Type A-IP20 Type A | Plastic | AWM 2725, black | 3 m | 17-201041 |
| Patch cord | IP20 Type A-IP20 Type A | Plastic | AWM 2725, black | 4,5m | 17-201061 |
| Patch cord | IP20 Type A-IP20 Type B | Plastic | AWM 2725, black | 2 m | 17-201081 |
| Patch cord | IP20 Type A-IP20 Type B | Plastic | AWM 2725, black | 3 m | 17-201091 |
| Patch cord | IP20 Type A-IP20 Type B | Plastic | AWM 2725, black | 4,5m | 17-201111 |

Section 13

# IP67 Fiber Optic Industrial Connectors

CONEC has developed an ODVA compatible IP67 Fiber Optic connection for harsh indoor and outdoor environment. The new system is a bayonet locking enclosure with integrated LC Duplex Connectors and Adapters. The bayonet locking enclosure provides an easy and secured connection also under adverse conditions. The available materials for the housings are plastic or nickel plated zinc die-cast for extreme harsh conditions.
The LC connections are available for single mode or multimode transmission, depending on the requirements of the operated system.
The major application for these connectors are connections from base stations to the transmission modules based on antenna poles or for network connections on the last mile into end users homes. This program is supplemented by preassembled patch cables in various lengths.

For a variety of different Fiber Optic connections Conec supplies a wide range of Fiber Optic adapters.

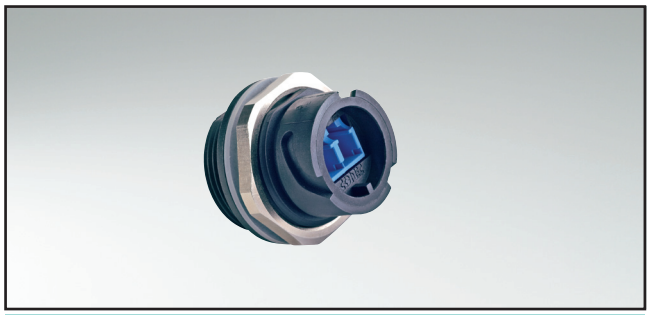
To support different application requirements in regards to transmission Conec adapters are available with Phosphor-Bronze or ceramic sleeves for precise positioning of the connector ferrules to each other.

Adapters are available in both, plastic or zinc die-cast housing. The adapters are offered in simplex and duplex configurations. For installation of the Fiber Optic adapters Conec offers a stainless steel clip for push-in installation or adapters with integrated threads for simple fastening by screws.

All CONEC Fiber Optic Adapters are supplied with preinstalled dust caps.

# IP67 Fiber Optic Industrial Duplex LC Connector

## Receptacle Assembly Kit – Bayonet locking – Plastic or Zinc die-cast



RoHS compliant

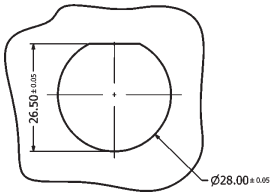
### Description

- Industrial version with bayonet coupling
- For front or rear panel mount to a max. panel thickness of 3,2 mm
- Receptacle housing: Black plastic UL 94 V-0, zinc die-cast
- Protection cap: Black plastic, zinc die-cast nickel plated
- Available as a set with protection cap
- Operating temperature: -40°C to +85°C

### Product drawing

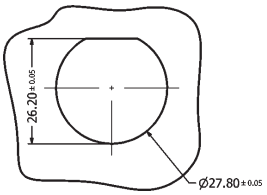
Recommended Panel Cut-out

for plastic version

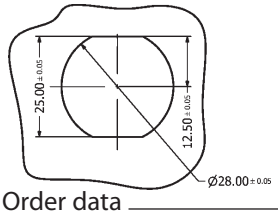


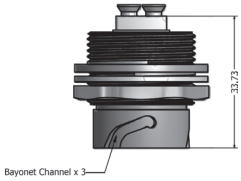

for metal version

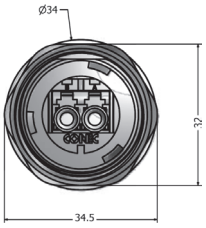
Single-D Panel Cut-out

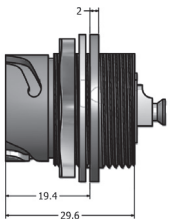



Double-D Panel Cut-out

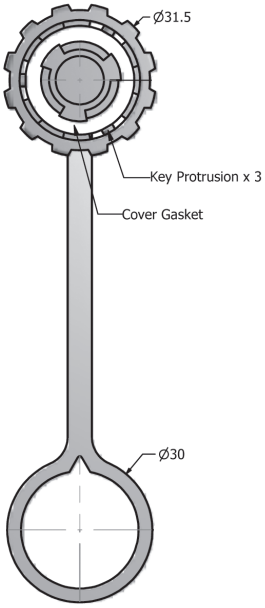


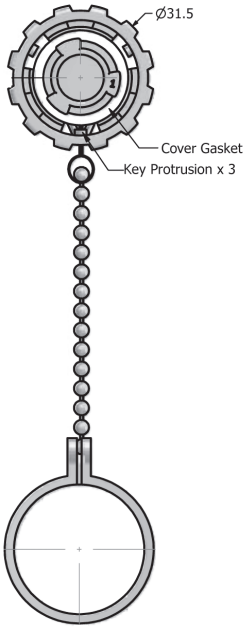






Protection cap plastic




Protection cap metal

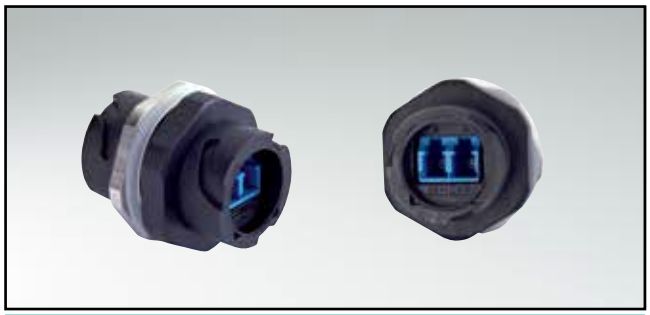



### Order data

| Type | Material | Surface | SM/MM/APC SM | Protection cap | Part Number |
|---|---|---|---|---|---|
| Receptacle Assembly Kit | Plastic | black | Single Mode | | 17-300010 |
| Receptacle Assembly Kit | Plastic | black | Multi Mode | | 17-300020 |
| Receptacle Assembly Kit | Plastic | black | APC Single Mode | | 17-300170 |
| Receptacle Assembly Kit | Plastic | black | Single Mode | with protection cap | 17-300230 |
| Receptacle Assembly Kit | Plastic | black | Multi Mode | with protection cap | 17-300240 |
| Receptacle Assembly Kit | Plastic | black | APC Single Mode | with protection cap | 17-300250 |
| Receptacle Assembly Kit | Zinc die cast | nickel plated | Single Mode | | 17-300060 |
| Receptacle Assembly Kit | Zinc die cast | nickel plated | Multi Mode | | 17-300070 |
| Receptacle Assembly Kit | Zinc die cast | nickel plated | APC Single Mode | | 17-300180 |
| Receptacle Assembly Kit | Zinc die cast | nickel plated | Single Mode | with protection cap | 17-300380 |
| Receptacle Assembly Kit | Zinc die cast | nickel plated | Multi Mode | with protection cap | 17-300390 |
| Receptacle Assembly Kit | Zinc die cast | nickel plated | APC Single Mode | with protection cap | 17-300400 |

# IP67 Fiber Optic Industrial Duplex LC Connector

## Inline coupler – on both sides Bayonet termination – Plastic



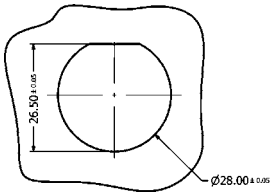
RoHS compliant

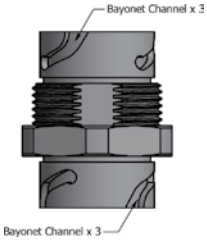
### Description

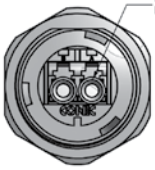
- For front- or rear panel mounting up to wall thickness of .130"/3.2 mm
- Design: Black plastic
- Available as a set with protection cap
- Operating temperature: -40°C to +85°C

