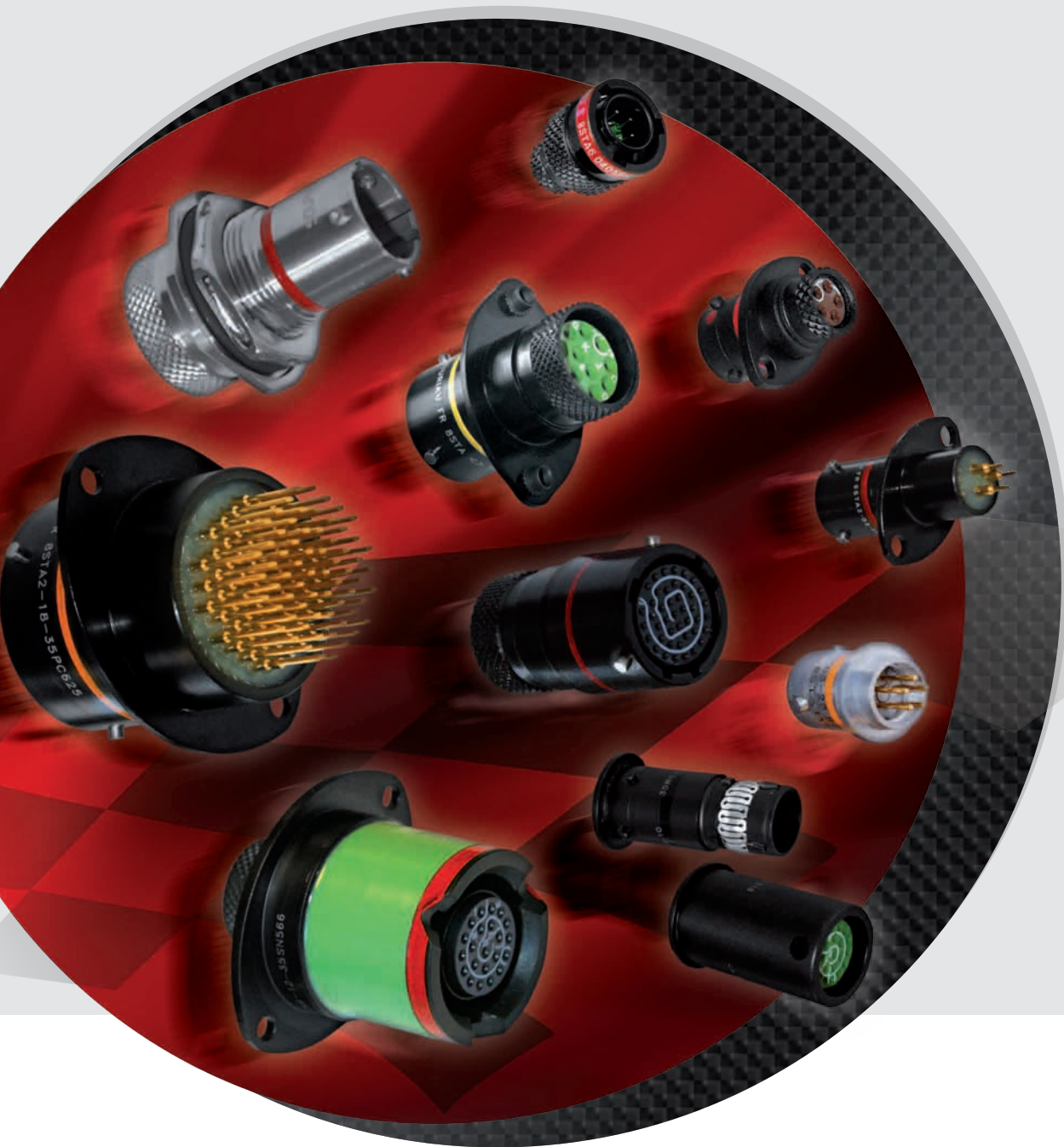




# SOURIAU

## 8STA/8TA Series

Compact Circular Connectors

Derived from MIL-DTL-38999 & JN1003



# 8STA/8TA Series



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### Standard Series

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| • High density .....                        | 26 |
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### Derived Series

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| • Quick release for steering boss system ..... | 40 |
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| • Through bulkhead .....                       | 44 |
| • Hermetic shell size 02 .....                 | 46 |
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8STA/8TA Series

# Overview

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# 8STA/8TA Series

## Overview

### Presentation

#### Compact Circular Connectors

##### 8STA/8TA Series

- **8STA & 8TA** circular connectors are derived from international military specifications **MIL-DTL-38999 & JN1003**, and are designed to withstand high levels of shock & vibration in harsh environments.
- One of the primary objectives with this product family, is to push the boundaries in terms of **miniaturization** and **weight reduction**, as demonstrated by the introduction of the worlds smallest, & now most popular connector of this type: 8STA size **02**.
- Continuing on with this theme, several new products can be found in this latest catalogue, including chassis mounted receptacles with integrated nuts, eliminating the need for nut plates, lightweight cable receptacles, hermetic size 02 connectors and High Density 8STA with pin counts normally associated with much larger connectors.
- **8STA & 8TA** Series connectors are recommended for **harsh environment** applications where size and weight should be minimized.



### Applications

#### Motorsport Applications:

Formula 1, WRC, GP2, Moto GP, Superbike, Boat racing, ...

- *Electronic boxes, sensors, harnesses, ...*
- *Miniaturization, power, high density, ...*



# 8STA/8TA Series

## Overview

### Features & benefits

#### Integrated Backshell



- ▶ Space & weight saving.
- ▶ Cost effective.
- ▶ Right angle & straight version available.
- ▶ Easy to implement with heat shrink boot.

#### Environmental Resistant



- ▶ IP67 waterproof.
- ▶ Grommet and interfacial seal as MilAero products.
- ▶ 500 mating/unmating endurance.
- ▶ Withstands most of Motorsport fluids.

#### 8STA/8TA Series



- ▶ Compact circular connector.
- ▶ Derived from MIL-DTL-38999 & JN1003.
- ▶ Many derived products ! See page 39.

#### A Complete Range



- ▶ Crimp, PC tails, coax, triax, quadax, power & thermocouple contacts.
- ▶ 12 shell sizes: from size 02, up to size 24.
- ▶ More than 70 contact layouts.

#### User Friendly



- ▶ Quick bayonet locking: 1/3 turn to mate.
- ▶ Secure connection with audible clic.
- ▶ Visual color indication when mated.
- ▶ Up to 7 color coded keyway orientations.

# 8STA/8TA Series

## Overview

### Product range overview

| Standard Series                                                                      |                                    |                                                                                      |                                        |
|--------------------------------------------------------------------------------------|------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------|
|     |                                    |    |                                        |
| <b>8STA Series shell sizes 02 to 06</b><br>See page 16                               |                                    | <b>8STA Series shell sizes 08 to 24</b><br>See page 19                               |                                        |
|  |                                    |                                                                                      |                                        |
| <b>Integrated Clinch Nuts</b><br>See page 23                                         | <b>High Density</b><br>See page 26 | <b>NEW</b>                                                                           | <b>PC Tail Contacts</b><br>See page 28 |
|   |                                    |  |                                        |
| <b>Power Contacts</b><br>See page 32                                                 |                                    | <b>8TA Series</b><br>See page 35                                                     |                                        |

# 8STA/8TA Series

## Overview

### Derived Series



#### Steering Boss System

See page 40

#### Blind Mating Plug

See page 42

#### Through Bulkhead

See page 44



#### Hermetic Shell Size 02

See page 46

#### Hermetic Fuel Tank

See page 48

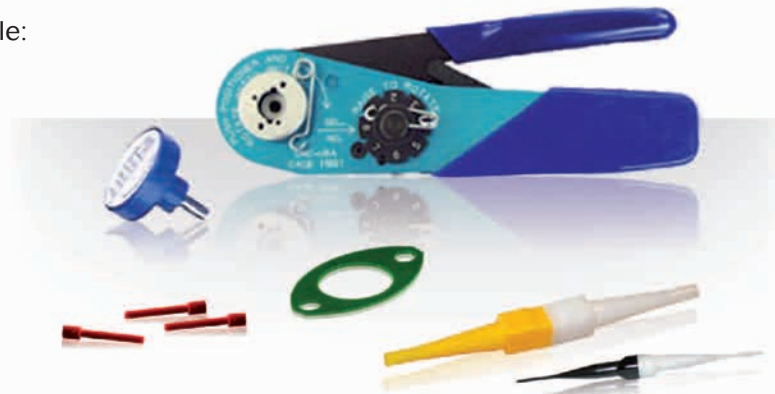
#### Fuel Immersible

See page 50

### Tooling & Accessories

- A full range of tooling and accessories available:

- . Nut plates
- . Gaskets
- . Metal protective caps
- . Filler plugs
- . Crimping tools
- . Insertion & extraction tools
- . ...



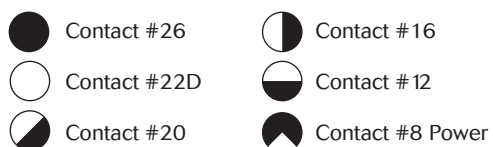
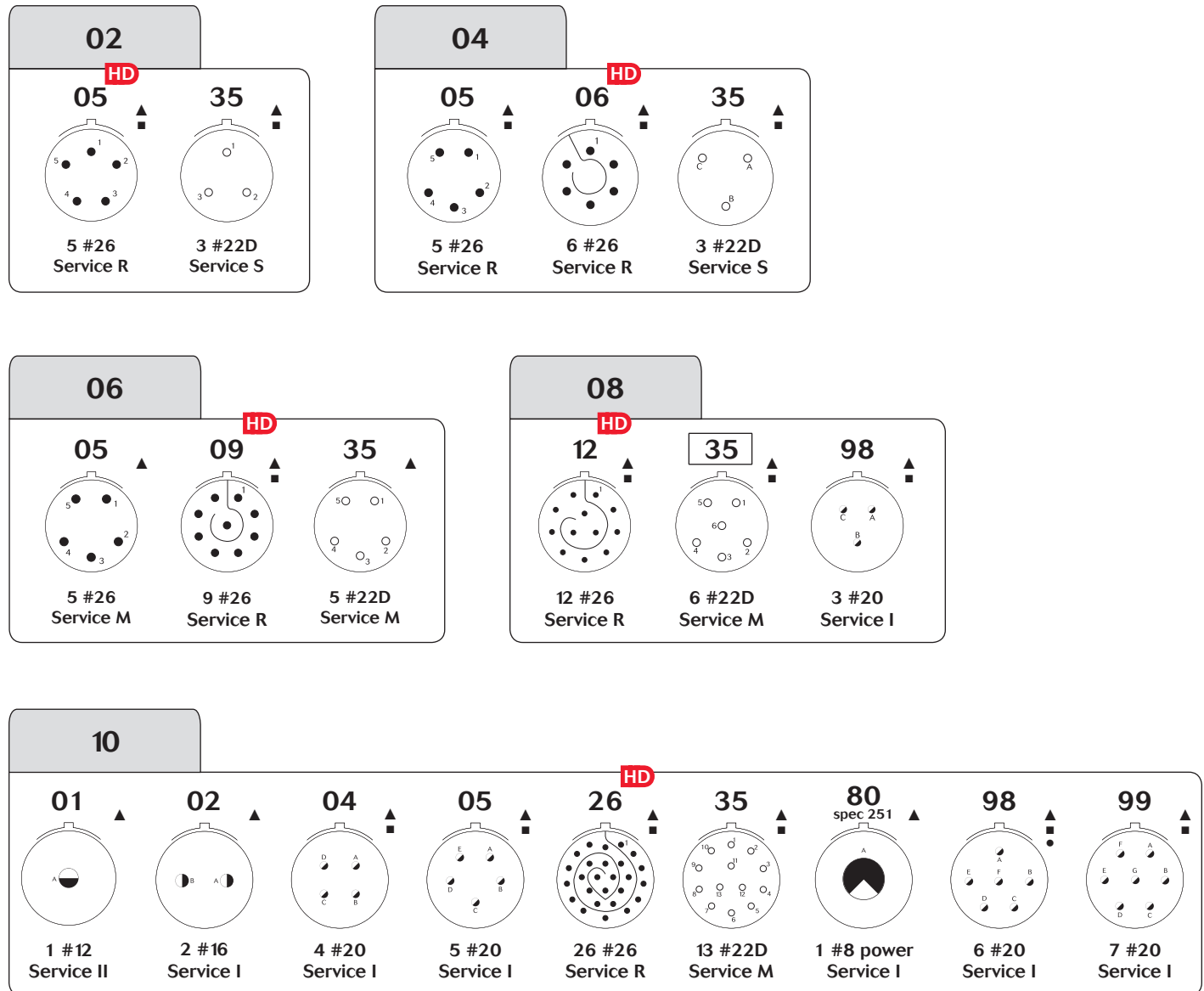
#### Common Section

page 53

# 8STA/8TA Series

## Overview

### Contact layouts (viewed from front face of male insulator)



- ▲ Crimp contact layouts
- PC tail contact layouts
- Solder cup contact layouts

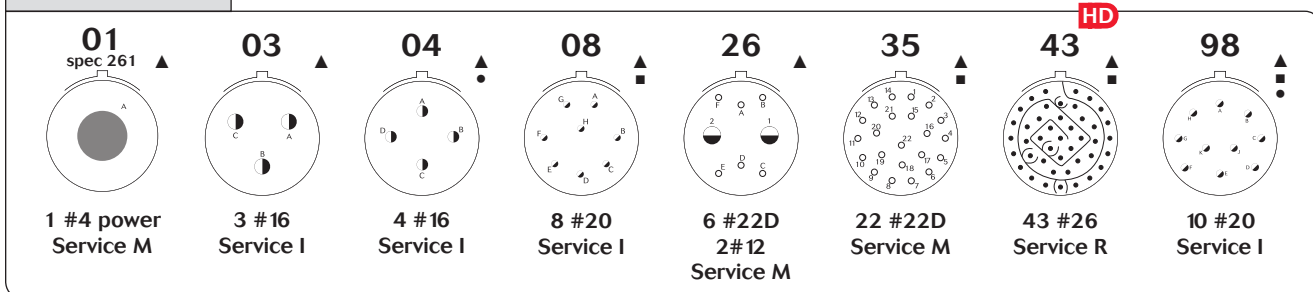
**HD** High Density layouts

For both 8STA & 8TA, all others for 8STA only

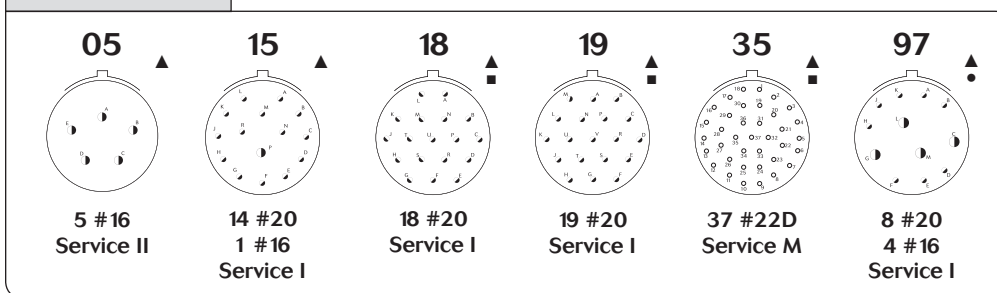
# 8STA/8TA Series

## Overview

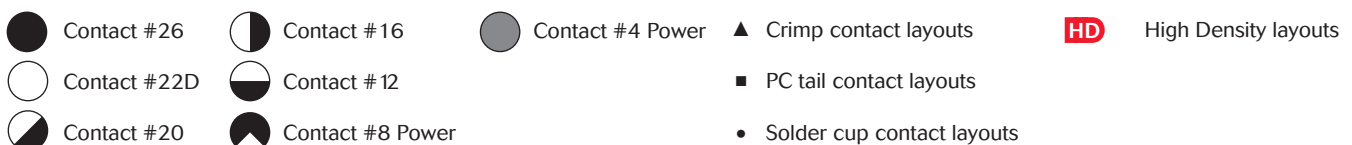
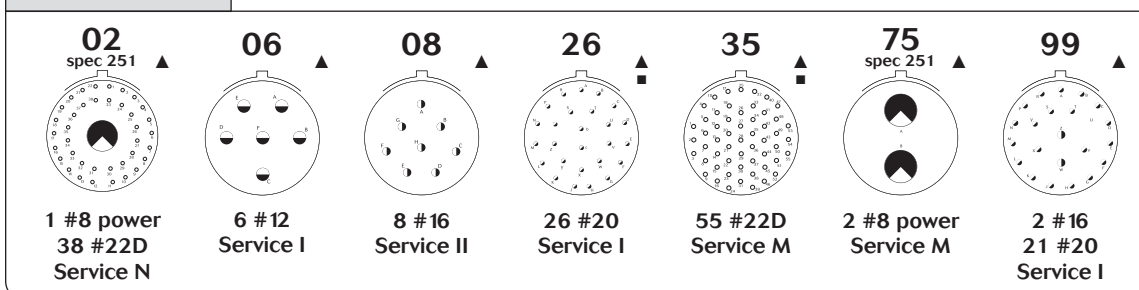
12



14



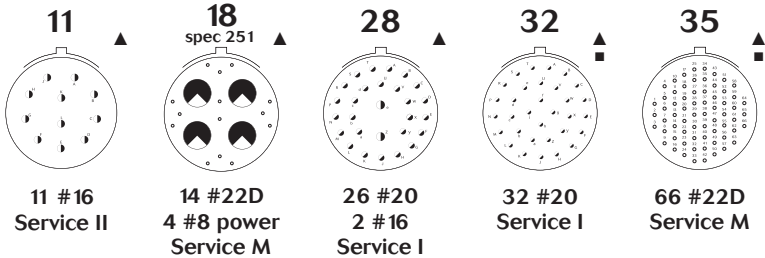
16



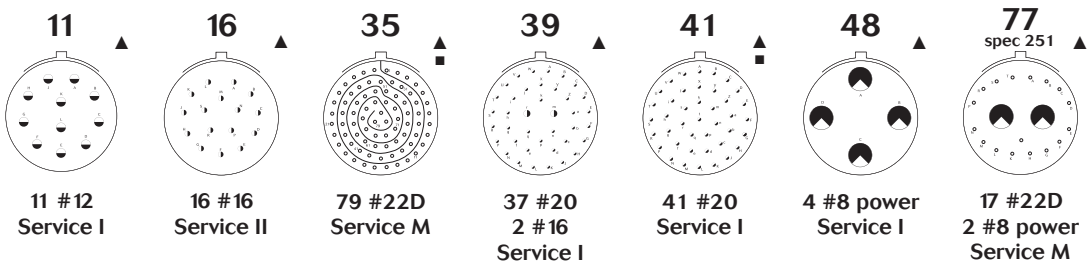
# 8STA/8TA Series

## Overview

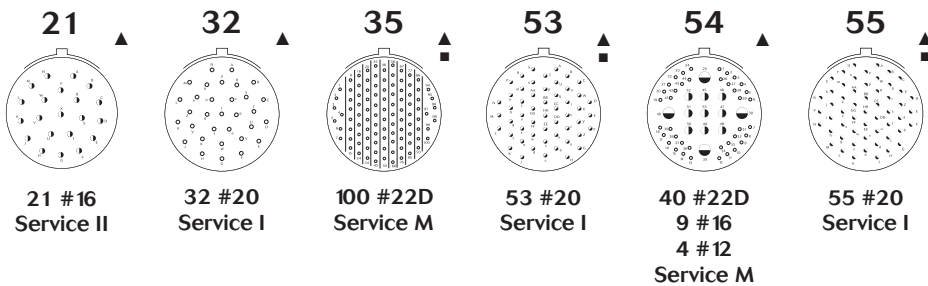
18



20



22



Contact #22D



Contact #12

▲ Crimp contact layouts



Contact #20



Contact #8 Power

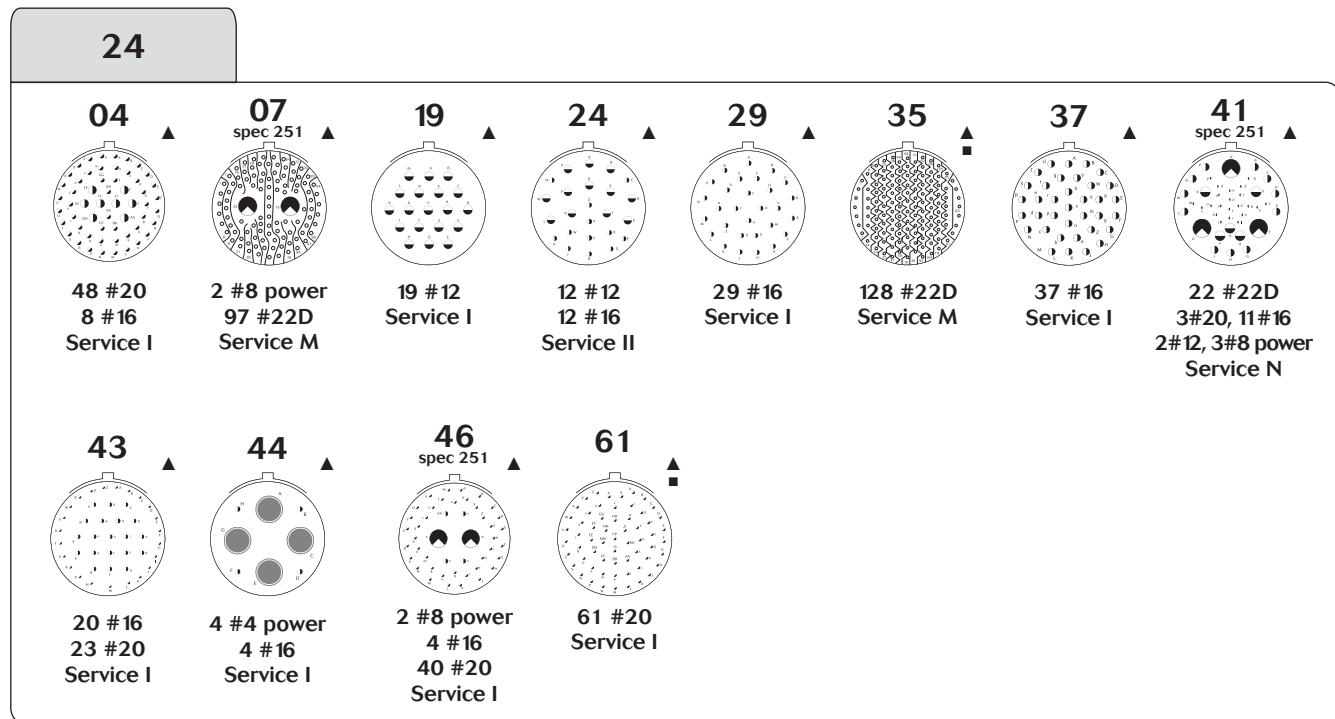
■ PC tail contact layouts



Contact #16

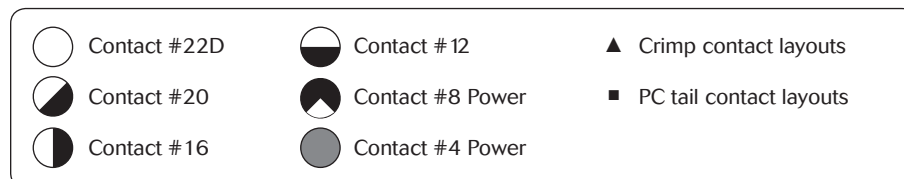
# 8STA/8TA Series

## Overview



### Test voltage rating (Vrms)

| Service | Sea level | at 21 000 m |
|---------|-----------|-------------|
| R       | 400       | N/A         |
| S       | 1000      | N/A         |
| M       | 1300      | 800         |
| N       | 1000      | 600         |
| I       | 1800      | 1000        |
| II      | 2300      | 1000        |





## 8STA/8TA Series

# Standard Series

|                                               |    |
|-----------------------------------------------|----|
| ■ 8STA Series - Shell sizes 02, 04 & 06 ..... | 16 |
| ■ 8STA Series - Shell sizes 08 to 24 .....    | 19 |
| ■ 8STA Series - Integrated clinch nuts .....  | 23 |
| ■ 8STA Series - High density .....            | 26 |
| ■ 8STA Series - PCB connectors .....          | 28 |
| ■ 8STA Series - Power contacts .....          | 32 |
| ■ 8TA Series - Compact low profile .....      | 35 |

# 8STA Series

## Shell Sizes 02, 04 & 06



## Description

- Size 02: the smallest circular connector with removable contacts #26
- Ultra compact design & very lightweight connector
- Rugged aluminium body to ensure long service life in the harshest environment
- Positive locking mechanism with locked colour indicators
- Scoop proof
- 7 color-coded keyway orientations
- Boot termination feature
- PCB option available
- Conductive black zinc or nickel plating

## Technical features

### Mechanical

- **Shell:**  
Aluminium alloy  
Glass fibre loaded plastic - composite (shell size 06 only)
- **Shell plating:**  
Conductive black zinc (standard)  
Nickel (F)  
Composite (X)
- **Insulator:**  
Thermoplastic
- **Grommet & seal:**  
Liquid silicone rubber
- **Contact:**  
Copper alloy
- **Contact plating:**  
Gold
- **Endurance:**  
500 mating cycles
- **Shock:**  
300g for 3ms and EIA-364-27
- **Vibration:**  
147m/s<sup>2</sup>, 10 to 2000Hz
- **Contact retention:**  
35 N (size 26)  
45 N (size 22D)

### Climatic

- **Operating temperature:**  
-55°C to +175°C
- **Sealing mated connectors:**  
IP67 (1 metre for 30 min minimum)
- **Salt spray:**  
Aluminum: 48 hours  
Composite: 500 hours

### Electrical

- **Test voltage:**  
Size 26: 400 Vrms  
Size 22D: 1000 Vrms (shell size 02 & 04)  
1300 Vrms (shell size 06)
- **Contact resistance:**  
Size 26: <16 mΩ  
Size 22D: <14.6 mΩ
- **Insulation resistance:**  
≥ 5000mΩ @ 400Vdc / Size 26  
≥ 5000mΩ @ 500Vdc / Size 22D
- **Contact rating:**  
Size 26: 3 Amp  
Size 22D: 5 Amp

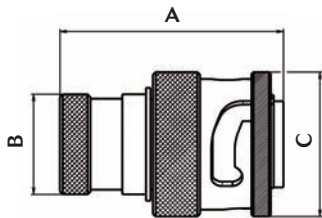
# 8STA Series

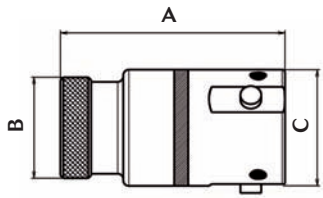
## Shell Sizes 02, 04 & 06

### Ordering information

|                                                                                                                         |      |   |  |    |    |   |   |
|-------------------------------------------------------------------------------------------------------------------------|------|---|--|----|----|---|---|
| Basic series                                                                                                            | 8STA | 0 |  | 04 | 05 | P | N |
| <b>Shell type</b>                                                                                                       |      |   |  |    |    |   |   |
| 0: Oval flange receptacle                                                                                               |      |   |  |    |    |   |   |
| 1: In-line receptacle                                                                                                   |      |   |  |    |    |   |   |
| 2: Oval flange receptacle with PCB contacts                                                                             |      |   |  |    |    |   |   |
| 6: Plug                                                                                                                 |      |   |  |    |    |   |   |
| 7: Jam nut receptacle (consult us)                                                                                      |      |   |  |    |    |   |   |
| <b>Plating</b>                                                                                                          |      |   |  |    |    |   |   |
| None: Standard version                                                                                                  |      |   |  |    |    |   |   |
| F: Nickel version                                                                                                       |      |   |  |    |    |   |   |
| X: Composite version (shell size 06 only)                                                                               |      |   |  |    |    |   |   |
| <b>Shell size</b>                                                                                                       |      |   |  |    |    |   |   |
| 02, 04, 06                                                                                                              |      |   |  |    |    |   |   |
| <b>Contact layout</b>                                                                                                   |      |   |  |    |    |   |   |
| See pages 10 to 13                                                                                                      |      |   |  |    |    |   |   |
| <b>Type of contact</b>                                                                                                  |      |   |  |    |    |   |   |
| P: Pin                                                                                                                  |      |   |  |    |    |   |   |
| S: Socket                                                                                                               |      |   |  |    |    |   |   |
| <b>Orientation</b>                                                                                                      |      |   |  |    |    |   |   |
| N: Red / A: Yellow / B: Blue / C: Orange / D: Green / E: Grey (shell size 02 only) / U: Universal (aluminum alloy only) |      |   |  |    |    |   |   |
| <b>Specification</b>                                                                                                    |      |   |  |    |    |   |   |
| None: Standard version                                                                                                  |      |   |  |    |    |   |   |
| 499: Integrated nut on the flange - M2 insert (only for shell style 0 & 2) - for more details, please see page 23       |      |   |  |    |    |   |   |
| 528: Integrated nut on the flange - M2.5 insert (only for shell style 0 & 2) - for more details, please see page 23     |      |   |  |    |    |   |   |
| 562: PCB version (jam nut shell size 02 only)                                                                           |      |   |  |    |    |   |   |
| 022: Fuel immersible version (shell sizes 04 & 06 only) - for more details, please see page 50                          |      |   |  |    |    |   |   |

### Dimensions

| Plug                                                                                |                      |                     |                       |
|-------------------------------------------------------------------------------------|----------------------|---------------------|-----------------------|
|  |                      |                     |                       |
| Shell size                                                                          | A                    | Ø B                 | Ø C                   |
| 02                                                                                  | 17.50                | 7.2                 | 10.4                  |
| 04                                                                                  | 18.3 <sup>±0.2</sup> | 8.5 <sup>±0.1</sup> | 13.4 <sup>±0.1</sup>  |
| 06                                                                                  | 21.95/22.2           | 10.1/10.35          | 15.05 <sup>±0.2</sup> |

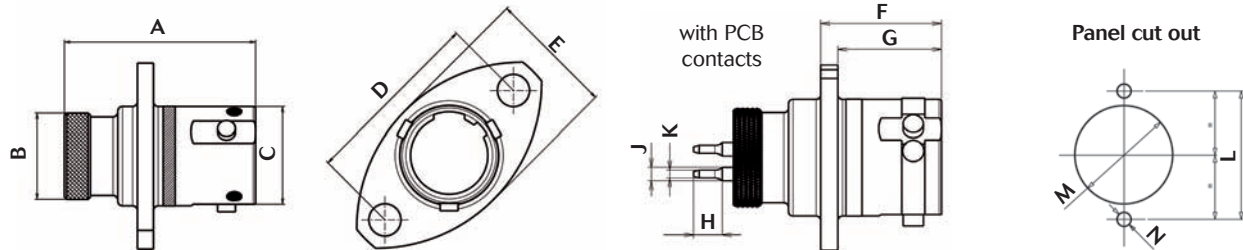
| In-line receptacle                                                                    |                      |                     |                    |
|---------------------------------------------------------------------------------------|----------------------|---------------------|--------------------|
|  |                      |                     |                    |
| Shell size                                                                            | A                    | Ø B                 | Ø C                |
| 02                                                                                    | 17.50                | 7.2                 | 8.3                |
| 04                                                                                    | 18.1 <sup>±0.2</sup> | 8.5 <sup>±0.1</sup> | 10 <sup>±0.2</sup> |
| 06                                                                                    | 22.95/23.2           | 10.1/10.35          | 11.5/11.65         |

Note: All dimensions are in millimeters (mm)

# 8STA Series

## Shell Sizes 02, 04 & 06

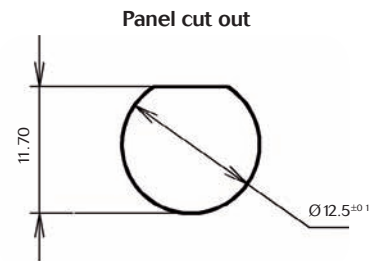
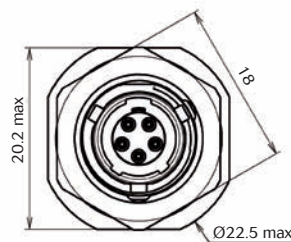
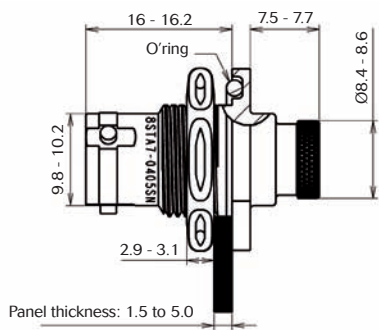
### Oval flange receptacle



| Shell size | A         | Ø B       | Ø C       | D         | E         | F         | G         | H         |
|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 02         | 17.5      | 7.2       | 8.3       | 15.3      | -         | 10        | -         | 2.45/2.55 |
| 04         | 17.9/18.3 | 8.4/8.6   | 9.8/10.2  | 16/16.4   | 12.8/13.2 | 10.4/10.7 | 8.8/9.2   | 2.5       |
| 06         | 22.9/23.2 | 10.1/10.3 | 11.5/11.6 | 17.8/18.2 | 14.7/14.9 | 12.6/12.9 | 10.7/10.8 | 3.9/4.1   |

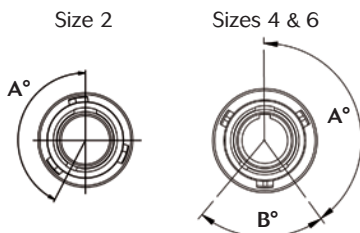
| Shell size | J         |           | K         |           | L              | Ø M           | Ø N           |
|------------|-----------|-----------|-----------|-----------|----------------|---------------|---------------|
|            | #22D      | #26       | #22D      | #26       |                |               |               |
| 02         | 1.17/1.24 | 0.95/1.15 | 0.64/0.69 | 0.49/0.54 | 15.3 $\pm$ 0.2 | 9.3 $\pm$ 0.1 | 3.1 $\pm$ 0.2 |
| 04         | 1.19/1.24 | 1.1/1.15  | 0.64/0.69 | 0.49/0.54 | 16.2 $\pm$ 0.2 | 12 $\pm$ 0.1  | 3.1 $\pm$ 0.2 |
| 06         | 1.19/1.24 | 1.1/1.15  | 0.64/0.69 | 0.49/0.54 | 18 $\pm$ 0.2   | 13 $\pm$ 0.1  | 3.1 $\pm$ 0.2 |

### Jam nut receptacle (shell size 04)



Note: for other shell sizes please consult us.