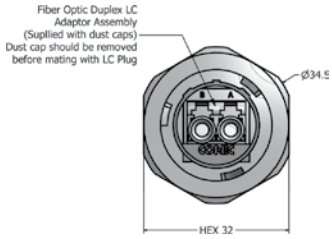
### Product drawing

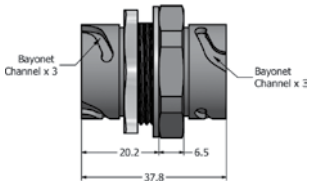
Recommended Panel Cut-out



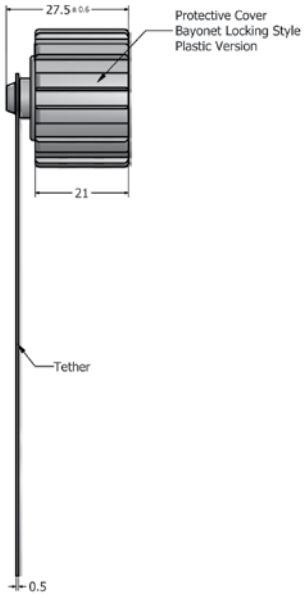



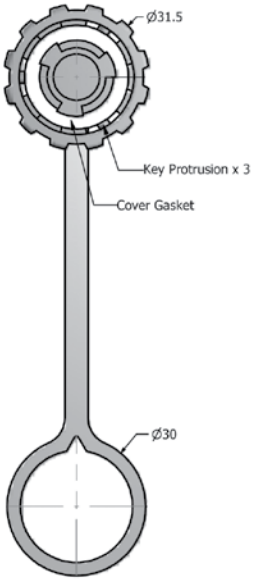




Protection cap plastic



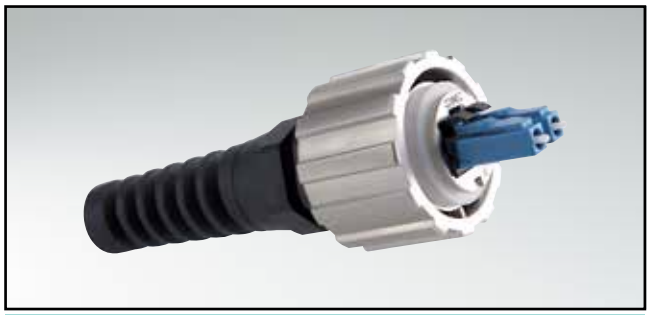




### Order data

| Type | Material | Surface | SM/MM/APC SM | Protection cap | Part Number |
|---|---|---|---|---|---|
| Inline coupler | Plastic | black | Single Mode | | 17-300790 |
| Inline coupler | Plastic | black | Multi Mode | | 17-300800 |
| Inline coupler | Plastic | black | APC Single Mode | | 17-300810 |
| Inline coupler | Plastic | black | Single Mode | with protection cap | 17-300820 |
| Inline coupler | Plastic | black | Multi Mode | with protection cap | 17-300830 |
| Inline coupler | Plastic | black | APC Single Mode | with protection cap | 17-300840 |

# IP67 Fiber Optic Industrial Duplex LC Connector

## Plug Kit

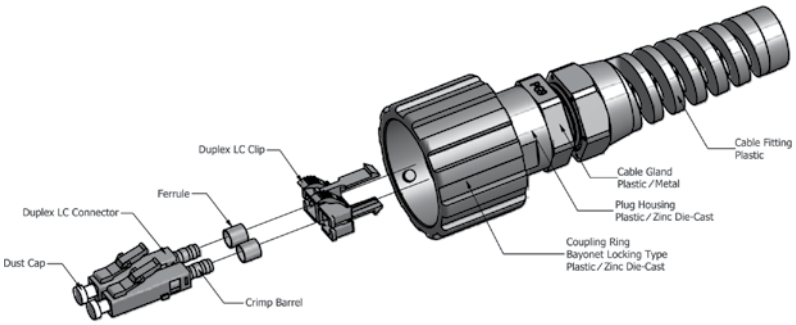


RoHS compliant

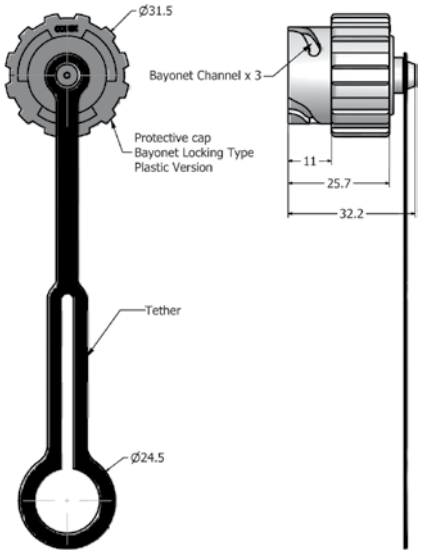
### Description

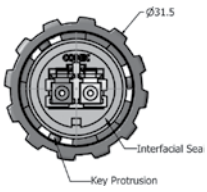
- Industrial version with bayonet coupling
- Connector: Black plastic UL 94 V-0, zinc die-cast
- Available as a set with protection cap
- Operating temperature: -40°C to +85°C

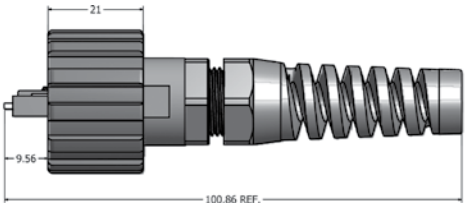
### Product drawing




Protection cap plastic



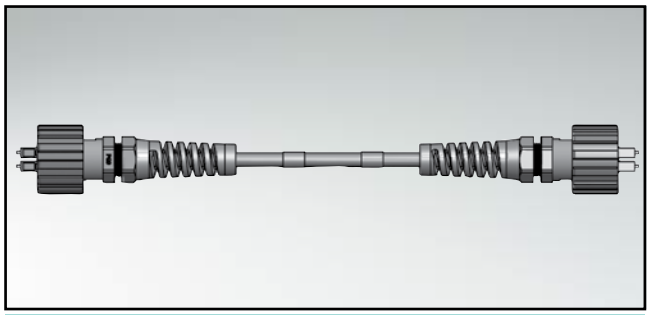




### Order data

| Type | Material | Surface | SM/MM/APC SM | Protection cap | Part Number |
|---|---|---|---|---|---|
| Plug Kit | Plastic | black | Single Mode | | 17-300030 |
| Plug Kit | Plastic | black | Multi Mode | | 17-300040 |
| Plug Kit | Plastic | black | APC Single Mode | | 17-300110 |
| Plug Kit | Plastic | black | Single Mode | with protection cap | 17-300200 |
| Plug Kit | Plastic | black | Multi Mode | with protection cap | 17-300210 |
| Plug Kit | Plastic | black | APC Single Mode | with protection cap | 17-300220 |
| Plug Kit | Zinc die cast | nickel plated | Single Mode | | 17-300080 |
| Plug Kit | Zinc die cast | nickel plated | Multi Mode | | 17-300090 |
| Plug Kit | Zinc die cast | nickel plated | APC Single Mode | | 17-300120 |
| Plug Kit | Zinc die cast | nickel plated | Single Mode | with protection cap | 17-300410 |
| Plug Kit | Zinc die cast | nickel plated | Multi Mode | with protection cap | 17-300420 |
| Plug Kit | Zinc die cast | nickel plated | APC Single Mode | with protection cap | 17-300430 |
| Protective cover | Plastic | black | | | 17-300050 |

# IP67 Fiber Optic Industrial Duplex LC Patch cord

## IP67 Industrial to IP67 Industrial Duplex LC



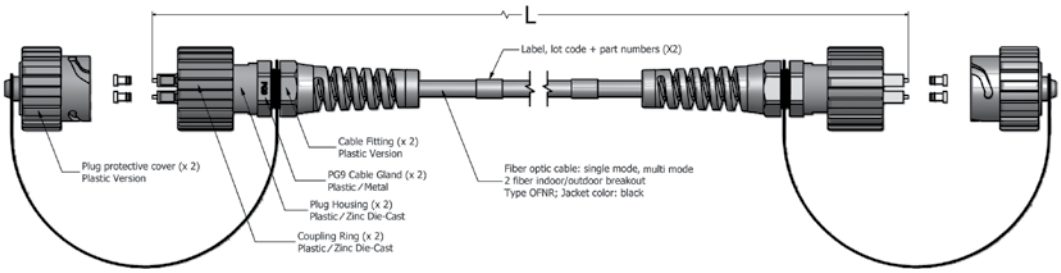
RoHS compliant

### Description

- Single Mode, Multi Mode and Single Mode APC
- Multi Mode: maximum connector insertion loss (ILI: 0.5 dB, plus cable attenuation of 3.5 dB/km AT 850nm
- Single Mode: maximum connector insertion loss (il): 0.2 db, plus cable attenuation of 0.78 db/km at 1310nm
- Cables are indoor and outdoor OFNR type
- Plug protectiv cover (2x)
- Other lengths on request