### Orientation



View from front face of plug.

| Key positions |           | N    | A      | B    | C      | D     | E    | U    |
|---------------|-----------|------|--------|------|--------|-------|------|------|
| Shell size 02 | Angles A° | 153° | 51°    | 102° | 204°   | 255°  | 306° | None |
|               | Angles B° | 75°  | 120°   | 120° | 115°   | 115°  | -    | None |
| Color band    |           | Red  | Yellow | Blue | Orange | Green | Grey | None |

Note: All dimensions are in millimeters (mm)

# 8STA Series

## Shell Sizes 08 to 24



## Description

- 5 shell styles:
- 100% scoop-proof
- EMI-RFI shielding and shell to shell continuity is provided by conductive plating and integral grounding ring fitting to the plug
- Environment sealing from interfacial seal and rear grommet (sealing IP67)
- Positive locking mechanism with locked colour indicator
- 6 color-coded keyway orientations
- Conductive black zinc or nickel plating

## Technical features

### Mechanical

- **Shell:**  
Aluminium alloy
- **Shell plating:**  
Conductive black zinc  
Nickel (F)
- **Insulator:**  
Thermoplastic
- **Grommet & seal:**  
Liquid silicone rubber
- **Contact:**  
Copper alloy
- **Contact plating:**  
Gold
- **Endurance:**  
500 mating cycles
- **Shock:**  
300g for 3ms and EIA-364-27
- **Vibration:**  
147m/s<sup>2</sup>, 10 to 2000Hz
- **Contact retention:**

|           |       |
|-----------|-------|
| Size 22D: | 45 N  |
| Size 20:  | 60N   |
| Size 16:  | 100 N |
| Size 12:  | 100 N |
| Size 8:   | 110 N |
| Size 4:   | 200 N |

### Climatic

- **Operating temperature:**  
-55°C to +175°C
- **Sealing mated connectors:**  
IP67 (1 metre for 30 min minimum)
- **Salt spray:**  
Aluminum: 48 hours

### Electrical

- **Test voltage:**

| Service   | M    | N    | I    | II   |
|-----------|------|------|------|------|
| Sea level | 1300 | 1000 | 1800 | 2300 |

- **Contact resistance:**

|           |         |
|-----------|---------|
| Size 22D: | 14.6 mΩ |
| Size 20:  | 7.3 mΩ  |
| Size 16:  | 3.8 mΩ  |
| Size 12:  | 3.5 mΩ  |
| Size 8:   | 3 mΩ    |
| Size 4:   | 2 mΩ    |
- **Insulation resistance:**  
≥ 5000 mΩ (at 500 Vdc)
- **Contact rating:**

|           |       |
|-----------|-------|
| Size 22D: | 5 A   |
| Size 20:  | 7.5 A |
| Size 16:  | 13 A  |
| Size 12:  | 23 A  |
| Size 8:   | 45 A  |
| Size 4:   | 80 A  |
- **Shell continuity:**  
≤10 mΩ

# 8STA Series

## Shell Sizes 08 to 24

### Ordering information

|                                                                                                                                                                                                                                                                                                                                                                                                                         |      |   |    |    |   |   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---|----|----|---|---|
| Basic series                                                                                                                                                                                                                                                                                                                                                                                                            | 8STA | 0 | 10 | 35 | P | N |
| <b>Shell type</b><br>0: Oval flange receptacle (for front or rear mounting)<br>1: In-line receptacle<br>2: Oval flange receptacle with PCB contacts<br>6: Plug<br>7: Jam nut receptacle                                                                                                                                                                                                                                 |      |   |    |    |   |   |
| <b>Plating</b><br>None: Standard version<br>F: Nickel version                                                                                                                                                                                                                                                                                                                                                           |      |   |    |    |   |   |
| Shell size: 08 - 10 - 12 - 14 - 16 - 18 - 20 - 22 - 24                                                                                                                                                                                                                                                                                                                                                                  |      |   |    |    |   |   |
| Contact layout: See pages 10 to 13                                                                                                                                                                                                                                                                                                                                                                                      |      |   |    |    |   |   |
| <b>Type of contact</b><br>P: Pin<br>S: Socket                                                                                                                                                                                                                                                                                                                                                                           |      |   |    |    |   |   |
| <b>Orientation</b><br>N: Red / A: Yellow / B: Blue / C: Orange / D: Green / U: Universal                                                                                                                                                                                                                                                                                                                                |      |   |    |    |   |   |
| <b>Specification</b><br>None: Standard version<br>499: Integrated nut on the flange - M2 insert (only for shell style 0 & 2) - for more details, please see page 23<br>528: Integrated nut on the flange - M2.5 insert (only for shell style 0 & 2) - for more details, please see page 23<br>523: Lightweight In-line receptacle (shell type 1)<br>022: Fuel immersible version - for more details, please see page 50 |      |   |    |    |   |   |

### Dimensions

# Oval flange receptacle

Panel cut out

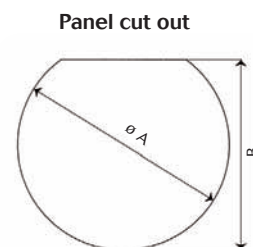
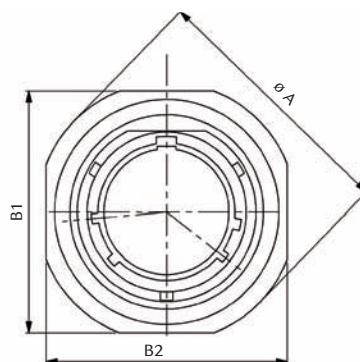
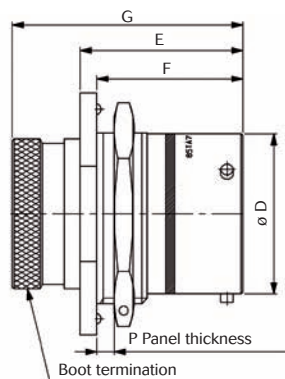
| Shell size | A max. | B $\pm 0.20$ | $\text{ØC} \begin{smallmatrix} 0 \\ +0.1 \end{smallmatrix}$ | $\text{ØD} \begin{smallmatrix} +0.2 \\ -0.13 \end{smallmatrix}$ | $E \begin{smallmatrix} 0 \\ +0.15 \end{smallmatrix}$ | $F \begin{smallmatrix} 0 \\ -0.13 \end{smallmatrix}$ | G max. | L max. | P max. | Panel cut out        |              |                      |
|------------|--------|--------------|-------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------|------------------------------------------------------|--------|--------|--------|----------------------|--------------|----------------------|
|            |        |              |                                                             |                                                                 |                                                      |                                                      |        |        |        | $\text{ØA} \pm 0.10$ | $B \pm 0.20$ | $\text{ØC} \pm 0.20$ |
| 08         | 16.50  | 21.40        | 3.20                                                        | 12.00                                                           | 17.21                                                | 16.05                                                | 33.50  | 27.20  | 3.00   | 14.50                | 21.40        | 3.60                 |
| 10         | 19.50  | 25.90        |                                                             | 15.00                                                           |                                                      |                                                      |        | 32.00  |        | 17.40                | 25.90        |                      |
| 12         | 24.00  | 29.10        |                                                             | 19.05                                                           |                                                      |                                                      |        | 35.20  |        | 21.90                | 29.10        |                      |
| 14         | 27.00  | 32.50        |                                                             | 22.22                                                           |                                                      |                                                      |        | 38.40  |        | 25.00                | 32.50        |                      |
| 16         | 30.30  | 34.80        |                                                             | 25.40                                                           |                                                      |                                                      |        | 41.00  |        | 28.20                | 34.80        |                      |
| 18         | 33.70  | 38.20        |                                                             | 28.57                                                           |                                                      |                                                      |        | 44.70  |        | 31.40                | 38.20        |                      |
| 20         | 37.00  | 41.60        |                                                             | 31.75                                                           |                                                      | 15.29                                                |        | 47.90  |        | 34.60                | 41.60        |                      |
| 22         | 40.40  | 45.00        | 3.77                                                        | 34.90                                                           |                                                      |                                                      |        | 51.00  |        | 37.60                | 45.00        |                      |
| 24         | 43.40  | 49.50        |                                                             | 38.10                                                           | 18.20                                                |                                                      |        | 55.80  |        | 41.00                | 49.50        | 4.10                 |

Note: All dimensions are in millimeters (mm)

# 8STA Series

## Shell Sizes 08 to 24

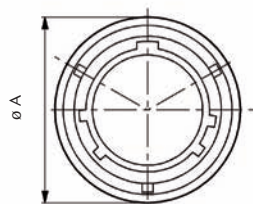
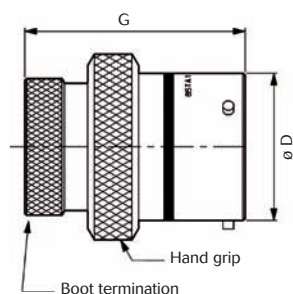
### Jam nut receptacle



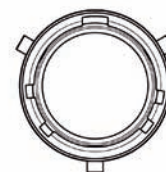
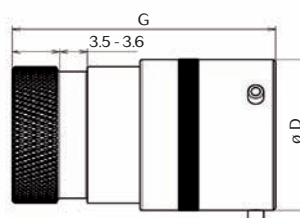
| Shell size | ØA ±0.3 | B1-B2 ±0.24 | ØD $\begin{smallmatrix} 0 \\ -0.12 \end{smallmatrix}$ | E ±0.10 | F ±0.24 | G ±0.3 | P max. | Tightening torque (mN) | Panel cut out |         |  |  |  |  |
|------------|---------|-------------|-------------------------------------------------------|---------|---------|--------|--------|------------------------|---------------|---------|--|--|--|--|
|            |         |             |                                                       |         |         |        |        |                        | ØA ±0.10      | B ±0.20 |  |  |  |  |
| 08         | 26.90   | 24.10       | 11.97                                                 | 25.91   | 23.24   | 36.71  | 3.00   | 4                      | 14.50         | 13.60   |  |  |  |  |
| 10         | 30.15   | 27.30       | 14.94                                                 |         |         |        |        | 6                      | 17.70         | 16.80   |  |  |  |  |
| 12         | 34.89   | 32.10       | 19.01                                                 |         |         |        |        | 9                      | 22.70         | 20.90   |  |  |  |  |
| 14         | 38.06   | 34.92       | 22.18                                                 |         |         |        |        | 10                     | 25.70         | 24.10   |  |  |  |  |
| 16         | 41.25   | 38.40       | 25.36                                                 |         |         |        |        | 13                     | 28.80         | 27.20   |  |  |  |  |
| 18         | 44.41   | 41.60       | 28.53                                                 | 26.71   |         | 37.51  |        | 20                     | 32.00         | 30.40   |  |  |  |  |
| 20         | 49.19   | 46.30       | 31.71                                                 |         |         |        |        | 23                     | 35.10         | 33.60   |  |  |  |  |
| 22         | 52.33   | 49.50       | 34.88                                                 |         |         |        |        | 25                     | 38.00         | 36.80   |  |  |  |  |
| 24         | 55.50   | 52.45       | 38.06                                                 |         |         |        |        | 26                     | 42.00         | 39.90   |  |  |  |  |
|            |         |             |                                                       |         |         |        |        |                        |               |         |  |  |  |  |

### In-line receptacle

#### Standard version



#### Lightweight version (specification 523)



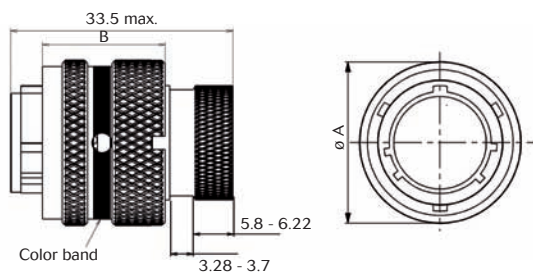
| Shell size                                                | 8    | 10   | 12    | 14    | 16   | 18    | 20    | 22    | 24   |
|-----------------------------------------------------------|------|------|-------|-------|------|-------|-------|-------|------|
| ØA max.                                                   | 17.6 | 20.7 | 25.1  | 28.3  | 31.4 | 34.7  | 38.1  | 41.2  | 44.7 |
| ØD $\begin{smallmatrix} +0.20 \\ -0.13 \end{smallmatrix}$ | 12   | 15   | 19.05 | 22.22 | 25.4 | 28.57 | 31.75 | 34.92 | 38.1 |
| G max.                                                    | 33.5 |      |       |       |      |       |       |       |      |

Note: All dimensions are in millimeters (mm)

# 8STA Series

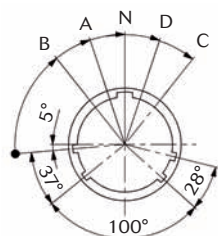
## Shell Sizes 08 to 24

### Plug

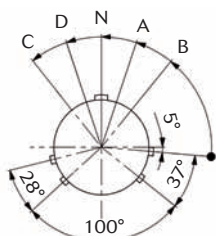


| Shell size | ØA max. | B max. |
|------------|---------|--------|
| 08         | 18.70   | 18.55  |
| 10         | 21.50   |        |
| 12         | 25.10   |        |
| 14         | 29.00   |        |
| 16         | 32.20   |        |
| 18         | 35.40   |        |
| 20         | 38.20   | 19.30  |
| 22         | 41.30   |        |
| 24         | 44.50   | 19.05  |

### Orientation



Viewed from face of receptacle



Viewed from face of plug

| Shell size | N<br>Red | A<br>Yellow | B<br>Blue | C<br>Orange | D<br>Green |
|------------|----------|-------------|-----------|-------------|------------|
| 08         | 95°      | 77°         | -         | -           | 113°       |
| 10         | 95°      | 81°         | 67°       | 123°        | 109°       |
| 12         | 95°      | 75°         | 63°       | 127°        | 116°       |
| 14         | 95°      | 74°         | 61°       | 129°        | 116°       |
| 16         | 95°      | 77°         | 65°       | 125°        | 113°       |
| 18         | 95°      | 77°         | 65°       | 125°        | 113°       |
| 20         | 95°      | 77°         | 65°       | 125°        | 113°       |
| 22         | 95°      | 80°         | 69°       | 121°        | 110°       |
| 24         | 95°      | 80°         | 69°       | 121°        | 110°       |

For each shell size, U orientation can be mateable with any other orientations.