### Product drawing

Single Mode
Multi Mode
Single Mode APC

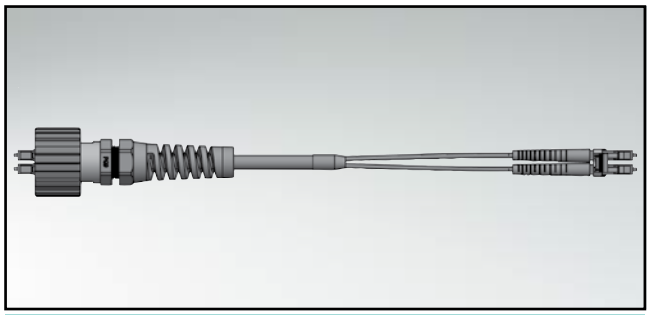



### Order data

| Type | Material | surface | SM/MM/APC SM | Length L | Part Number |
|---|---|---|---|---|---|
| Patch cord | Plastic | black | Single Mode | 2 m | 17-300320-02 |
| Patch cord | Plastic | black | Single Mode | 5 m | 17-300320-05 |
| Patch cord | Plastic | black | Single Mode | 10 m | 17-300320-10 |
| Patch cord | Plastic | black | Multi Mode | 2 m | 17-300190-02 |
| Patch cord | Plastic | black | Multi Mode | 5 m | 17-300190-05 |
| Patch cord | Plastic | black | Multi Mode | 10 m | 17-300190-10 |
| Patch cord | Plastic | black | Single Mode APC | 2 m | 17-300340-02 |
| Patch cord | Plastic | black | Single Mode APC | 5 m | 17-300340-05 |
| Patch cord | Plastic | black | Single Mode APC | 10 m | 17-300340-10 |
| Patch cord | Zinc die cast | nickel plated | Single Mode | 2 m | 17-300330-02 |
| Patch cord | Zinc die cast | nickel plated | Single Mode | 5 m | 17-300330-05 |
| Patch cord | Zinc die cast | nickel plated | Single Mode | 10 m | 17-300330-10 |
| Patch cord | Zinc die cast | nickel plated | Multi Mode | 2 m | 17-300310-02 |
| Patch cord | Zinc die cast | nickel plated | Multi Mode | 5 m | 17-300310-05 |
| Patch cord | Zinc die cast | nickel plated | Multi Mode | 10 m | 17-300310-10 |
| Patch cord | Zinc die cast | nickel plated | Single Mode APC | 2 m | 17-300350-02 |
| Patch cord | Zinc die cast | nickel plated | Single Mode APC | 5 m | 17-300350-05 |
| Patch cord | Zinc die cast | nickel plated | Single Mode APC | 10 m | 17-300350-10 |

# IP67 Fiber Optic Industrial Duplex LC Patch cord

## IP67 Industrial to IP20



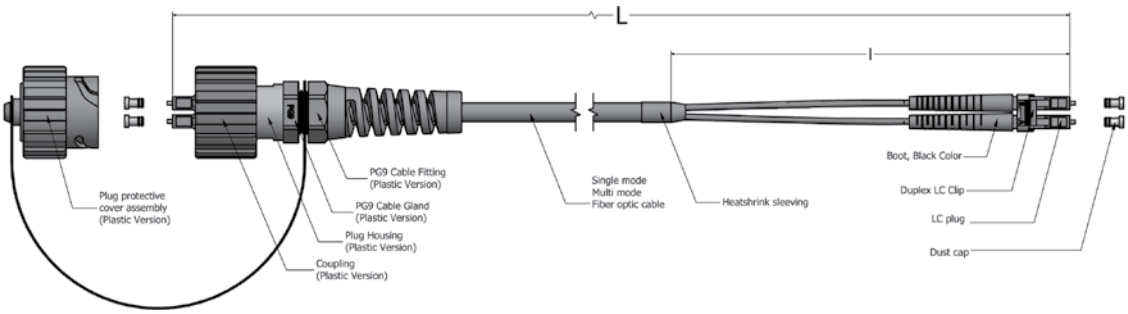
RoHS compliant

### Description

- Single Mode, Multi Mode and Single Mode APC
- Multi Mode: maximum connector insertion loss (ILI: 0.5 dB, plus cable attenuation of 3.5 dB/km AT 850nm
- Single Mode: maximum connector insertion loss (il): 0.2 db, plus cable attenuation of 0.78 db/km at 1310nm
- protective cover shall be installed when unmated
- Other lengths on request

### Product drawing

Single Mode
Multi Mode
Single Mode APC

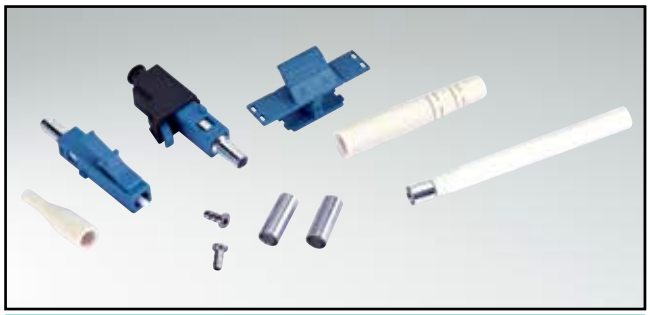



### Order data

| Type | Material | Surface | SM/MM/APC SM | Length L | Length l | Part Number |
|---|---|---|---|---|---|---|
| Patch cord | Plastic | black | Single Mode | 1 m | 0.10 m | 17-300290-001 |
| Patch cord | Plastic | black | Single Mode | 30 m | 2.66 m | 17-300290-030 |
| Patch cord | Plastic | black | Single Mode | 60 m | 2.66 m | 17-300290-060 |
| Patch cord | Plastic | black | Single Mode | 100 m | 2.66 m | 17-300290-100 |
| Patch cord | Plastic | black | Single Mode | 200 m | 2.66 m | 17-300290-200 |
| Patch cord | Plastic | black | Single Mode | 300 m | 2.66 m | 17-300290-300 |
| Patch cord | Plastic | black | Multi Mode | 1 m | 0.10 m | 17-300300-001 |
| Patch cord | Plastic | black | Multi Mode | 30 m | 2.66 m | 17-300300-030 |
| Patch cord | Plastic | black | Multi Mode | 60 m | 2.66 m | 17-300300-060 |
| Patch cord | Plastic | black | Multi Mode | 100 m | 2.66 m | 17-300300-100 |
| Patch cord | Plastic | black | Multi Mode | 200 m | 2.66 m | 17-300300-200 |
| Patch cord | Plastic | black | Multi Mode | 300 m | 2.66 m | 17-300300-300 |
| Patch cord | Plastic | black | Single Mode APC | 1 m | 0.10 m | 17-300370-001 |
| Patch cord | Plastic | black | Single Mode APC | 30 m | 2.66 m | 17-300370-030 |
| Patch cord | Plastic | black | Single Mode APC | 60 m | 2.66 m | 17-300370-060 |
| Patch cord | Plastic | black | Single Mode APC | 100 m | 2.66 m | 17-300370-100 |
| Patch cord | Plastic | black | Single Mode APC | 200 m | 2.66 m | 17-300370-200 |
| Patch cord | Plastic | black | Single Mode APC | 300 m | 2.66 m | 17-300370-300 |

# LC Unibody Connector

## Singlemode – Multimode – Singlemode APC



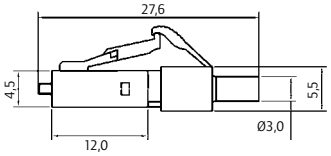
RoHS compliant

### Description

- Housing material: Plastic (UL94V-0)
- Ferrule: Ceramic
- Temperature range: -40°C to +75°C
- Mating cycles: 1000
- Set with cable boot and crimp sleeve for cable Ø 2,0 mm
- Connector with Dust cap

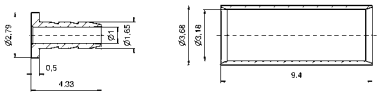
### Product drawing

Connector

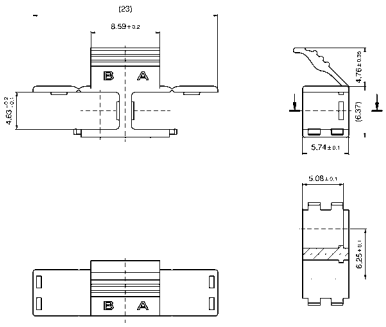



Crimp assembly 2.0

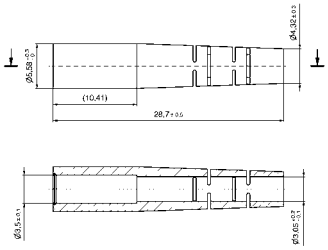
Crimp assembly 3.0



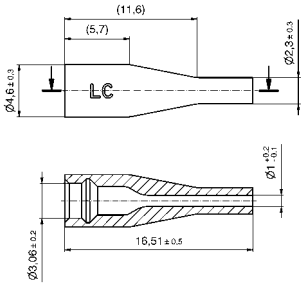
Duplex clip



Boot for 2.0 & 3.0mm



Boot for 0.9mm

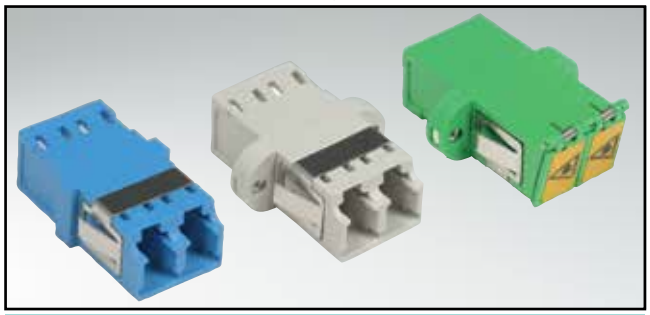



### Order data

| Type | SM/MM/APC | Color | Part Number |
|---|---|---|---|
| Connector with Dust cap | Single Mode | blue | 18-000010 |
| Connector with Dust cap | Multi Mode | beige | 18-000020 |
| Connector with Dust cap | Single Mode APC | green | 18-000030 |
| Crimp assembly for 2.0mm cables | | | 18-000040 |
| Crimp assembly for 3.0mm cables | | | 18-000050 |
| Duplex clip | Single Mode | blue | 18-000100 |
| Duplex clip | Multi Mode | beige | 18-000110 |
| Duplex clip | Single Mode APC | green | 18-000120 |
| Boot for 2.0 & 3.0mm cables | | white | 18-000080 |
| Boot for 2.0 & 3.0mm cables | | black | 18-000090 |
| Boot for 0.9mm fiber | | white | 18-000060 |
| Boot for 0.9 mm fiber | | black | 18-000070 |

# LC Duplex-Adapters Plastic

## Single Mode – Multi Mode – Single Mode APC



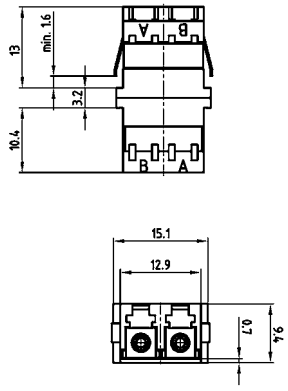
RoHS compliant

### Description

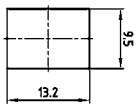
- Housing material: Plastic (UL 94V-0)
- Sleeve: Ceramic, Phosphor-bronze
- Clip: Stainless steel
- Adapters are supplied with dust caps
- Adapter flange available with different mounting options: clip and screws

### Product drawing

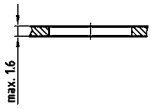
Adapter



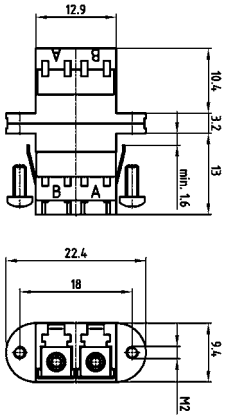

Panel cutout



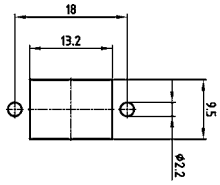

Wall thickness



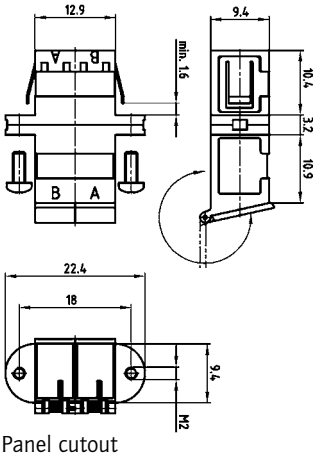

Adapter with flange



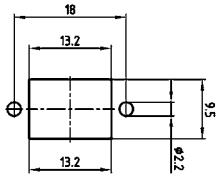

Panel cutout




Adapter with shutter




Panel cutout

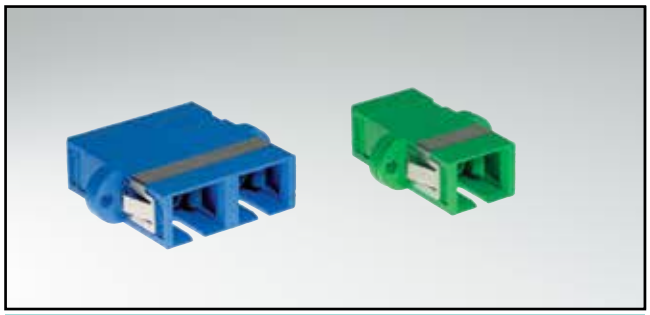



### Order data

| Type | Material sleeve | SM/MM/APC SM | Mount | Housing color | Part Number |
|---|---|---|---|---|---|
| Adapter | ceramic | Single Mode | Clip | blue | 18-007900 |
| Adapter | ceramic | Multi Mode | Clip | beige | 18-007920 |
| Adapter | phosphor-bronze | Multi Mode | Clip | beige | 18-007940 |
| Adapter | ceramic | APC 8°= Single Mode | Clip | green | 18-007880 |
| Adapter with flange | ceramic | Single Mode | M2x6 screw | blue | 18-007980 |
| Adapter with flange | ceramic | Multi Mode | M2x6 screw | beige | 18-008000 |
| Adapter with flange | phosphor-bronze | Multi Mode | M2x6 screw | beige | 18-008020 |
| Adapter with flange | ceramic | APC 8°= Single Mode | M2x6 screw | green | 18-007960 |
| Adapter with flange | ceramic | Single Mode | Clip | blue | 18-008060 |
| Adapter with flange | ceramic | Multi Mode | Clip | beige | 18-008080 |
| Adapter with flange | phosphor-bronze | Multi Mode | Clip | beige | 18-008100 |
| Adapter with flange | ceramic | APC 8°= Single Mode | Clip | green | 18-008040 |
| Adapter with shutter | ceramic | Single Mode | M2x6 screw | blue | 18-008140 |
| Adapter with shutter | ceramic | APC 8°= Single Mode | M2x6 screw | green | 18-008120 |
| Adapter with shutter | ceramic | Single Mode | Clip | blue | 18-008180 |
| Adapter with shutter | ceramic | APC 8°= Single Mode | Clip | green | 18-008160 |

# SC Simplex-/Duplex-Adapters Plastic

## Single Mode – Multi Mode – Single Mode APC



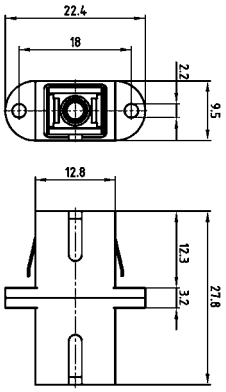
RoHS compliant

### Description

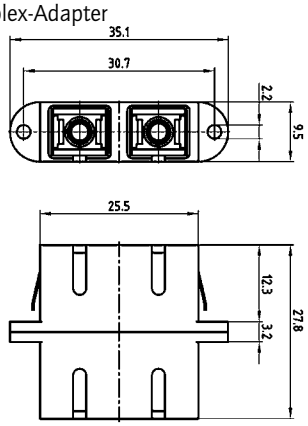
- Housing material: Plastic (UL 94V-0)
- Sleeve: Ceramic, Phosphor-bronze
- Clip: Stainless steel
- Adapters are supplied with dust caps
- Mounting options: clip

### Product drawing

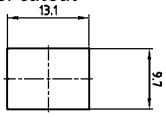
Simplex-Adapter



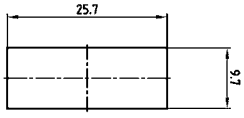

Duplex-Adapter



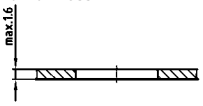

Panel cutout



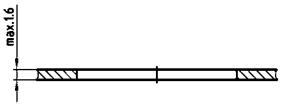

Panel cutout




Wall thickness




Wall thickness

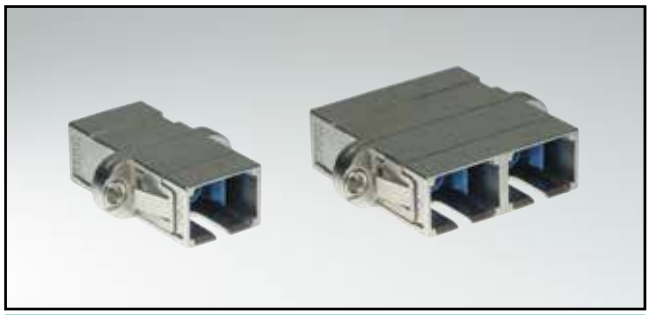



### Order data

| Type | Material sleeve | SM/MM/APC SM | Housing color | Part Number |
|---|---|---|---|---|
| Duplex adapter | ceramic | Single Mode | blue | 18-007080 |
| Duplex adapter | phosphor-bronze | Multi Mode | beige | 18-007100 |
| Duplex adapter | ceramic | APC 8°= Single Mode | green | 18-007060 |
| Simplex adapter | ceramic | Single Mode | blue | 18-007020 |
| Simplex adapter | phosphor-bronze | Multi Mode | beige | 18-007040 |
| Simplex adapter | ceramic | APC 8°= Single Mode | green | 18-007000 |

# SC Simplex-/Duplex-Adapters Metal

## Single Mode – Multi Mode – Single Mode APC



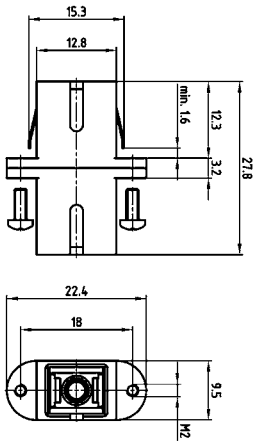
RoHS compliant

### Description

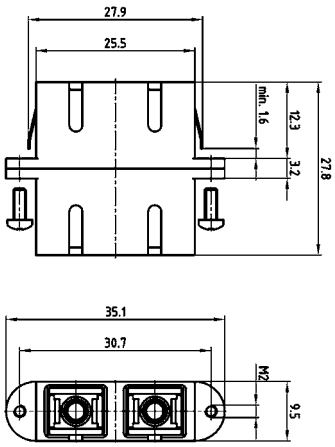
- Housing material: Zinc die-cast
- Sleeve: Phosphor-Bronze; Ceramic
- Clip: Stainless steel
- Adapters are supplied with dust caps
- Available with different mounting options: clip or screws