# 8STA Series

## Integrated Clinch Nuts



## Description

- A convenient & time saving feature - Weight saving opportunities: Elimination of nut plates
- SOURIAU's Offer:
  - . 12 shell sizes available, from 02 to 24
  - . Available for standard crimp receptacle (shell type 0) & PCB receptacle (shell type 2)

## Technical features

Current solution:



Connector + Nut plate

**NEW** solution:



Integrated clinchnut on the flange

## Mechanical

- **Shell:**  
Aluminium alloy
- **Shell plating:**  
Conductive black zinc
- **Insulator:**  
Thermoplastic
- **Grommet & seal:**  
Liquid silicone rubber
- **Contact:**  
Copper alloy
- **Contact plating:**  
Gold
- **Endurance:**  
500 mating cycles
- **Shock:**  
300g for 3ms and EIA-364-27
- **Vibration:**  
147m/s<sup>2</sup>, 10 to 2000Hz
- **Contact retention:**

|           |       |
|-----------|-------|
| Size 26:  | 35 N  |
| Size 22D: | 45 N  |
| Size 20:  | 60N   |
| Size 16:  | 100 N |
| Size 12:  | 100 N |
| Size 8:   | 110 N |
| Size 4:   | 200 N |

## Climatic

- **Operating temperature:**  
-55°C to +175°C
- **Sealing mated connectors:**  
IP67 (1 metre for 30 min minimum)
- **Salt spray:**  
48 hours

## Electrical

- Please see details in each section concerned

# 8STA Series

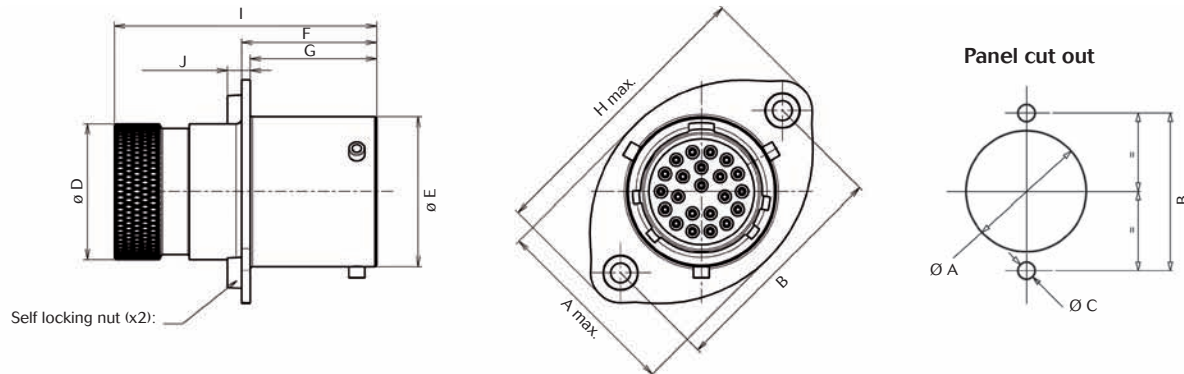
## Integrated Clinch Nuts

### Ordering information

|                                                                                                 |      |   |    |    |   |   |     |
|-------------------------------------------------------------------------------------------------|------|---|----|----|---|---|-----|
| Basic series                                                                                    | 8STA | 0 | 10 | 35 | P | N | 499 |
| Shell type                                                                                      |      |   |    |    |   |   |     |
| 0: Oval flange receptacle                                                                       |      |   |    |    |   |   |     |
| 2: Oval flange receptacle with PCB contacts                                                     |      |   |    |    |   |   |     |
| Shell size                                                                                      |      |   |    |    |   |   |     |
| 02 - 04 - 06 - 08 - 10 - 12 - 14 - 16 - 18 - 20 - 22 - 24                                       |      |   |    |    |   |   |     |
| Contact layout                                                                                  |      |   |    |    |   |   |     |
| See pages 10 to 13                                                                              |      |   |    |    |   |   |     |
| Type of contact                                                                                 |      |   |    |    |   |   |     |
| P: Pin                                                                                          |      |   |    |    |   |   |     |
| S: Socket                                                                                       |      |   |    |    |   |   |     |
| Orientation                                                                                     |      |   |    |    |   |   |     |
| N: Red / A: Yellow / B: Blue / C: Orange / D: Green / U: Universal                              |      |   |    |    |   |   |     |
| Specification (mandatory)                                                                       |      |   |    |    |   |   |     |
| 499: Integrated nut on the flange - M2 insert for sizes 02 to 06 / M3 insert for sizes 08 to 24 |      |   |    |    |   |   |     |
| 528: Integrated nut on the flange - M2.5 insert for sizes 02 to 06                              |      |   |    |    |   |   |     |

### Dimensions

#### Oval flange receptacle



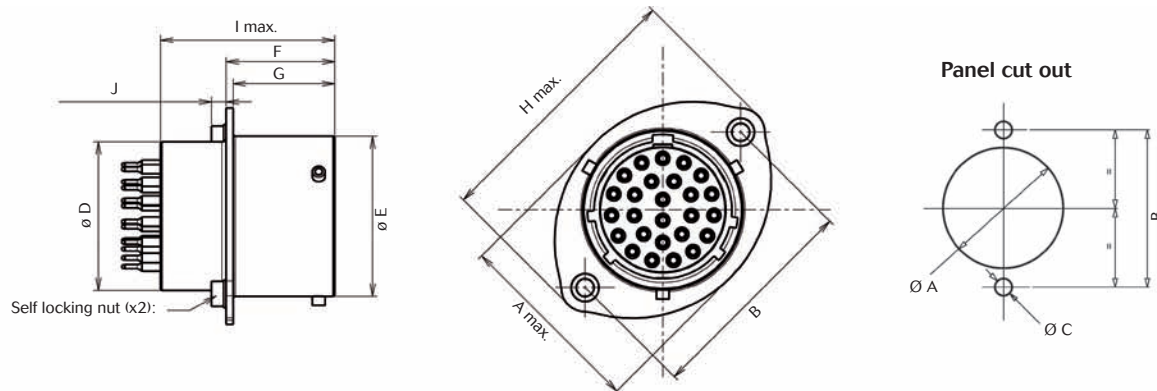
| Shell size | A max. | B $\pm 0.20$ | $\varnothing D$ | $\varnothing E$ | F     | G     | H     | I     | J    | Panel cut out            |              |                          |
|------------|--------|--------------|-----------------|-----------------|-------|-------|-------|-------|------|--------------------------|--------------|--------------------------|
|            |        |              |                 |                 |       |       |       |       |      | $\varnothing A \pm 0.10$ | $B \pm 0.20$ | $\varnothing C \pm 0.20$ |
| 02         | 10.50  | 15.4         | 7.20            | 8.30            | 10.15 | 8.80  | 21.4  | 16.30 | 3.22 | 9.30                     | 15.30        | 3.10                     |
| 04         | 13.2   | 16.4         | 8.6             | 10.2            | 10.7  | 9.2   | 22.3  | 18.30 | 3.37 | 12.00                    | 16.20        |                          |
| 06         | 15.0   | 18.2         | 10.35           | 12.0            | 12.95 | 10.95 | 24.0  | 23.25 | 3.83 | 13.00                    | 18.00        |                          |
| 08         | 16.50  | 21.40        | 10.62           | 12.00           | 17.21 | 16.05 | 29.25 | 33.4  | 3.32 | 14.50                    | 21.40        | 3.60                     |
| 10         | 19.50  | 25.90        | 13.72           | 15.00           |       |       | 33.75 |       |      | 17.40                    | 25.90        |                          |
| 12         | 24.00  | 29.10        | 17.26           | 19.05           |       |       | 36.95 |       |      | 21.90                    | 29.10        |                          |
| 14         | 27.00  | 32.50        | 20.41           | 22.22           |       |       | 40.35 |       |      | 25.00                    | 32.50        |                          |
| 16         | 30.30  | 34.80        | 23.60           | 25.40           |       |       | 42.65 |       |      | 28.20                    | 34.80        |                          |
| 18         | 33.70  | 38.20        | 26.76           | 28.57           |       | 15.29 | 46.05 |       |      | 31.40                    | 38.20        | 4.10                     |
| 20         | 37.00  | 41.60        | 29.93           | 31.75           |       |       | 49.45 |       |      | 34.60                    | 41.60        |                          |
| 22         | 40.40  | 45.00        | 33.11           | 34.90           |       |       | 52.85 |       |      | 37.60                    | 45.00        |                          |
| 24         | 43.40  | 49.50        | 36.30           | 38.10           | 18.20 |       | 57.35 |       |      | 41.00                    | 49.50        |                          |

Note: All dimensions are in millimeters (mm)

# 8STA Series

## Integrated Clinch Nuts

### Oval flange receptacle with PCB contacts



| Shell size | A max. | B $\pm 0.20$ | $\varnothing D$ max. | E     | F     | G     | H max. | I max. | J    | Panel cut out            |              |                          |
|------------|--------|--------------|----------------------|-------|-------|-------|--------|--------|------|--------------------------|--------------|--------------------------|
|            |        |              |                      |       |       |       |        |        |      | $\varnothing A \pm 0.10$ | B $\pm 0.20$ | $\varnothing C \pm 0.20$ |
| 02         | 10.5   | 15.3         | 7.2                  | 8.3   | 10.15 | 8.8   | 21.3   | 17.5   | 2.05 | 9.30                     | 15.30        | 3.10                     |
| 04         | 13.2   | 16.4         | 8.6                  | 10.2  | 10.7  | 9.2   | 22.2   | 18.3   |      | 12.00                    | 16.20        |                          |
| 06         | 15.0   | 18.2         | 10.35                | 12.0  | 12.95 | 10.95 | 24.0   | 23.25  |      | 13.00                    | 18.00        |                          |
| 08         | 16.50  | 21.40        | 11.10                | 12.00 | 17.21 | 16.05 | 42.40  | 27.65  | 2.72 | 14.50                    | 21.40        | 3.60                     |
| 10         | 19.50  | 25.90        | 13.90                | 14.87 |       |       |        |        |      | 17.40                    | 25.90        |                          |
| 12         | 24.00  | 29.10        | 17.35                | 19.05 |       |       |        |        |      | 21.90                    | 29.10        |                          |
| 14         | 27.00  | 32.50        | 20.50                | 22.22 |       |       |        |        |      | 25.00                    | 32.50        |                          |
| 16         | 30.30  | 34.80        | 23.70                | 25.40 |       |       |        |        |      | 28.20                    | 34.80        |                          |
| 18         | 33.70  | 38.20        | 26.91                | 28.57 |       |       |        |        |      | 31.40                    | 38.20        |                          |
| 20         | 37.00  | 41.60        | 30.11                | 31.77 | 15.29 |       |        |        |      | 34.60                    | 41.60        |                          |
| 22         | 40.40  | 45.00        | 33.20                | 34.90 |       |       |        |        |      | 37.60                    | 45.00        |                          |
| 24         | 43.40  | 49.50        | 36.40                | 38.10 | 18.20 |       |        |        |      | 41.00                    | 49.50        | 4.10                     |

For gaskets, please see page 58.

# 8STA Series

## High Density

NEW



## Description

- Derived from MIL-DTL-38999 & JN1003 standard
- Rugged aluminium body to ensure long service life in the harshest environment
- 100% scoop proof
- Available in 6 shell sizes:  
02-05; 04-06; 06-09; 08-12; 10-26; 12-43
- Contacts #26 for AWG 24 to 30

## Technical features

### Mechanical

- **Shell:**  
Aluminium alloy
- **Shell plating:**  
Conductive black zinc  
Nickel (F)
- **Insulator:**  
Thermoplastic
- **Grommet & seal:**  
Liquid silicone rubber
- **Contact:**  
Copper alloy
- **Contact plating:**  
Gold
- **Endurance:**  
500 mating cycles
- **Shock:**  
300g for 3ms and EIA-364-27
- **Vibration:**  
147m/s<sup>2</sup>, 10 to 2000Hz

### Climatic

- **Operating temperature:**  
-55°C to +175°C
- **Sealing mated connectors:**  
IP67 (1 metre for 30 min minimum)
- **Salt spray:**  
48 hours

### Electrical

- **Contact resistance:**  
Size 26: 16mΩ
- **Insulation resistance:**  
≥5000mΩ (at 500Vdc)
- **Contact rating:**  
Size 26: 3 Amp
- **Shell continuity:**  
≤10mΩ

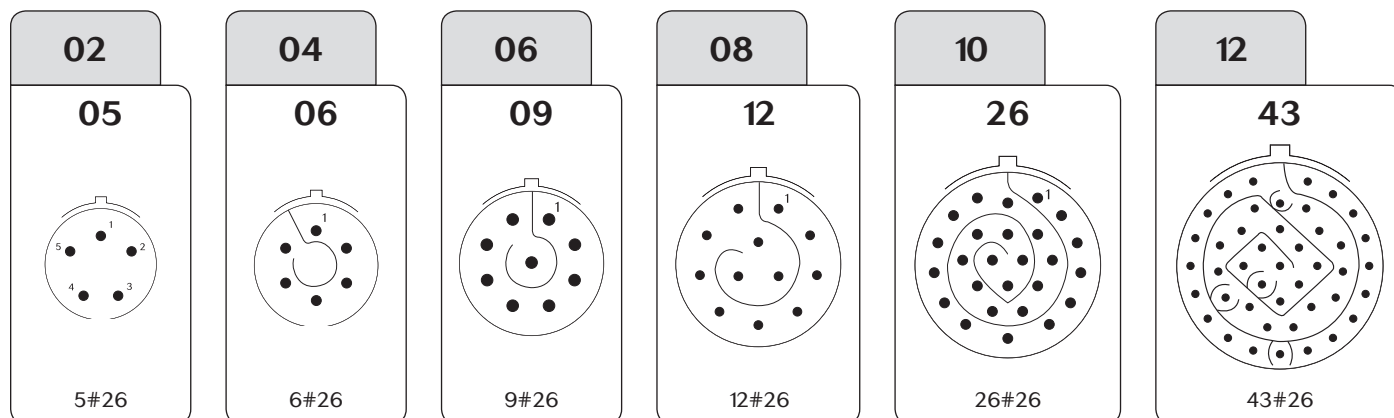
# 8STA Series

## High Density

### Ordering information

| Basic series                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 8STA | 6 | 12 | 43 | P | N |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---|----|----|---|---|
| <b>Shell type:</b><br>0: Oval flange receptacle<br>1: In line receptacle<br>2: Oval Flange receptacle with PCB contacts<br>6: Plug<br>7: Jam nut receptacle                                                                                                                                                                                                                                                                                                                                               |      |   |    |    |   |   |
| <b>Shell size:</b><br>02; 04; 06; 08; 10; 12                                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |   |    |    |   |   |
| <b>Contact layout:</b> See below                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |      |   |    |    |   |   |
| <b>Type of contact:</b><br>P: Pin<br>S: Socket                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |   |    |    |   |   |
| <b>Orientation:</b><br>N: Red; A: Yellow; B: Blue; C: Orange; D: Green; E: Grey (shell size 02 only); U: Universal                                                                                                                                                                                                                                                                                                                                                                                        |      |   |    |    |   |   |
| <b>Specification:</b><br>None : Standard crimp version<br>499: Integrated clinch nut on the flange:<br>. M2 insert (shell type 0 & 2 only for shell sizes 04 & 06)<br>. M3 insert (shell type 0 & 2 only for shell sizes 08, 10 & 12)<br>523: Light weight in line receptacle - for shell sizes 08 to 12 (shell type 1 only)<br>528: Integrated clinch nut on the flange: M2.5 insert (shell type 0 & 2 only for shell sizes 04 & 06)<br>566: Rackable plug - for shell sizes 10 & 12 (shell type 6 only) |      |   |    |    |   |   |

### Contact layouts



# 8STA Series

## PCB Connectors



## Description

- Derived from MIL-DTL-38999 & Eurofighter JN 1003, 8STA connectors use the extensive SOURIAU range of 38999 medium and high density signal contact layouts
- Rugged aluminium body to ensure long service life in the harshest environment
- 8STA PCB connectors are available in shell sizes 02 to 24 (12 sizes)
- 100% scoop proof
- Available with clinch nut
- 6 colour coded keyway orientations

## Technical features

### Mechanical

- **Shell:** Aluminium
- **Shell plating:** Conductive black zinc
- **Insulator:** Liquid silicone rubber
- **Seal:** Liquid silicone rubber
- **Contact:** Copper alloy
- **Contact plating:** Gold
- **Endurance:** 500 matings/unmatings
- **Shock:** 300g for 3ms and EIA-364-27
- **Vibration:** 147m/s<sup>2</sup>, 10 to 2000 Hz

### Electrical

- **Contact resistance:**
  - Size 26: 16 mΩ
  - Size 22D: 14.6 mΩ
  - Size 20: 7.3 mΩ
  - Size 16: 3.8 mΩ
- **Insulation resistance:**
  - ≥ 5000mΩ (at 500Vdc)
- **Contact rating:**
  - Size 26: 3 Amp
  - Size 22D: 5 Amp
  - Size 20: 7.5 Amp
  - Size 16: 13 Amp
- **Shell continuity:** ≤ 10mΩ

### Climatic

- **Temperature range:** -55°C to +175°C
- **Sealing mated connectors:**
  - IP 67 (1 metre for 30 min minimum)
- **Salt spray:** 48 hours

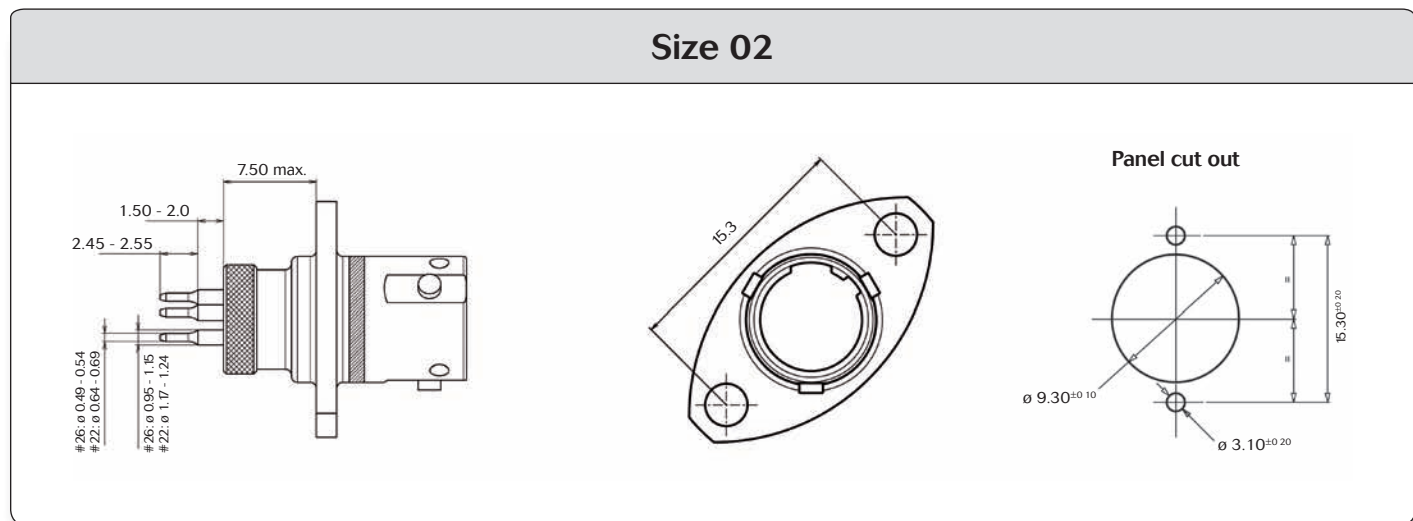
# 8STA Series

## PCB Connectors

### Ordering information

|                                                                                          |      |   |    |    |   |   |   |
|------------------------------------------------------------------------------------------|------|---|----|----|---|---|---|
| Basic series                                                                             | 8STA | 2 | 12 | 35 | P | N | - |
| <b>Shell type:</b>                                                                       |      |   |    |    |   |   |   |
| 2: Oval flange receptacle with PCB contacts                                              |      |   |    |    |   |   |   |
| <b>Shell size:</b>                                                                       |      |   |    |    |   |   |   |
| 02; 04; 06; 08; 10; 12; 14; 16; 18; 20; 22; 24                                           |      |   |    |    |   |   |   |
| <b>Contact layout:</b>                                                                   |      |   |    |    |   |   |   |
| See pages 10 to 13                                                                       |      |   |    |    |   |   |   |
| <b>Type of contact:</b>                                                                  |      |   |    |    |   |   |   |
| P: Pin                                                                                   |      |   |    |    |   |   |   |
| S: Socket                                                                                |      |   |    |    |   |   |   |
| <b>Orientation:</b>                                                                      |      |   |    |    |   |   |   |
| N; A; B; C; D; E (E only for size 02)                                                    |      |   |    |    |   |   |   |
| <b>Specification :</b>                                                                   |      |   |    |    |   |   |   |
| None: Standard version                                                                   |      |   |    |    |   |   |   |
| 499: Integrated clinch nut on flange (M2 for sizes 02, 04 & 06; M3 for sizes 08 to 24)   |      |   |    |    |   |   |   |
| 528: Integrated clinch nut on flange (M2.5 for sizes 02, 04 & 06)                        |      |   |    |    |   |   |   |
| 571: Specific PC tail (length = 4.6mm) - only available for sizes 08 to 24 (see page 31) |      |   |    |    |   |   |   |
| 625: Specific PC tail (length = 8.5mm) - only available for sizes 08 to 24 (see page 31) |      |   |    |    |   |   |   |

### Dimensions

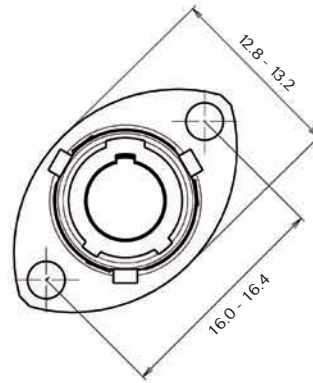
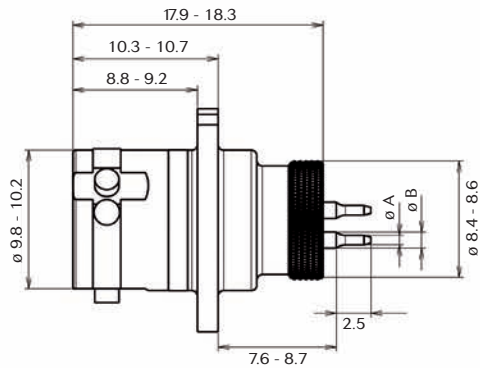


Note: All dimensions are in millimeters (mm)

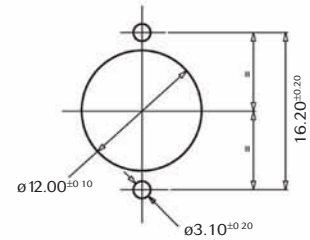
# 8STA Series

## PCB Connectors

### Size 04



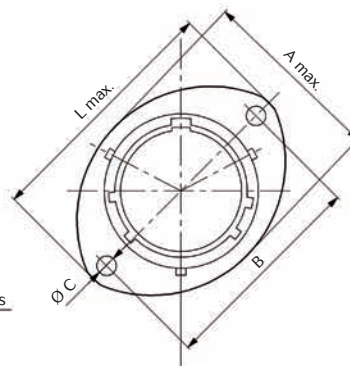
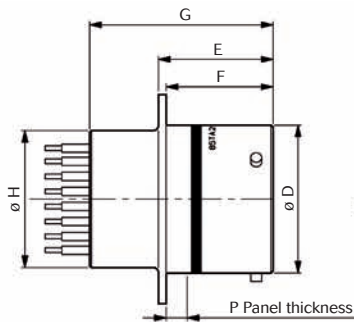
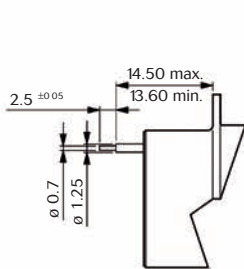
Panel cut out



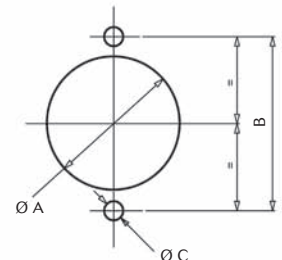
| Layouts      | Contacts        | ø A         | ø B         |
|--------------|-----------------|-------------|-------------|
| <b>04-35</b> | 3 contacts #22D | 0.64 / 0.69 | 1.19 / 1.24 |
| <b>04-05</b> | 5 contacts #26  | 0.49 / 0.54 | 1.1 / 1.15  |

For contact P/N, please consult us

### Sizes 08 to 24



Panel cut out



| Shell size | A max. | B $\pm 0.20$ | $\varnothing C^{\circ}$ | $\varnothing D^{+0.2}$ | E $^{\circ}$ | F $^{\circ}$ | G max. | $\varnothing H$ max. | L max. | P max. | Panel cut out              |              |                            |
|------------|--------|--------------|-------------------------|------------------------|--------------|--------------|--------|----------------------|--------|--------|----------------------------|--------------|----------------------------|
|            |        |              |                         |                        |              |              |        |                      |        |        | $\varnothing A^{\pm 0.10}$ | B $\pm 0.20$ | $\varnothing C^{\pm 0.20}$ |
| 08         | 16.50  | 21.40        | 3.20                    | 12.00                  | 17.21        | 16.05        | 27.65  | 11.10                | 27.20  | 3.00   | 14.50                      | 21.40        | 3.60                       |
| 10         | 19.50  | 25.90        |                         | 14.97                  |              |              |        | 13.90                | 32.00  |        | 17.40                      | 25.90        |                            |
| 12         | 24.00  | 29.10        |                         | 19.05                  |              |              |        | 17.35                | 35.20  |        | 21.90                      | 29.10        |                            |
| 14         | 26.90  | 32.50        |                         | 22.22                  |              |              |        | 20.50                | 38.40  |        | 25.00                      | 32.50        |                            |
| 16         | 30.30  | 34.80        |                         | 25.40                  |              |              |        | 23.70                | 41.00  |        | 28.20                      | 34.80        |                            |
| 18         | 33.70  | 38.20        |                         | 28.57                  |              |              |        | 26.91                | 44.70  |        | 31.40                      | 38.20        |                            |
| 20         | 37.00  | 41.60        |                         | 31.77                  |              | 30.11        |        | 47.80                | 34.60  |        | 41.60                      |              |                            |
| 22         | 40.40  | 45.00        | 34.90                   | 33.20                  | 51.00        | 37.60        |        | 45.00                |        |        |                            |              |                            |
| 24         | 43.40  | 49.50        | 3.77                    | 38.10                  | 18.20        |              |        | 36.40                | 55.80  |        |                            | 41.00        | 49.50                      |

Note: All dimensions are in millimeters (mm)

# 8STA Series

## PCB Connectors

### Specific PCB versions

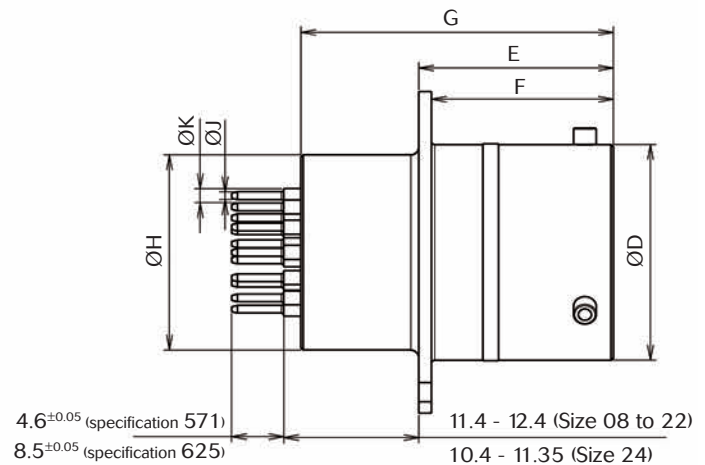
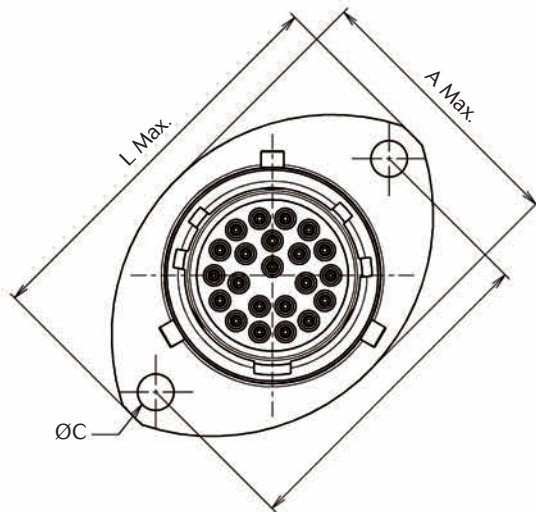
#### Specification 571

Available from shell sizes 08 to 24 with layouts using contacts #22D et #20  
 Specific tail length = 4.6 mm  
 Also available with clinch nut: please consult us.

#### Specification 625

Available from shell sizes 08 to 24 with layouts using contacts #22D et #20  
 Specific tail length = 8.5 mm  
 Also available with clinch nut: please consult us.

#### Dimensions



| Shell size | A Max | B $\pm 0.2$ | $\varnothing C \pm 0.15$ | $\varnothing D \pm 0.2$ | E $\pm 0.15$ | F $\pm 0.13$ | G Max | $\varnothing H$ Max | L Max |
|------------|-------|-------------|--------------------------|-------------------------|--------------|--------------|-------|---------------------|-------|
| 08         | 16.5  | 21.4        | 3.15                     | 12                      | 17.21        | 16.05        | 27.65 | 11.1                | 27.2  |
| 10         | 19.5  | 25.9        |                          | 14.97                   |              |              |       | 13.9                | 32    |
| 12         | 24    | 29.1        |                          | 19.05                   |              |              |       | 17.35               | 35.2  |
| 14         | 26.9  | 32.5        |                          | 22.22                   |              |              |       | 20.5                | 38.4  |
| 16         | 30.3  | 34.8        |                          | 25.4                    |              |              |       | 23.7                | 41    |
| 18         | 33.7  | 38.2        |                          | 28.57                   |              |              |       | 26.91               | 44.7  |
| 20         | 37    | 41.6        |                          | 31.77                   |              | 30.11        |       | 47.8                |       |
| 22         | 40.2  | 45          |                          | 34.9                    |              | 33.2         |       | 51                  |       |
| 24         | 43.4  | 49.5        | 3.77 $\pm 0.15$          | 38.1                    | 18.2         |              |       | 36.4                | 55.8  |

Note: All dimensions are in millimeters (mm)

# 8STA Series

## Power Contacts



## Description

- A #4 contact for a wide range of wire sizes:  
Size 8, 10, 16, 25 & 35 mm<sup>2</sup>
- Easy visual wire identification:  
Coloured band on contact
- Allow the use of small wire sections:  
Reducer for wires 8 & 10 mm<sup>2</sup> in contact barrel 16mm<sup>2</sup>
- Ideal for high power applications:  
Up to 200A continuous (12-01 specif. 261)
- Space & cost saving with mixed connectors:  
Only one connector instead of 2 to transmit signal & power

## Technical features

### Mechanical

- **Shell:**  
Aluminium alloy
- **Shell plating:**  
Conductive black zinc
- **Insulator:**  
Thermoplastic
- **Grommet & seal:**  
Liquid silicone rubber
- **Contact:**  
Copper alloy
- **Contact plating:**  
Gold over nickel
- **Endurance:**  
500 mating cycles
- **Shock:**  
300g for 3ms and EIA-364-27
- **Vibration:**  
147m/s<sup>2</sup>, 10 to 2000Hz
- **Contact retention:**

|                |                |
|----------------|----------------|
| Size 22D: 45 N | Size 20: 60 N  |
| Size 16: 100 N | Size 12: 100 N |
| Size 8: 110 N  | Size 4: 200 N  |

### Climatic

- **Operating temperature:**  
-55°C to +175°C
- **Sealing mated connectors:**  
IP67 (1 metre for 30 min minimum)
- **Salt spray:**  
48 hours

### Electrical

#### • Test voltage:

| Service   | M    | N    | I    | II   |
|-----------|------|------|------|------|
| Sea level | 1300 | 1000 | 1800 | 2300 |

#### • Contact resistance:

|           |         |
|-----------|---------|
| Size 22D: | 14.6 mΩ |
| Size 20:  | 7.3 mΩ  |
| Size 16:  | 3.8 mΩ  |
| Size 12:  | 3.5 mΩ  |
| Size 8:   | 3 mΩ    |
| Size 4:   | 2 mΩ    |

#### • Insulation resistance:

≥ 5000 mΩ (at 500 Vdc)

#### • Contact rating:

|           |       |
|-----------|-------|
| Size 22D: | 5 A   |
| Size 20:  | 7.5 A |
| Size 16:  | 13 A  |
| Size 12:  | 23 A  |
| Size 8:   | 45 A  |
| Size 4:   | 80 A  |

#### • Shell continuity:

≤10 mΩ

# 8STA Series

## Power Contacts

### Ordering information

|                                                                                         |             |          |           |           |          |          |            |
|-----------------------------------------------------------------------------------------|-------------|----------|-----------|-----------|----------|----------|------------|
| <b>Basic series</b>                                                                     | <b>8STA</b> | <b>0</b> | <b>12</b> | <b>01</b> | <b>P</b> | <b>N</b> | <b>261</b> |
| <b>Shell type</b>                                                                       |             |          |           |           |          |          |            |
| 0: Oval flange receptacle (for front or rear mounting)                                  |             |          |           |           |          |          |            |
| 1: In-line receptacle                                                                   |             |          |           |           |          |          |            |
| 6: Plug                                                                                 |             |          |           |           |          |          |            |
| 7: Jam nut receptacle                                                                   |             |          |           |           |          |          |            |
| <b>Shell size: 10 - 12 - 16 - 18 - 20 - 24</b>                                          |             |          |           |           |          |          |            |
| <b>Contact layout:</b> See below                                                        |             |          |           |           |          |          |            |
| <b>Type of contact</b>                                                                  |             |          |           |           |          |          |            |
| P: Pin      A: without pin contacts (specifications 261 & 545 only)                     |             |          |           |           |          |          |            |
| S: Socket    B: without socket contacts (specifications 261 & 545 only)                 |             |          |           |           |          |          |            |
| <b>Orientation: N: Red / A: Yellow / B: Blue / C: Orange / D: Green / U: Universal</b>  |             |          |           |           |          |          |            |
| <b>Specification</b>                                                                    |             |          |           |           |          |          |            |
| None: for contact layouts 20-48 & 24-44                                                 |             |          |           |           |          |          |            |
| 251: for contact layouts 10-80, 16-02, 16-75, 18-18, 20-75, 20-78, 24-07, 24-41 & 24-46 |             |          |           |           |          |          |            |
| 261: only for 12-01                                                                     |             |          |           |           |          |          |            |
| 540: Layout 12-01 with protected socket                                                 |             |          |           |           |          |          |            |
| 545: Layout 24-44 - delivered with contact #16 & without contact #4                     |             |          |           |           |          |          |            |

Note : (layout 12-01 specif. 261 only)

1) Standard connector (8STAx1201yz261 where x = shell type; y = type of cts; z = orientation) is provided with power contacts for 16mm² wire.

2) For 10mm² wire, order standard connector (note 1) + reducing sleeve 8400 2351 A separately.