### Product drawing

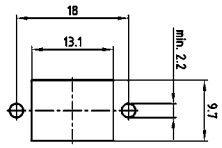
Simplex-Adapter



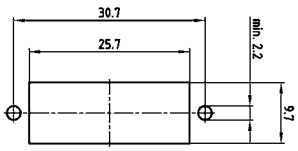

Duplex-Adapter




Panel cutout




Panel cutout

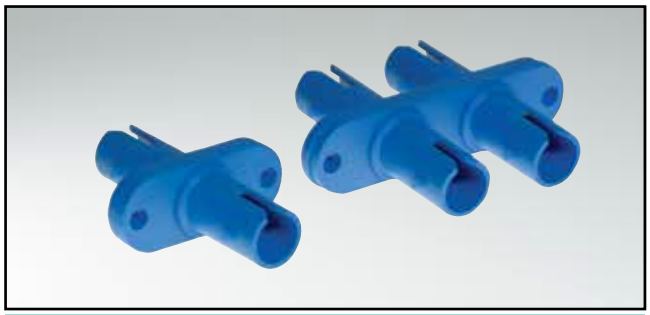



### Order data

| Type | Material sleeve | SM/MM/APC SM | Inner housing color | Mount | Part Number |
|---|---|---|---|---|---|
| Simplex adapter | ceramic | Single Mode | blue | M2x6 screw | 18-007140 |
| Simplex adapter | ceramic | Multi Mode | beige | M2x6 screw | 18-007160 |
| Simplex adapter | phosphor-bronze | Multi Mode | beige | M2x6 screw | 18-007180 |
| Simplex adapter | ceramic | APC 8°= Single Mode | green | M2x6 screw | 18-007120 |
| Simplex adapter | ceramic | Single Mode | blue | Clip | 18-007220 |
| Simplex adapter | ceramic | Multi Mode | beige | Clip | 18-007240 |
| Simplex adapter | phosphor-bronze | Multi Mode | beige | Clip | 18-007260 |
| Simplex adapter | ceramic | APC 8°= Single Mode | green | Clip | 18-007200 |
| Duplex adapter | ceramic | Single Mode | blue | M2x6 screw | 18-007300 |
| Duplex adapter | ceramic | Multi Mode | beige | M2x6 screw | 18-007320 |
| Duplex adapter | phosphor-bronze | Multi Mode | beige | M2x6 screw | 18-007340 |
| Duplex adapter | ceramic | APC 8°= Single Mode | green | M2x6 screw | 18-007280 |
| Duplex adapter | ceramic | Single Mode | blue | Clip | 18-007380 |
| Duplex adapter | ceramic | Multi Mode | beige | Clip | 18-007400 |
| Duplex adapter | phosphor-bronze | Multi Mode | beige | Clip | 18-007420 |
| Duplex adapter | ceramic | APC 8°= Single Mode | green | Clip | 18-007360 |

# ST Simplex-/Duplex-Adapters Plastic

## Single Mode – Multi Mode



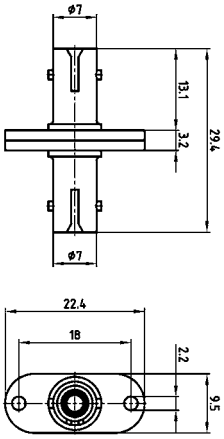
RoHS compliant

### Description

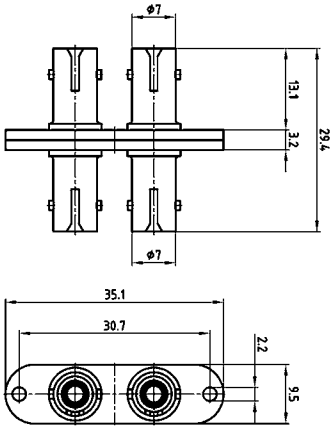
- Housing material: Plastic (UL 94V-0)
- Sleeve: Ceramic, Phosphor-bronze
- Adapters are supplied with dust caps

### Product drawing

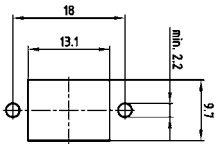
Simplex-Adapter



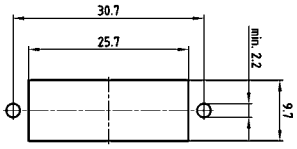

Duplex-Adapter




Panel cutout




Panel cutout




### Order data

| Type | Material sleeve | SM/MM | Housing color | Part Number |
|---|---|---|---|---|
| Simplex adapter | ceramic | Single Mode | blue | 18-007680 |
| Simplex adapter | phosphor-bronze | Multi Mode | beige | 18-007700 |
| Duplex adapter | ceramic | Single Mode | blue | 18-007720 |
| Duplex adapter | phosphor-bronze | Multi Mode | beige | 18-007740 |

# ST Simplex-Metal Adapters

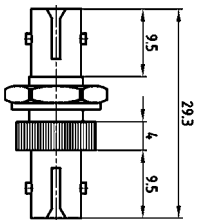
## Single Mode – Multi Mode

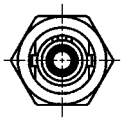
RoHS compliant

### Description

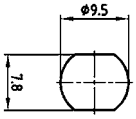
- Housing material: Zinc die-cast, nickel plated
- Sleeve: Phosphor-Bronze; Ceramic
- Adapters are supplied with dust caps

### Product drawing



Panel cutout

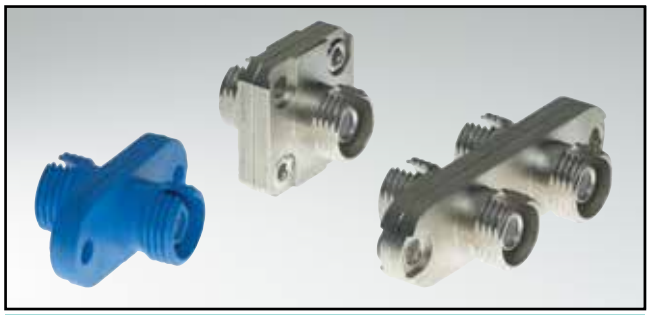



### Order data

| Type | Material sleeve | SM/MM | Housing material | Part Number |
|---|---|---|---|---|
| Simplex adapter | ceramic | Single Mode | zinc diecast | 18-007760 |
| Simplex adapter | ceramic | Multi Mode | zinc diecast | 18-007780 |
| Simplex adapter | phosphor-bronze | Multi Mode | zinc diecast | 18-007800 |

# FC Simplex-/Duplex-Adapters Plastic and Metal

## Single Mode – Multi Mode



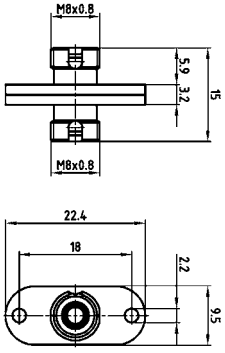
RoHS compliant

### Description

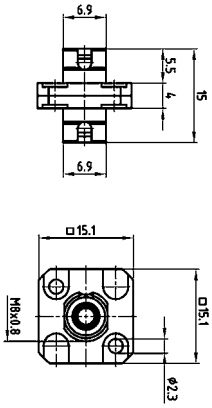
- Housing material: Plastic (UL 94V-0), zinc die-cast nickel plated
- FC-Duplex Adapter: Screws M2x6
- Sleeve: Ceramic, Phosphor-bronze
- Adapters are supplied with dust caps

### Product drawing

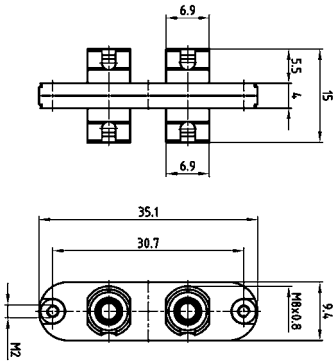
Simplex-Adapter plastic



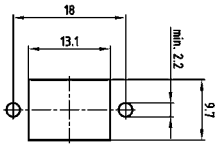

Simplex-Adapter metal



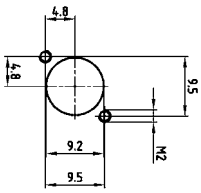

Duplex-Adapter metal



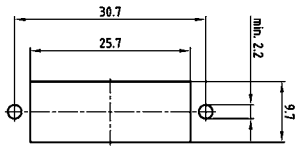

Panel cutout




Panel cutout




Panel cutout

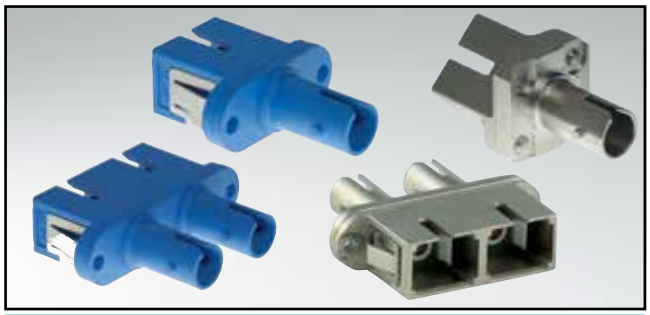



### Order data

| Type | Material sleeve | SM/MM | Housing color/ Housing material | Part Number |
|---|---|---|---|---|
| Simplex adapter plastic | ceramic | Single Mode | blue | 18-007480 |
| Simplex adapter plastic | phosphor-bronze | Multi Mode | beige | 18-007500 |
| Simplex adapter metal | ceramic | Single Mode | zinc die-cast | 18-007540 |
| Simplex adapter metal | ceramic | Multi Mode | zinc die-cast | 18-007560 |
| Simplex adapter metal | phosphor-bronze | Multi Mode | zinc die-cast | 18-007580 |
| Duplex adapter metal | ceramic | Single Mode | zinc die-cast | 18-007620 |
| Duplex adapter metal | ceramic | Multi Mode | zinc die-cast | 18-007640 |
| Duplex adapter metal | phosphor-bronze | Multi Mode | zinc die-cast | 18-007660 |