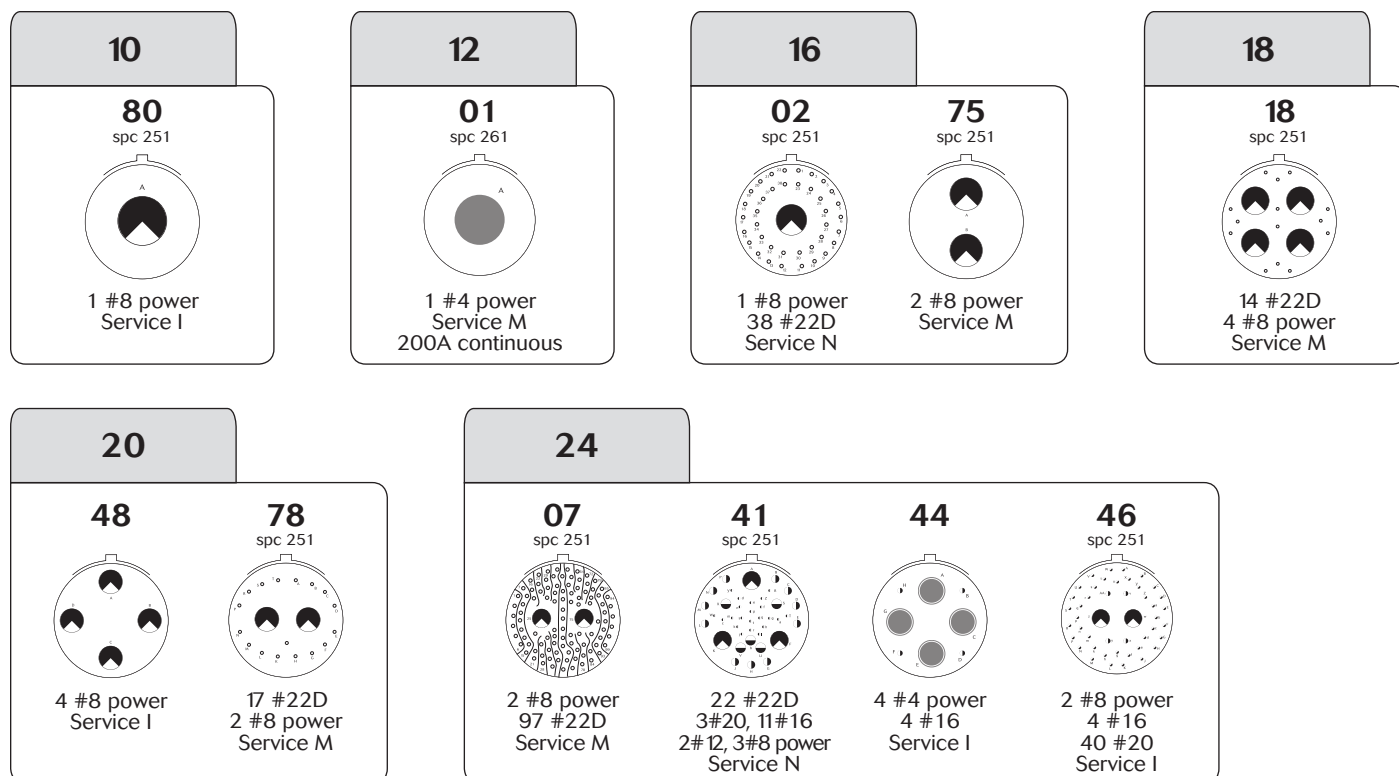
3) For 25mm² wire, order connector without contact, see A & B details in type of contact (ex : 8STAx1201Az261 or Bz261) + contact separately (pin : 8599 7598 900 & socket : 8599 7599 900)

4) For 35mm² wire, order connector without contact, see A & B details in type of contact (ex : 8STAx1201Az261 or Bz261) + contact separately (pin : 8599 0313 & socket : 8599 0316)

Note : (layout 24-44 specif. 545 only)

Specif. 545 = connector delivered with contact #16 & without power contact #4 & boots, power contact #4 to be ordered separately according wire section to be used (see table next page)

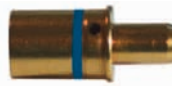
### Contact layouts



# 8STA Series

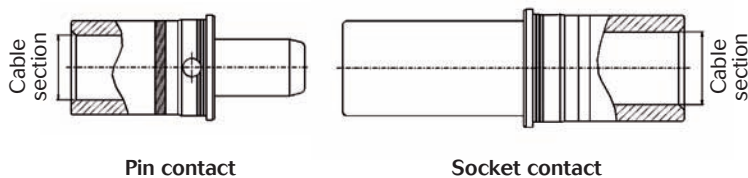
## Power Contacts

### Power contacts

| Designation                           | Wire 16 mm <sup>2</sup>                                                                                                                                                    | Wire 25 mm <sup>2</sup>                                                                   | Wire 35 mm <sup>2</sup>                                                                               |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
|                                       | Removable contact                                                                                                                                                          |                                                                                           | Non removable contact                                                                                 |
| Colour band                           | <br>Red                                                                                   | <br>Blue | <br>Green          |
| Pin contact                           | 8599 7520A 900                                                                                                                                                             | 8599 7598 900                                                                             | 8599 0313                                                                                             |
| Socket contact                        | 8599 7521A 900                                                                                                                                                             | 8599 7599 900                                                                             | 8599 0316                                                                                             |
| Reducer - wire 8 & 10 mm <sup>2</sup> | 8400 2351A                                                                                                                                                                 | -                                                                                         | -                                                                                                     |
| Crimping tool                         | M22520/23-01<br>+ Die M22520/23-04<br>+ Positionner M22520/23-11<br><br>And for wider wire 50 mm <sup>2</sup> :<br>M22520/23-01<br>+ Die WA23-4<br>+ Positionner WA23-176L | M22520/23-01<br>+ Die M22520/23-04<br>+ Positionner M22520/23-11                          | M22520/23-01<br>+ Die 8599-0319<br>+ Positionner 8599-0318 (male)<br>+ Positionner 8599-0317 (female) |
| Plastic extraction tool               | M81969/14-07 (blue)                                                                                                                                                        |                                                                                           | -                                                                                                     |

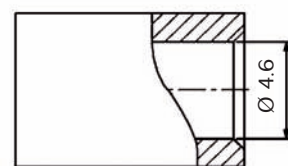
### Dimensions

#### Size 4 power contact

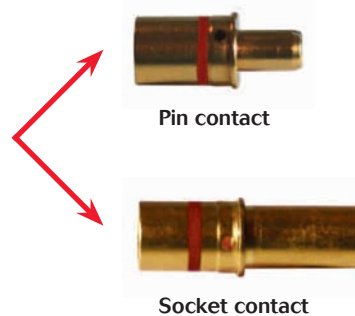
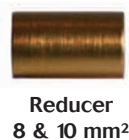


| Contact     | Cable section      |                    |                    |
|-------------|--------------------|--------------------|--------------------|
|             | 16 mm <sup>2</sup> | 25 mm <sup>2</sup> | 35 mm <sup>2</sup> |
| Pin/Socket  | Ø6.5 Min.          | Ø7.33 Min.         | Ø8.65 Min.         |
| Colour band | Red                | Blue               | Green              |

#### Reducer for wire 8 & 10 mm<sup>2</sup>



Compatible with pin & socket contact / wire 16 mm<sup>2</sup>



# 8TA Series

## Compact Low Profile



## Description

- Rugged aluminium body to ensure long service life in the harshest environment
- Compact low profile derived from MIL-DTL-38999 Series 2
- 6 gold plated #22D contacts
- Environment sealing from interfacial seal and rear grommet
- Positive locking mechanism with locked colour indicators 3 keyway orientations
- Not scoop proof
- Conductive black zinc plating

## Technical features

### Mechanical

- **Shell:**  
Aluminium alloy
- **Shell plating:**  
Conductive black zinc
- **Insulator:**  
Thermoplastic
- **Grommet & seal:**  
Liquid silicone rubber
- **Contact:**  
Copper alloy
- **Contact plating:**  
Gold
- **Endurance:**  
500 matings/unmatings operations
- **Shock:**  
300g for 3ms and EIA-364-27
- **Vibration:**  
random 100 to 1000 Hz - 1 g<sup>2</sup>/Hz
- **Contact retention:**  
45 N

### Climatic

- **Operating temperature:**  
-55°C to +175°C
- **Sealing mated connectors:**  
IP67 (1 metre for 30 min minimum)
- **Salt spray:**  
48 hours

### Electrical

- **Test voltage:**  
1300 Vrms (sea level)
- **Contact resistance:**  
<14.6 mΩ
- **Insultation resitance:**  
≥ 5000 mΩ (at 500 Vdc)
- **Contact rating:**  
5 A
- **Shell continuity:**  
<60 mΩ

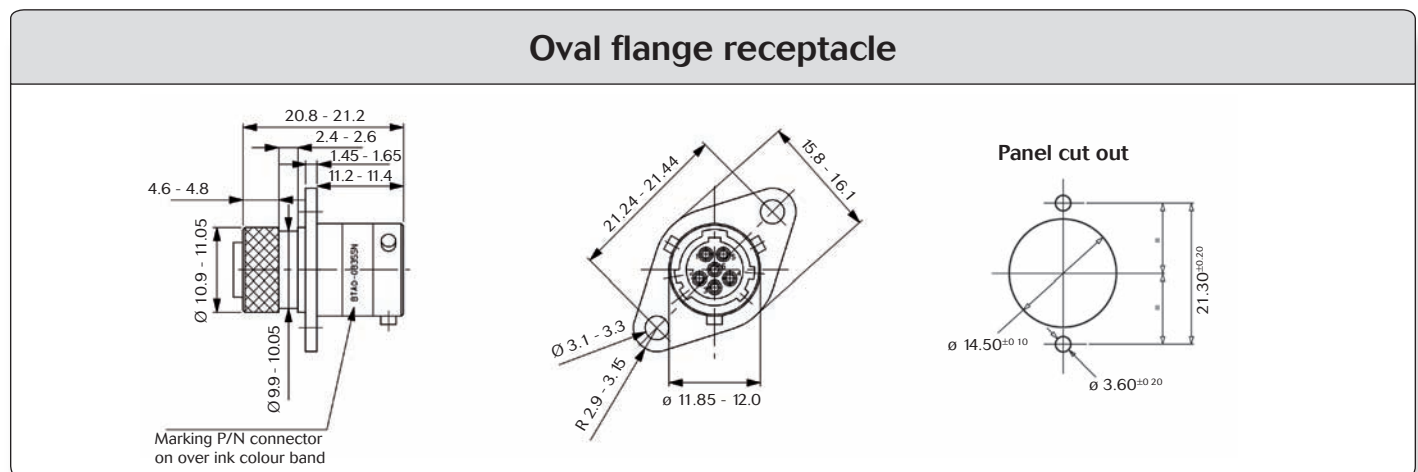
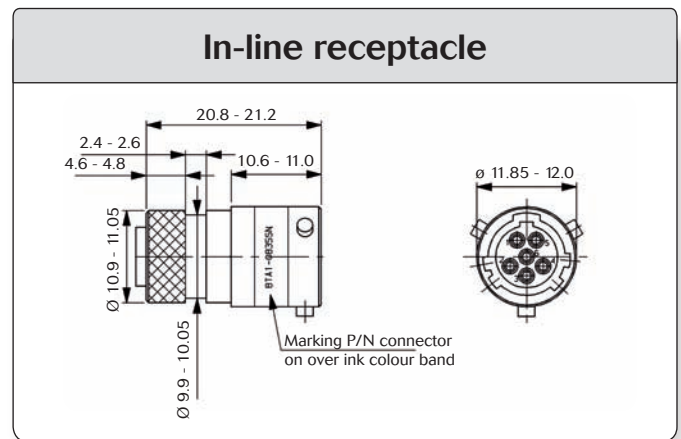
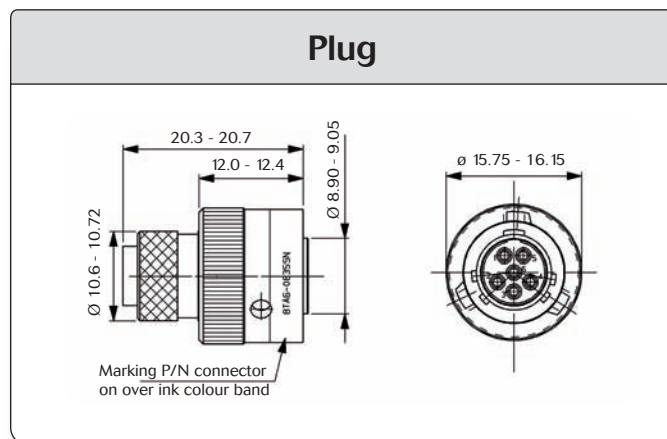
# 8TA Series

## Compact Low Profile

### Ordering information

| Basic series                                                                                                                             | 8TA | 0 | 08 | 35 | P | N |
|------------------------------------------------------------------------------------------------------------------------------------------|-----|---|----|----|---|---|
| <b>Shell type</b><br>0: Oval flange receptacle (for front or rear mounting)<br>1: In-line receptacle<br>6: Plug<br>7: Jam nut receptacle |     |   |    |    |   |   |
| <b>Shell size</b><br>08                                                                                                                  |     |   |    |    |   |   |
| <b>Contact layout</b><br>35 (6 contacts #22D)                                                                                            |     |   |    |    |   |   |
| <b>Type of contact</b><br>P: Pin<br>S: Socket                                                                                            |     |   |    |    |   |   |
| <b>Orientation</b><br>N: Red / A: Yellow / D: Green                                                                                      |     |   |    |    |   |   |

### Dimensions

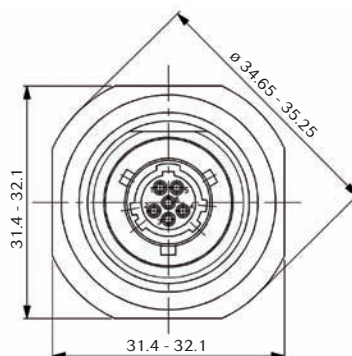
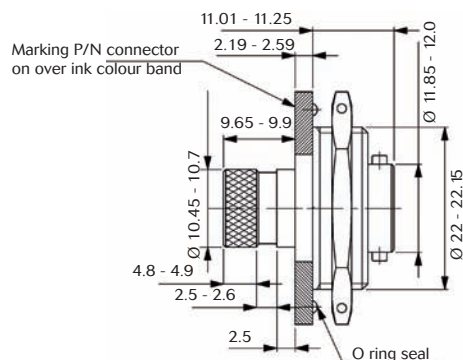


Note: All dimensions are in millimeters (mm)

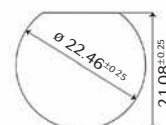
# 8TA Series

## Compact Low Profile

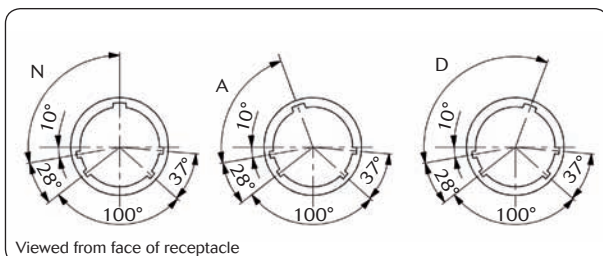
### Jam nut receptacle



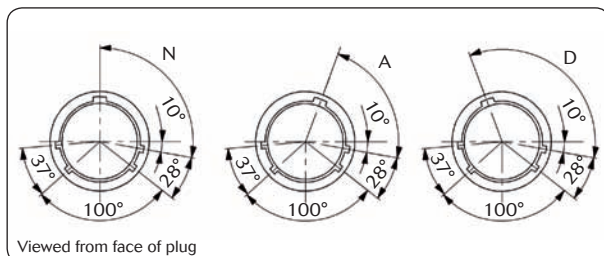
Panel cut out



### Orientation



Viewed from face of receptacle



Viewed from face of plug

| Key positions | Alpha 1 | Colour band |
|---------------|---------|-------------|
| N             | 100°    | Red         |
| A             | 82°     | Yellow      |
| D             | 118°    | Green       |



8STA/8TA Series

# Derived Series

|                                                |    |
|------------------------------------------------|----|
| ■ Quick release for steering boss system ..... | 40 |
| ■ Blind mating plug .....                      | 42 |
| ■ Through bulkhead .....                       | 44 |
| ■ Hermetic shell size 02 .....                 | 46 |
| ■ Hermetic fuel tank .....                     | 48 |
| ■ Fuel immersible .....                        | 50 |

# 8STA Series

## Quick Release for Steering Boss System



### Description

- Rugged aluminium body to ensure long service life in the harshest environment.
- 100% scoop proof.
- Available in 2 shell sizes: 10 & 12 (Please consult us for other sizes).
- Standard insulators shell sizes 10 & 12 available.