# SC/ST Simplex-/Duplex Adapters Plastic and Metal

## Single Mode – Multi Mode



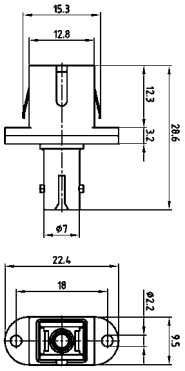
RoHS compliant

### Description

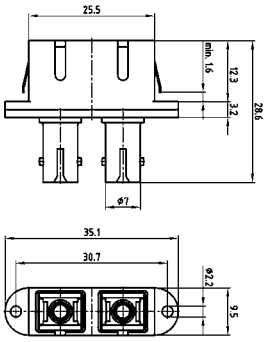
- Housing material: Plastic (UL 94V-0) and zinc die-cast, nickel plated
- Sleeve: ceramic, phosphor-bronze
- Clip: Stainless steel
- Adapters are supplied with dust caps

### Product drawing

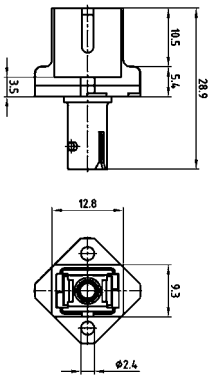
Simplex-Adapter plastic



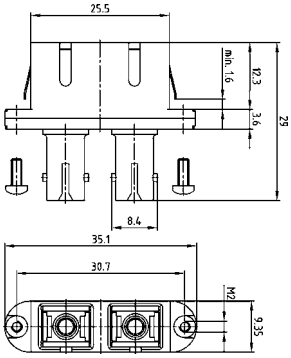

Duplex-Adapter plastic



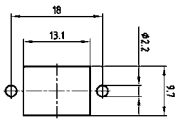

Simplex-Adapter metal



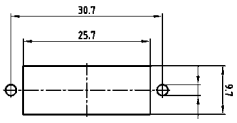

Duplex-Adapter metal



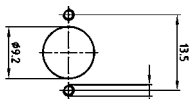

Panel cutout



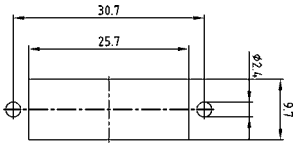

Panel cutout



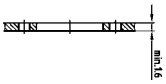

Panel cutout



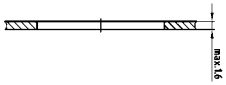

Panel cutout




Wall thickness




Wall thickness




### Order data

| Type | Material sleeve | SM/MM | Inner housing color | Part Number |
|---|---|---|---|---|
| Simplex hybrid adapter plastic | ceramic | Single Mode | blue | 18-010300 |
| Simplex hybrid adapter plastic | phosphor-bronze | Multi Mode | beige | 18-010320 |
| Duplex hybrid adapter plastic | ceramic | Single Mode | blue | 18-010340 |
| Duplex hybrid adapter plastic | phosphor-bronze | Multi Mode | beige | 18-010360 |
| Simplex hybrid adapter metal | ceramic | Single Mode | blue | 18-010500 |
| Simplex hybrid adapter metal | ceramic | Multi Mode | beige | 18-010520 |
| Simplex hybrid adapter metal | phosphor-bronze | Multi Mode | beige | 18-010540 |
| Duplex hybrid adapter metal, M2x6 | ceramic | Single Mode | blue | 18-010380 |
| Duplex hybrid adapter metal, M2x6 | ceramic | Multi Mode | beige | 18-010400 |
| Duplex hybrid adapter metal, M2x6 | phosphor-bronze | Multi Mode | beige | 18-010420 |
| Duplex hybrid adapter metal, clip | ceramic | Single Mode | blue | 18-010440 |
| Duplex hybrid adapter metal, clip | ceramic | Multi Mode | beige | 18-010460 |
| Duplex hybrid adapter metal, clip | phosphor-bronze | Multi Mode | beige | 18-010480 |

# FC/ST Simplex-Adapters Metal

## Single Mode – Multi Mode

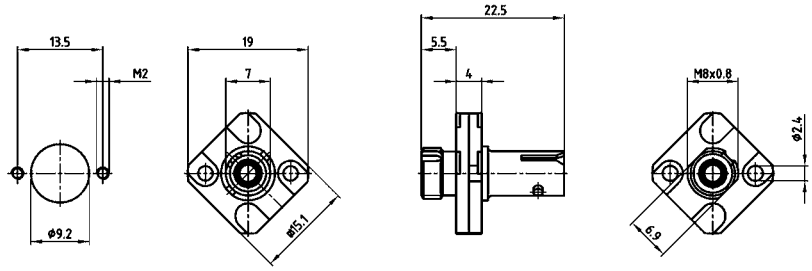
RoHS compliant

### Description

- Housing material: zinc die-cast, nickel plated
- Sleeve: Ceramic, Phosphor-bronze
- Adapters are supplied with dust caps

### Product drawing

Simplex-adapter Metal




### Order data

| Type | Material sleeve | SM/MM | Housing material | Part Number |
|---|---|---|---|---|
| Simplex adapter metal | ceramic | Single Mode | zinc die-cast | 18-010560 |
| Simplex adapter metal | ceramic | Multi Mode | zinc die-cast | 18-010580 |
| Simplex adapter metal | phosphor-bronze | Multi Mode | zinc die-cast | 18-010600 |

Section 14

# Installation and assembly tools

For standard, High Density and Combination D-SUB Connector series

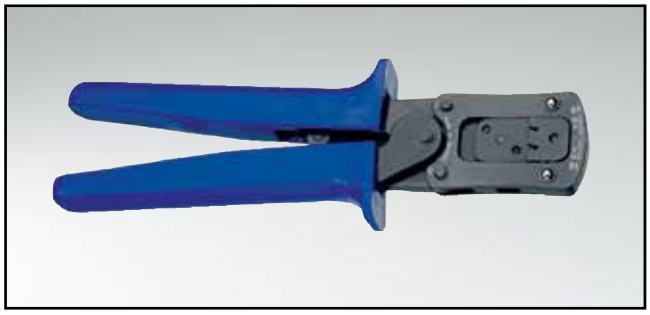
CONEC offers a variety of special tools to facilitate the reliable, rational assembly of contacts and connectors in its line of input/output connectors. These tools are practice-proven and ensure the optimal handling of our products.

For technical support and handling technic
please contact the factory.

**Description**

**Installing tool**
for D-SUB High Density contacts
**Part Number** 360X10339X

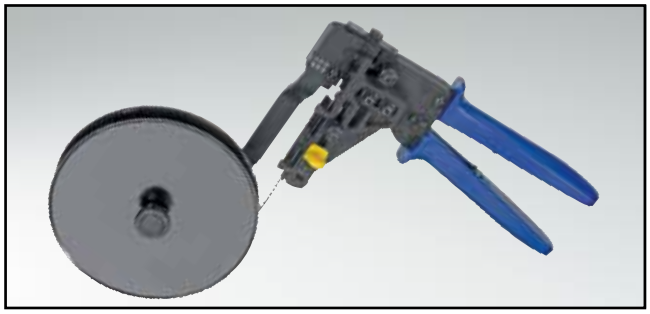
**Removal tool**
for D-SUB High Density contacts
**Part Number** 360X10349X