### Technical features

#### Mechanical

- **Shell:**  
Aluminium
- **Shell plating:**  
Conductive black zinc
- **Insulator:**  
Thermoplastic
- **Grommet & seal:**  
Liquid silicone rubber
- **Contact:**  
Copper alloy
- **Contact plating:**  
Gold

- **Endurance:**  
500 matings/unmatings operations
- **Shock:**  
300g for 3ms and EIA-364-27
- **Vibration:**  
147m/s<sup>2</sup>, 10 to 2000Hz

#### Climatic

- **Operating temperature:**  
-55°C to +175°C
- **Sealing mated connectors:**  
IP67 (1 metre for 30 min minimum)
- **Salt spray:**  
48 hours

### Electrical

- **Contact resistance:**  
Size 22D: 14.6mΩ  
See 8STA catalog for other contact size.
- **Insulation resistance:**  
≥ 5000mΩ @ 500Vdc
- **Contact rating:**  
Size 22D: 5 Amp  
See 8STA catalog for other contact size.
- **Shell continuity:**  
≤ 10mΩ

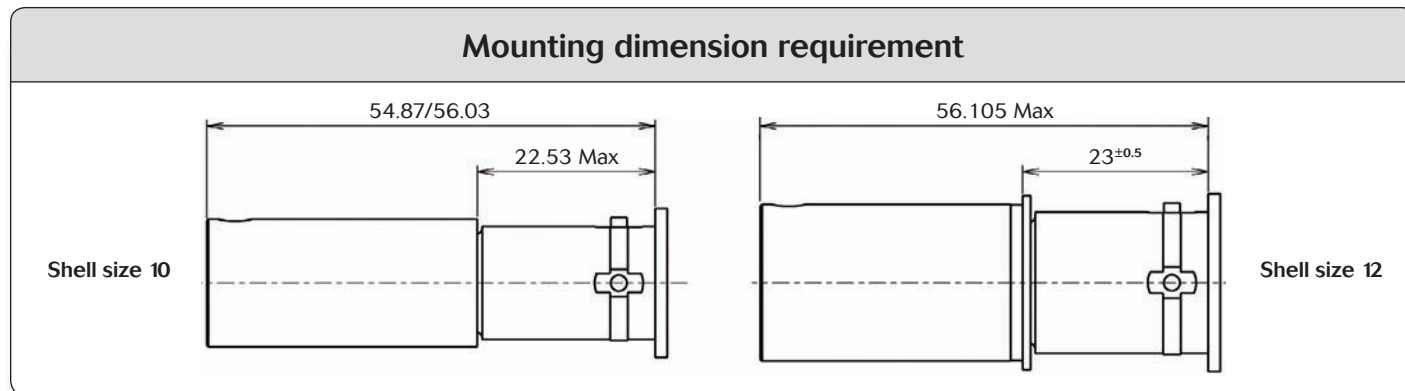
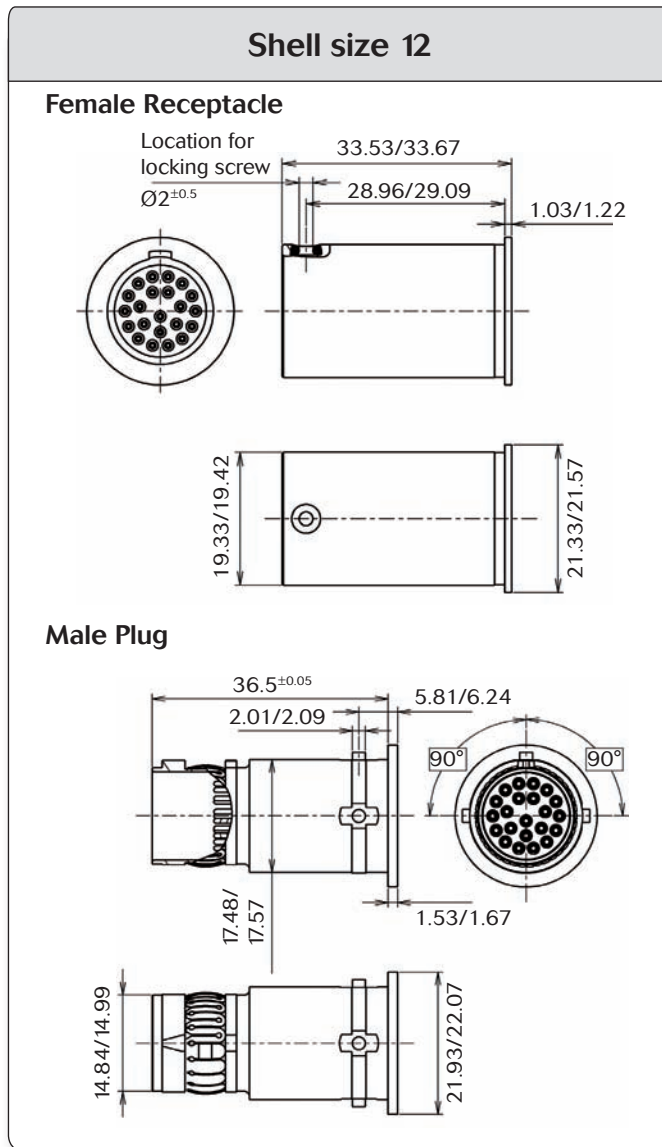
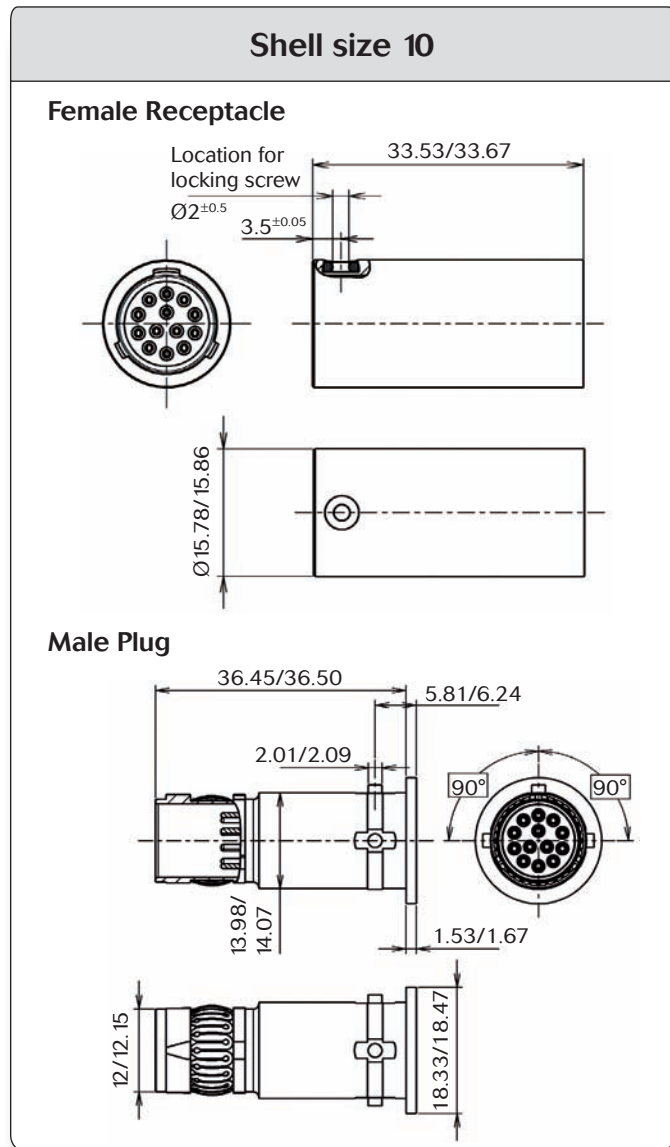
### Ordering information

|                                       |      |   |    |    |   |   |     |
|---------------------------------------|------|---|----|----|---|---|-----|
| Basic series                          | 8STA | 6 | 12 | 35 | P | N | 518 |
| Shell type                            |      |   |    |    |   |   |     |
| 0: Receptacle side                    |      |   |    |    |   |   |     |
| 6: Plug side                          |      |   |    |    |   |   |     |
| Shell size: 08 (consult us) - 10 - 12 |      |   |    |    |   |   |     |
| Contact layout: See pages 10 to 13    |      |   |    |    |   |   |     |
| Type of contact                       |      |   |    |    |   |   |     |
| P: Pin                                |      |   |    |    |   |   |     |
| S: Socket                             |      |   |    |    |   |   |     |
| Orientation: N                        |      |   |    |    |   |   |     |
| Specification (mandatory)             |      |   |    |    |   |   |     |
| 518: Steering column                  |      |   |    |    |   |   |     |

# 8STA Series

## Quick Release for Steering Boss System

### Dimensions



Note: All dimensions are in millimeters (mm)

# 8STA Series

## Blind Mating Plug



## Description

- Blind mating solution for quick connection in hard-to-reach areas.
- Specific 8STA plug:
  - . Compensating for misalignment in 3 axes.
- Blind connection:
  - . Easy & fast connection without any coupling / uncoupling between float-mounting unit & fixed unit.
  - . 100% Scoop proof.
- A versatile product:
  - . Available in sizes 10, 12, 14 & 16
  - . All layouts according connector shell size.
  - . Available in crimp contacts.
- Mandatory mating part:
  - . Standard jam nut receptacle 8STA7

## Technical Features

### Mechanical

- Shell: Aluminium alloy
- Shell plating: Conductive black zinc
- Insulator: Thermoplastic
- Grommet & seal: Liquid silicone rubber
- External cover: Green fluoro silicone
- Contact: Copper alloy
- Contact plating: Gold
- Contact retention:
  - . Size 22D: 45N    Size 20: 60N
  - . Size 16: 100N    Size 12: 100N
  - . Size 8: 110N    Size 4: 200N
- Flange dimension:
  - . Flange of plug size 16 equivalent to receptacle size 22
  - . Flange of plug size 14 equivalent to receptacle size 20
  - . Flange of plug size 12 equivalent to receptacle size 18
  - . Flange of plug size 10 equivalent to receptacle size 16

### Climatic

- Temperature range: -55°C to +175°C
- Sealing mated connectors:
  - . IP67 (1 meter for 30 min. minimum)
- Salt spray: 48 hours

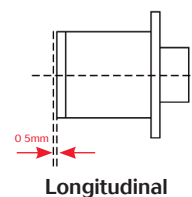
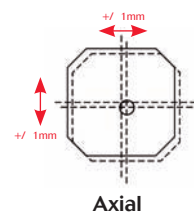
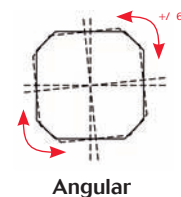
### Electrical

- Test voltage

| Service   | M    | N    | I    | II   |
|-----------|------|------|------|------|
| Sea level | 1300 | 1000 | 1800 | 2300 |

- Contact resistance:
  - . Size 22D: 4.6 mΩ
  - . Size 20: 7.3 mΩ    Size 16: 3.8 mΩ
  - . Size 12: 3.5 mΩ    Size 4: 2 mΩ
- Insulation resistance:
  - . ≥ 5000 mΩ (at 500 Vdc)
- Contact rating:
  - . Size 22D: 5A    Size 20: 7.5A
  - . Size 16: 13A    Size 12: 23A
  - . Size 8: 45A    Size 4: 80A

## Compensating for misalignment in 3 axes



# 8STA Series

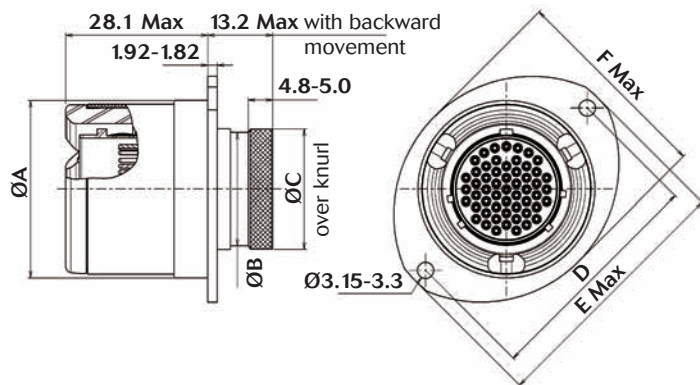
## Blind Mating Plug

### Ordering information

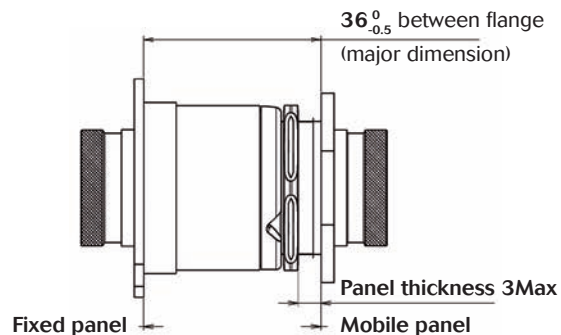
|                           |                                       |   |    |    |   |   |     |
|---------------------------|---------------------------------------|---|----|----|---|---|-----|
| Series                    | 8STA                                  | 6 | 12 | 35 | S | N | 566 |
| Shell style               | 6: Plug                               |   |    |    |   |   |     |
| Shell size                | 10, 12, 14, 16                        |   |    |    |   |   |     |
| Contact layouts           | See pages 10 to 13                    |   |    |    |   |   |     |
| Type of contacts          | P: Pin contacts<br>S: Socket contacts |   |    |    |   |   |     |
| Orientation               | N: Red                                |   |    |    |   |   |     |
| Specification (mandatory) | 566: Rackable plug                    |   |    |    |   |   |     |

### Dimensions

#### Plug Type 6



#### Mated Connector (plug type 6 & jam nut receptacle type 7)



| Shell size | ØA <sup>+0.3</sup> <sub>-0</sub> | ØB <sup>+0.2</sup> <sub>-0</sub> | ØC    | D <sup>+0.4</sup> <sub>-0</sub> | E     | F     |
|------------|----------------------------------|----------------------------------|-------|---------------------------------|-------|-------|
| 10         | 25.17                            | 12.85                            | 13.72 | 34.60                           | 41.00 | 30.30 |
| 12         | 28.35                            | 15.92                            | 17.26 | 38.00                           | 44.70 | 33.70 |
| 14         | 31.52                            | 18.90                            | 20.41 | 41.40                           | 47.90 | 37.00 |
| 16         | 34.70                            | 22.08                            | 23.60 | 44.80                           | 51.00 | 40.40 |

Note: All dimensions are in millimeters (mm)

# 8STA Series Through Bulkhead

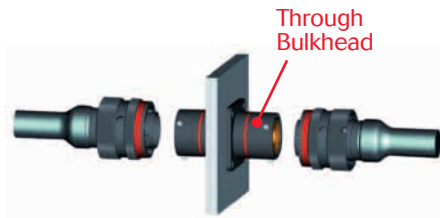


## Description

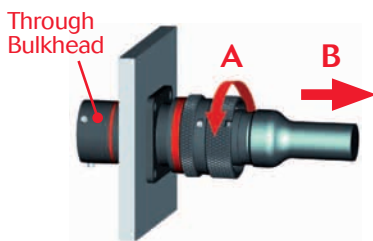
- Significant time saving advantage over conventional plugs & receptacles:  
«Double receptacle» mounted on panel
- Male / female single way power contact #4 in a shell size 12
- Easy identification with colour coded bands:  
5 visual keyway orientations
- Simplified connection through a bulkhead, eliminating hard wiring to the panel on one side
- Ideal for external use (dust, water etc.):  
IP67 (Interfacial & mating seals)

## Technical features

- Easy mating/unmating on both sides of the bulkhead



- Simplifies maintenance procedures having a detachable connector on each side of the bulkhead



## Mechanical

- **Shell:**  
Aluminium alloy
- **Shell plating:**  
Conductive black zinc
- **Insulator:**  
Thermoplastic
- **Grommet & seal:**  
Liquid silicone rubber
- **Contact:**  
Copper alloy
- **Contact plating:**  
Gold over nickel
- **Endurance:**  
500 mating cycles
- **Shock:**  
300g for 3ms and EIA-364-27
- **Vibration:**  
147m/s<sup>2</sup>, 10 to 2000Hz
- **Contact retention:**  
200 N

## Climatic

- **Operating temperature:**  
-55°C to +175°C
- **Sealing mated connectors:**  
IP67 (1 metre for 30 min minimum)
- **Salt spray:**  
48 hours

## Electrical

- **Test voltage:**  
1300 Vrms (sea level)
- **Contact resistance:**  
2 mΩ
- **Insulation resistance:**  
≥ 5000 mΩ (at 500 Vdc)
- **Contact rating:**  
200A for use in 35°C max environnement  
For derating curve, please contact us

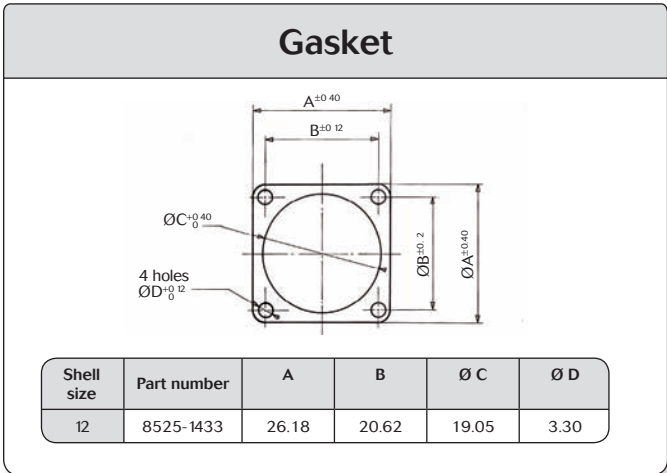
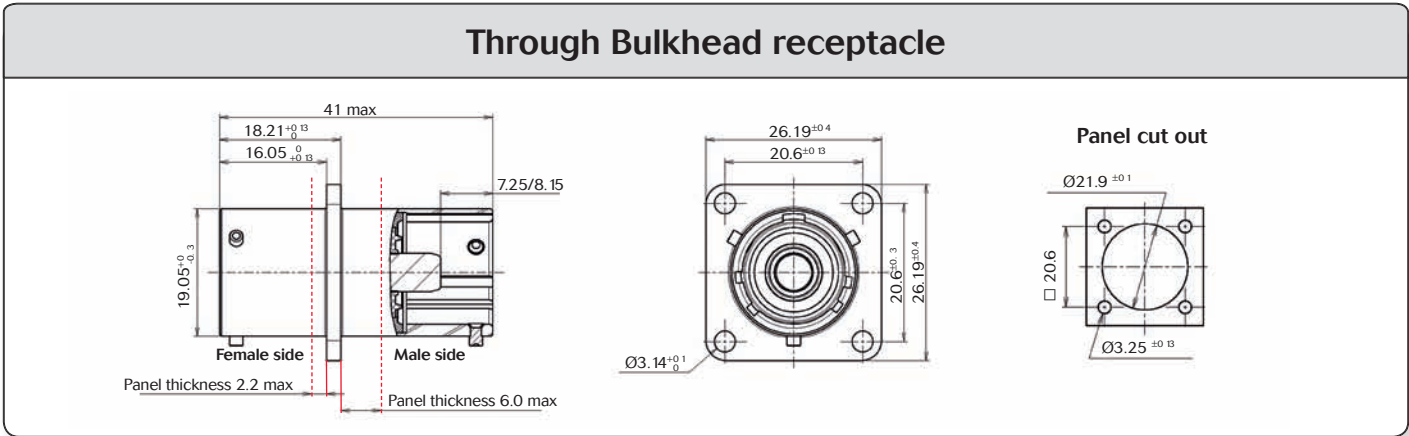
# 8STA Series