**Description**

**Crimp tool**
for D-SUB standard stamped and formed contacts

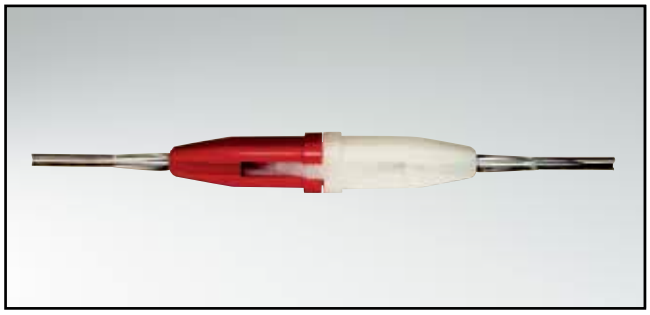
**Part Number** 360X10079X



**Description**

**Spool Crimp tool**
for D-SUB stamped contacts

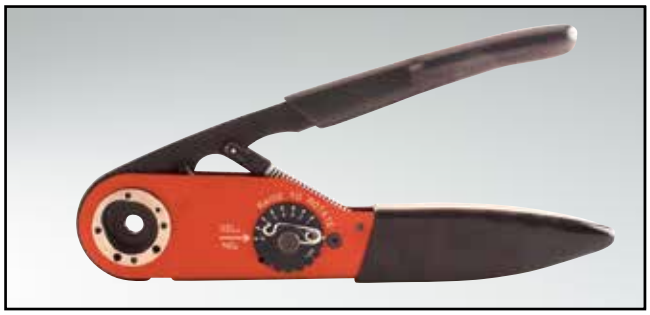
**Part Number** 360X10069X



**Description**

**Insertion and extraction tool**
for D-SUB crimp signal contacts

**Part Number** 360X12009X



**Description**

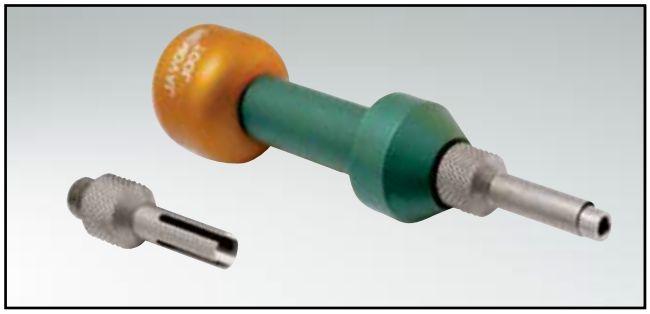
**Hand Crimp tool** for high power contacts

**Part Number** 360X10409X

**Description**

**Insert** for above hand crimp tool

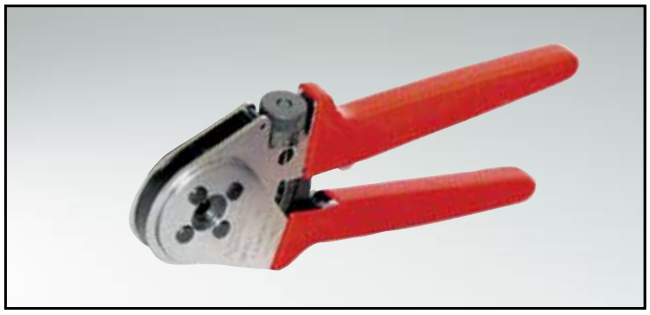
**Part Number** 360X20029X



**Description**

**Extraction tool**
for D-SUB combination connectors with coaxial, high power and high voltage contacts and with an insert for DIN EN 60603-2 high power and coaxial contacts
**Part Number** 360X10219X

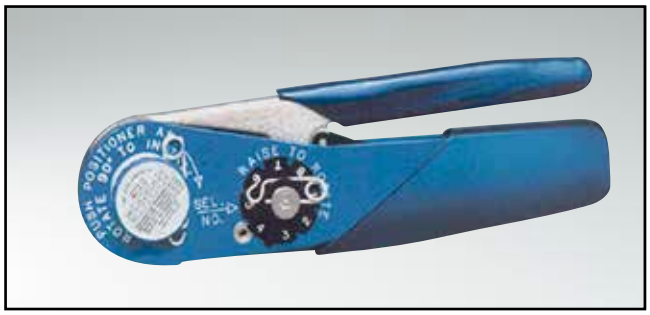
**Extraction tool (not shown)**
only for D-SUB combination connectors with coaxial, high power and high voltage contacts
**Part Number** 360X10319X



**Description**

**Hand Crimp tool**
for high power contact (solder / crimp) / angled

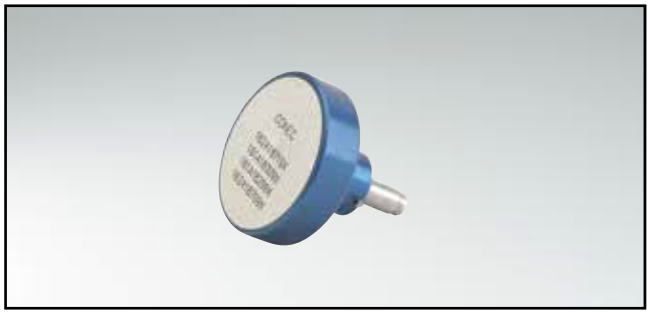
**Part Number** 360X12269X



## DESCRIPTION

**Hand Crimp tool**
for coaxial contacts (inner conductor) and D-SUB signal crimp contacts standard and High Density
(Inserts must be ordered separately)

**Part Number** 360X10329X



## DESCRIPTION

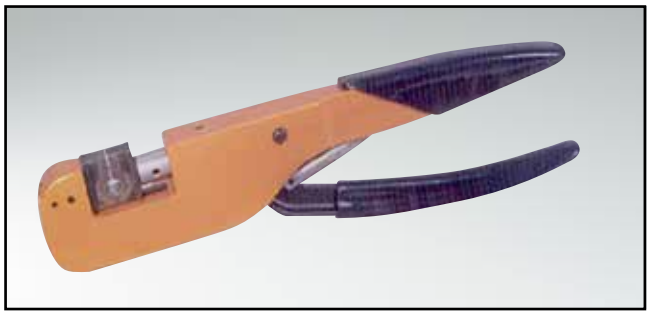
**Inserts** for above hand crimp tool

**Inserts for hand crimp tool for use with hand crimp tool 360X0329X/D-SUB Combination**

| Plug Connector | Socket connector | Tool insert | Insert cavity |
|---|---|---|---|
| 131J21019X | 132J21019X | **360X11049X** | depends on wire select cavity |
| 131J21029X | 132J21029X | **360X11049X** | |
| 131J21039X | 132J21039X | **360X11049X** | AWG → Cavity |
| 131J23019X | 132J23019X | **360X11059X** | 24 → 5 |
| 131J31019X | 132J31019X | **360X11049X** | 26 → 5 |
| 131J31029X | 132J31029X | **360X11049X** | 28 → 4 |
| 131J33019X | 132J33019X | **360X11059X** | 30 → 3 |

**Inserts for hand crimp tool for use with hand crimp tool 360X10329X/D-SUB Standard and High Density**

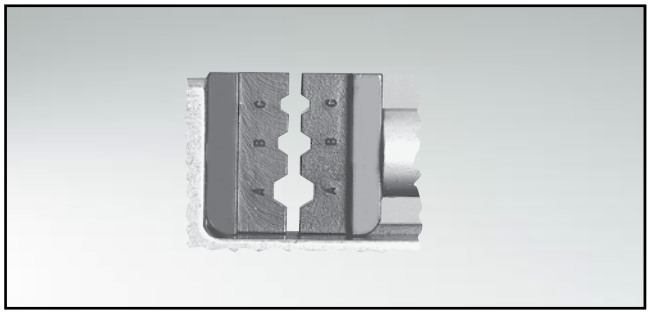
| Part Number | Tool insert | Wire Gauge (Sel#) | Wire Gauge (Sel#) | Wire Gauge (Sel#) | Wire Gauge (Sel#) |
|---|---|---|---|---|---|
| 161A18299X | **360X20069X** | 20 (7) | 22 (6) | 24 (5) | |
| 162A18709X | **360X20069X** | 20 (7) | 22 (6) | 24 (5) | |
| 161A18309X | **360X20069X** | 24 (7) | 26 (6) | 28 (5) | |
| 162A18719X | **360X20069X** | 24 (7) | 26 (6) | 28 (5) | |
| 161A18009X | **360X10629X** | 22 (4) | 24 (3) | 26 (2) | 28 (1) |
| 162A18419X | **360X10629X** | 22 (4) | 24 (3) | 26 (2) | 28 (1) |
| 131C15019X | **360X20039X** | 20 (7) | 22 (6) | 24 (5) | |
| 132C15019X | **360X20039X** | 20 (7) | 22 (6) | 24 (5) | |
| 131C15029X | **360X20039X** | 26 (6) | 28 (5) | 24 (7) | |
| 132C15029X | **360X20039X** | 26 (6) | 28 (5) | 24 (7) | |



## Description

**Hand Crimp tool**
for coaxial contacts (outer conductor),
(Inserts must be orderes separately)

**Part Number** 360X10519X



## Description

**Inserts** for above hand crimp tool

**Inserts for hand crimp tool coaxial contacts (outer conductor) for use with hand crimp tool 360X0519X**

| Plug Connector | Socket connector | Tool insert | Insert cavity |
|---|---|---|---|
| 131J20019X | 132J20019X | 360X11019X | C |
| 131J20029X | 132J20029X | 360X11019X | B |
| 131J20039X | 132J20039X | 360X11019X | A |
| 131J20049X | 132J20049X | 360X11029X | A |
| 131J20059X | 132J20059X | 360X11039X | B |
| 131J21019X | 132J21019X | 360X11019X | B |
| 131J21029X | 132J21029X | 360X11039X | B |
| 131J21039X | 132J21039X | 360X11029X | A |
| 131J22019X | 132J22019X | 360X11019X | B |
| 131J22029X | 132J22029X | 360X11019X | C |
| 131J22039X | 132J22039X | 360X11039X | B |
| 131J23019X | 132J23019X | 360X11019X | B |
| 131J30019X | 132J30019X | 360X11019X | B |
| 131J30029X | 132J30029X | 360X11019X | B |
| 131J31019X | 132J31019X | 360X11019X | B |
| 131J31029X | 132J31029X | 360X11019X | A |
| 131J33019X | 132J33019X | 360X11019X | B |

## Description

Manually operated lever press

**Part Number** 360X12369X

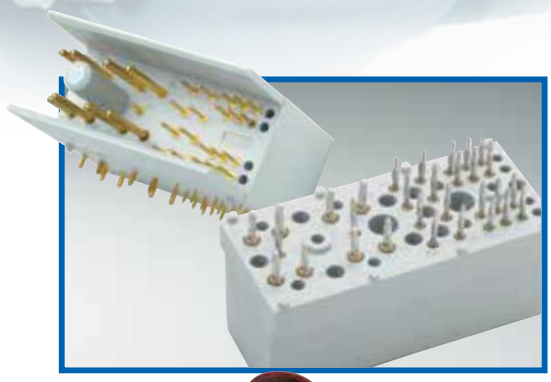
## Description

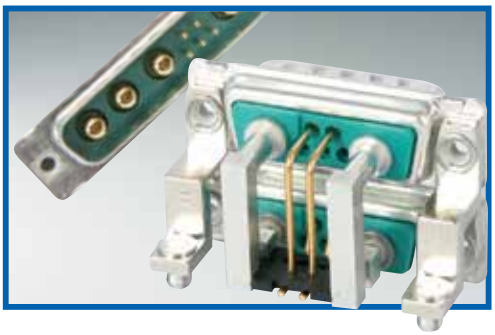
**Press in tool sets**

| Design | Type | Bestellnummer |
|---|---|---|
| Combination D-SUB Connectors | 2W2C | 360X00159A |
| Combination D-SUB Connectors | 3W3 | 360X00169A |
| Combination D-SUB Connectors | 3W3C | 360X00169A |
| Combination D-SUB Connectors | 5W5 | 360X00179A |
| Combination D-SUB Connectors | 8W8 | 360X00189A |
| Plug Connector | 9 pos. /15 pos. HD | 360X15019X |
| Plug Connector | 15 pos. /26 pos. HD | 360X15029X |
| Plug Connector | 25 pos. /44 pos. HD | 360X15039X |
| Plug Connector | 37 pos. /62 pos. HD | 360X15049X |
| Plug Connector | 50 pos. /78 pos. HD | 360X15059X |
| Socket Connector | 9 pos. /15 pos. HD | 360X15069X |
| Socket Connector | 15 pos. /26 pos. HD | 360X15079X |
| Socket Connector | 25 pos. /44 pos. HD | 360X15089X |
| Socket Connector | 37 pos. /62 pos. HD | 360X15099X |
| Socket Connector | 50 pos. /78 pos. HD | 360X15109X |

## Innovations of Conec

# Connecting with quality





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- Filter technology (EMI/RFI)
- Connectors for harsh enviroments
- Combination connectors (Power and Coax)
- Connectors referring to PICMG standard (ATCA, µTCA, CPCI)
- M12 circular connectors for High Temp, Food+Beverage amongst others

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Technology in Connectors™

Section 15

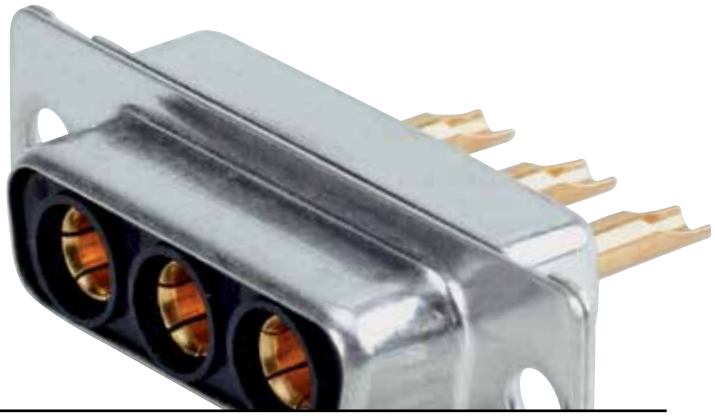
# Part Numbers

On the following pages you will find the CONEC catalogue program sorted by part numbers.

6658

66589

# 66589B 74



9B 75

6 589B 76

B 77

# Part Numbers


| Part Number | Section \| Page |
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| 2F2CPA22S41A20X | 4 \| 5 |
| 2F2CPA22S41A30X | 4 \| 5 |
| 2F2CPA22S42A10X | 4 \| 5 |
| 2F2CPA22S42A20X | 4 \| 5 |
| 2F2CPA22S42A30X | 4 \| 5 |
| 2F2CPA22S43A10X | 4 \| 5 |
| 2F2CPA22S43A20X | 4 \| 5 |
| 2F2CPA22S43A30X | 4 \| 5 |
| 2F2CPA22S44A10X | 4 \| 5 |
| 2F2CPA22S44A20X | 4 \| 5 |
| 2F2CPA22S44A30X | 4 \| 5 |
| 2F2CPA22S48A10X | 4 \| 10 |
| 2F2CPA22S48A30X | 4 \| 11 |
| 2F2CPA22S48A50X | 4 \| 11 |
| 2F2CPA22S48E20X | 4 \| 11 |
| 2F2CPA22S49A10X | 4 \| 10 |
| 2F2CPA22S49A30X | 4 \| 11 |
| 2F2CPA22S49A50X | 4 \| 11 |
| 2F2CPA22S49E20X | 4 \| 11 |
| 2F2CPA22S50A10X | 4 \| 10 |
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| 2F2CPA22S50A50X | 4 \| 11 |
| 2F2CPA22S50E20X | 4 \| 11 |
| 2F2CPA22S51A10X | 4 \| 10 |
| 2F2CPA22S51A30X | 4 \| 11 |
| 2F2CPA22S51A50X | 4 \| 11 |
| 2F2CPA22S51E20X | 4 \| 11 |
| 2F2CPA22S51E40X | 4 \| 11 |
| 2F2CPA22S51E60X | 4 \| 11 |
| 2F2CPA22S52A10X | 4 \| 10 |
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| 2F2CPA22S52E20X | 4 \| 11 |
| 2F2CPA22S52E40X | 4 \| 11 |
| 2F2CPA22S52E60X | 4 \| 11 |
| 2F2CPA22S56K20X | 4 \| 20 |
| 2F2CPA22S56K40X | 4 \| 20 |
| 2F2CPA22S57K20X | 4 \| 20 |
| 2F2CPA22S57K40X | 4 \| 20 |
| 2F2CPA22S58K20X | 4 \| 20 |
| 2F2CPA22S58K40X | 4 \| 20 |
| 2F2CPA22SP1AA0X | 4 \| 25 |
| 2F2CPA22SP1W40X | 4 \| 25 |
| 2F2CPA22SP2AA0X | 4 \| 25 |
| 2F2CPA22SP2W40X | 4 \| 25 |
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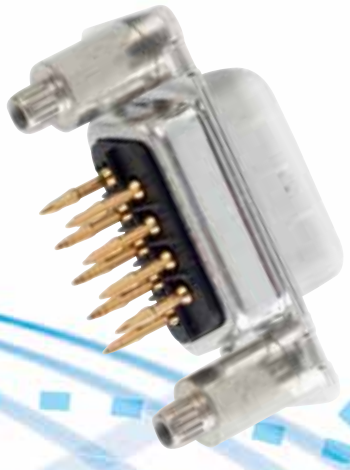

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**CONEC**
Elektronische Bauelemente GmbH
Ostenfeldmark 16
59557 Lippstadt
Deutschland

Tel. +49 2941 765-0
Fax +49 2941 76565
E-Mail info@conec.de
www.conec.com

**CONEC Corporation**
125 Sun Pac Blvd.
Brampton Ontario
Canada L6S 5Z6
Tel. +1 905 790 2200
Fax +1 905 790 2201
E-Mail info@conec.com

**CONEC**
343 Technology Drive
Garner, NC, USA 27529
Tel. +1 919 460 8800
Fax +1 919 460 0141
E-Mail info@conec.com

**CONEC (UK) Limited**
Ringway House East
Kelvin Road
Newbury, Berkshire
RG14 2DB
Tel. +44 1635 36929
Fax +44 1635 36925
E-Mail info@conec.co.uk

**CONEC Polska Sp. zo.o**
ul.Szmaragdowa 10
52-215 Wroclaw
Tel. +48 713744045
Fax +48 713744049
E-Mail info@conec.pl

**CONEC s.r.o.**
Loucka 119
76325 Ujezd
Czech Republic
Tel. +42 0577 350132
Fax +42 0577 350134
E-Mail info@conec.cz

**CONEC France SARL**
202 Rue des Chevreuils
30320 Poulx
Tel. +33 9 75267217
Fax +33 4 66570916
E-Mail info@conec.fr

**CONEC (Shanghai)**
Int. Trading Co., Ltd.
Rm. 715 Yongding Bldg.
No. 3388 Gong He Xin Rd.
200436 Shanghai
Tel. +86 21 66300930
Fax +86 21 66300911
E-Mail info@conec.cn

**CONEC GmbH** Schatz Electronic
Schubertstr. 14a
99096 Erfurt
Tel. +49 361 340110
Fax +49 361 3401111
E-Mail info@schatz-electronic.de

Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001
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**Офис по работе с юридическими лицами:**

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:
moschip.ru
moschip.ru_4
moschip.ru_6
moschip.ru_9