## Through Bulkhead

### Ordering information

|                                                                    |      |   |    |    |    |   |     |
|--------------------------------------------------------------------|------|---|----|----|----|---|-----|
| Basic series                                                       | 8STA | 0 | 12 | 01 | PS | N | 500 |
| Shell type                                                         |      |   |    |    |    |   |     |
| 0: Receptacle                                                      |      |   |    |    |    |   |     |
| Shell size                                                         |      |   |    |    |    |   |     |
| 12                                                                 |      |   |    |    |    |   |     |
| Contact layout                                                     |      |   |    |    |    |   |     |
| 01: 1 power contact #4                                             |      |   |    |    |    |   |     |
| Type of contact                                                    |      |   |    |    |    |   |     |
| PS: Pin + Socket contacts                                          |      |   |    |    |    |   |     |
| Orientation                                                        |      |   |    |    |    |   |     |
| N: Red / A: Yellow / B: Blue / C: Orange / D: Green / U: Universal |      |   |    |    |    |   |     |
| Specification (mandatory)                                          |      |   |    |    |    |   |     |
| 500: Through Bulkhead connector                                    |      |   |    |    |    |   |     |

### Dimensions



Note: All dimensions are in millimeters (mm)

# 8STA Series

## Hermetic Shell Size 02



## Description

- The smallest hermetic circular 5 way PC tail connector on the market
- Lightweight 8STA connector: 3 grs max
- Suitable for welding directly to sensor bodies: Designed for weld fixing
- Excellent corrosion resistance: Stainless steel body
- Excellent hermeticity: Hermetic glass bead ( $1.10^{-7}$  cm<sup>3</sup>/s)
- Intermateable with standard plug size 02-05
- Easy identification with colour coded bands: 7 visual keyway orientations
- Rapid & secure locking system with audible click: Bayonet connector

## Technical features

### Mechanical

- **Shell:**  
Stainless steel
- **Shell plating:**  
Passivated
- **Insulator:**  
Glass bead
- **Contact:**  
Iron-Nickel (NiFe2)
- **Contact plating:**  
Nickel
- **Endurance:**  
500 mating cycles
- **Shock:**  
300g for 3ms and EIA-364-27
- **Vibration:**  
10 to 2000 Hz 30g

### Climatic

- **Operating temperature:**  
-55°C to +175°C
- **Sealing mated connectors:**  
IP67 (1 meter for 30 min minimum)
- **Salt spray:**  
48 hours
- **Hermeticity:**  
 $1.10^{-7}$  cm<sup>3</sup>/s

### Electrical

- **Test voltage:**  
400V (sea level)
- **Contact resistance:**  
2 m $\Omega$
- **Insulation resistance:**  
 $\geq 5000$  M $\Omega$  (at 500Vdc)
- **Contact rating:**  
3 Amp

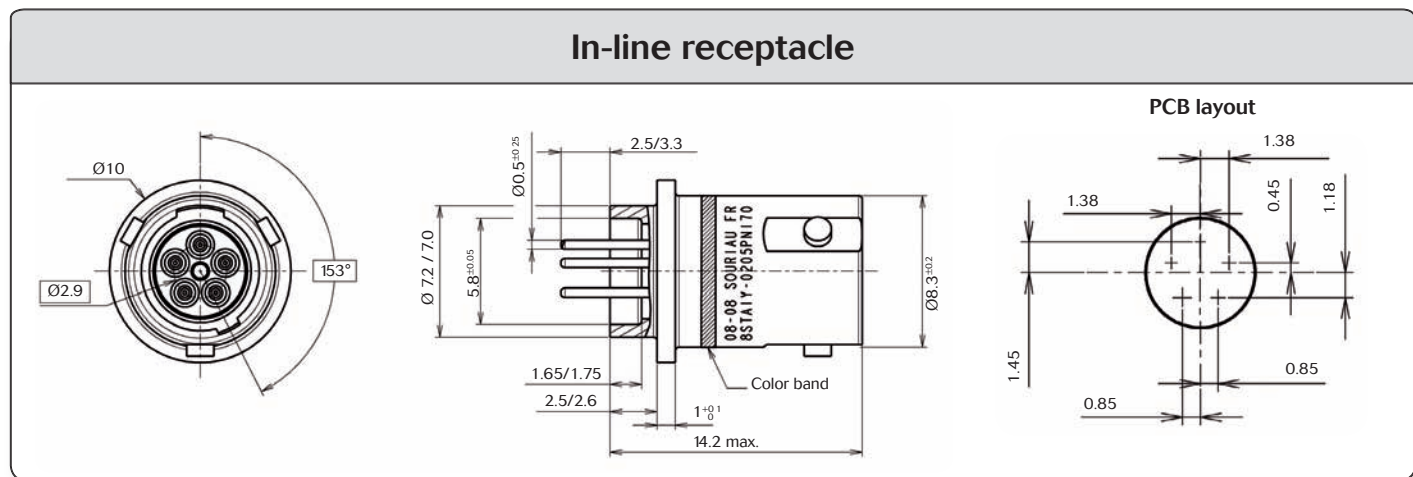
# 8STA Series

## Hermetic Shell Size 02

### Ordering information

|                                                                |      |   |   |    |    |   |   |     |
|----------------------------------------------------------------|------|---|---|----|----|---|---|-----|
| Basic series                                                   | 8STA | 1 | y | 02 | 05 | P | N | 170 |
| Shell type                                                     |      |   |   |    |    |   |   |     |
| 1: In-line connector                                           |      |   |   |    |    |   |   |     |
| Class                                                          |      |   |   |    |    |   |   |     |
| y: Hermetic version                                            |      |   |   |    |    |   |   |     |
| Shell size                                                     |      |   |   |    |    |   |   |     |
| 02                                                             |      |   |   |    |    |   |   |     |
| Contact layout                                                 |      |   |   |    |    |   |   |     |
| 05: 5 straight PCB contacts #26                                |      |   |   |    |    |   |   |     |
| Type of contact                                                |      |   |   |    |    |   |   |     |
| P: Pin contacts                                                |      |   |   |    |    |   |   |     |
| Orientation                                                    |      |   |   |    |    |   |   |     |
| N: Red / C: Orange - <i>please consult us for other keyway</i> |      |   |   |    |    |   |   |     |
| Specification (mandatory)                                      |      |   |   |    |    |   |   |     |
| 170: Hermetic shell size 02                                    |      |   |   |    |    |   |   |     |

### Dimensions



Note: All dimensions are in millimeters (mm)

# 8STA Series

## Hermetic Fuel Tank



### Description

- Hermetically sealed connector:  
1.10<sup>-7</sup> cm<sup>3</sup>/s @ 15PSI
- Withstands pressure differential without loss of electrical performances: Glass to metal insert
- Excellent resistance to racing fuels & fluids: Viton® interfacial seal
- Excellent corrosion resistance: Stainless steel material
- Low profile design for heat shrink boot & cost effective connector
- Integrated backshell

### Technical features

#### Mechanical

- **Shell:** Stainless steel
- **Shell plating:** Passivated
- **Insulator:** Glass bead
- **Contact:** Nickel iron
- **Contact plating:** Gold
- **Endurance:** 500 mating cycles
- **Shock:** 300g for 3ms and EIA-364-27
- **Vibration:** 10 to 2000 Hz 30g

#### Climatic

- **Operating temperature:**  
-55°C to +175°C
- **Sealing mated connectors:**  
IP67 (1 meter for 30 min minimum)
- **Salt spray:**  
48 hours
- **Hermeticity:**  
1.10<sup>-7</sup>cm<sup>3</sup>/s

#### Electrical

- **Test voltage:**  
Service I: 1800V  
Service M: 1300V
- **Contact resistance:**  
2 mΩ
- **Insulation resistance:**  
≥5000MΩ (at 500Vdc)
- **Contact rating:**  
Size 16: 10 A  
Size 20: 5 A  
Size 22D: 3 A

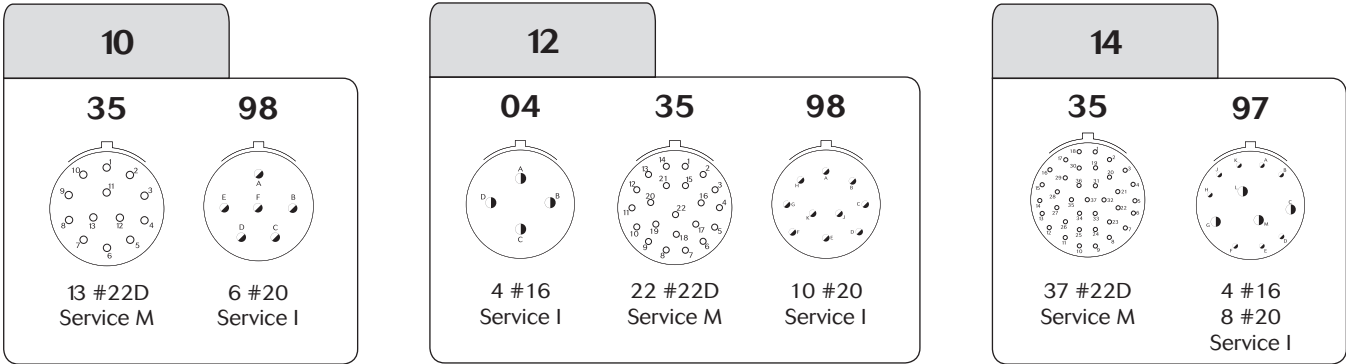
### Ordering information

|                                                         |      |   |   |    |    |   |   |     |
|---------------------------------------------------------|------|---|---|----|----|---|---|-----|
| Basic series                                            | 8STA | 7 | y | 10 | 98 | P | N | 022 |
| Shell type                                              |      |   |   |    |    |   |   |     |
| 7: Jam nut receptacle                                   |      |   |   |    |    |   |   |     |
| Class                                                   |      |   |   |    |    |   |   |     |
| y: Hermetic version                                     |      |   |   |    |    |   |   |     |
| Shell size                                              |      |   |   |    |    |   |   |     |
| 10, 12, 14                                              |      |   |   |    |    |   |   |     |
| Contact layout                                          |      |   |   |    |    |   |   |     |
| See next page for layouts available                     |      |   |   |    |    |   |   |     |
| Type of contact                                         |      |   |   |    |    |   |   |     |
| P: Pin contacts                                         |      |   |   |    |    |   |   |     |
| Orientation                                             |      |   |   |    |    |   |   |     |
| N: Red <i>(please consult us for other orientation)</i> |      |   |   |    |    |   |   |     |
| Specification (mandatory)                               |      |   |   |    |    |   |   |     |
| 022: Fuel immersible version                            |      |   |   |    |    |   |   |     |

# 8STA Series

## Hermetic Fuel Tank

### Contact layouts (viewed from front face of male insulator)



# 8STA/8TA Series

## Fuel Immersible



## Description

- Available for 8STA & 8TA Series
- Continuous immersion without loss of performance: Special fuel resistant insert
- Excellent connector sealing on panels by using the jam nut version

## Technical features

### Mechanical

- **Shell:**  
Aluminium alloy
- **Shell plating:**  
Conductive black zinc
- **Insulator:**  
Thermoplastic
- **Grommet & seal:**  
Fluoroelastomer
- **Contact:**  
Copper alloy
- **Contact plating:**  
Gold
- **Endurance:**  
500 mating cycles
- **Shock:**  
300g for 3ms and EIA-364-27
- **Vibration:**
  - . 8STA: 147m/s<sup>2</sup>, 10 to 2000Hz
  - . 8TA: random 100 to 1000 Hz - 1G<sup>2</sup>/Hz
- **Contact retention:** (8TA: Size 22D only)
  - Size 22D: 45 N
  - Size 20: 60N
  - Size 16: 100 N
  - Size 12: 100 N

### Climatic

- **Operating temperature:**  
-55°C to +175°C
- **Sealing mated connectors:**  
IP67 (1 metre for 30 min minimum)
- **Salt spray:**  
48 hours

### Resistance to fluids

- Withstands most of Motorsport fluids

### Electrical

- **Test voltage:**  
1300 Vrms
- **Contact resistance:** (8TA: Size 22D only)
  - Size 22D: 14.6 mΩ
  - Size 20: 7.3 mΩ
  - Size 16: 3.8 mΩ
  - Size 12: 3.5 mΩ
- **Insulation resistance:**  
≥ 5000 mΩ (at 500 Vdc)
- **Contact rating:** (8TA: Size 22D only)
  - Size 22D: 5 A
  - Size 20: 7.5 A
  - Size 16: 13 A
  - Size 12: 23 A
- **Shell continuity:**  
≤10 mΩ

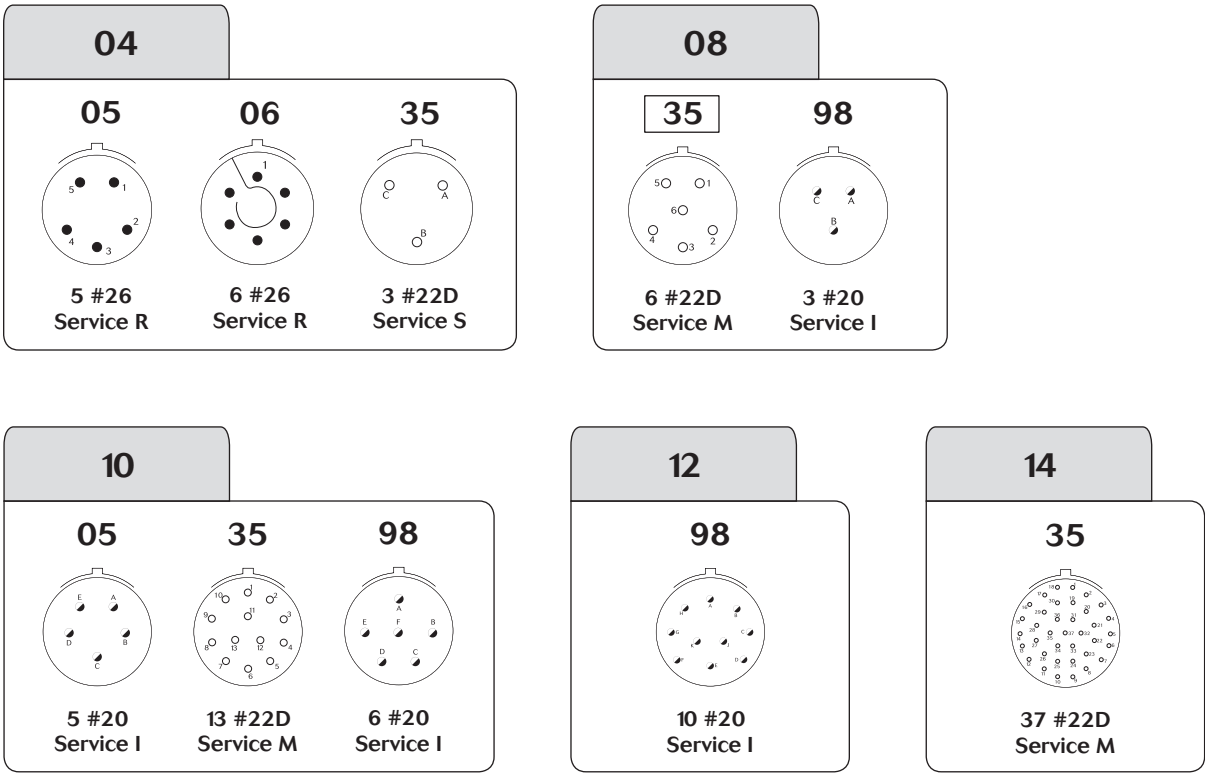
# 8STA/8TA Series

## Fuel Immersible

### Ordering information

|                               |             |        |          |          |        |        |            |
|-------------------------------|-------------|--------|----------|----------|--------|--------|------------|
| Basic series                  | 8STA<br>8TA | 0<br>0 | 08<br>08 | 35<br>35 | P<br>P | N<br>N | 022<br>022 |
| Shell type                    |             |        |          |          |        |        |            |
| 0: Oval flange receptacle     |             |        |          |          |        |        |            |
| 1: In-line receptacle         |             |        |          |          |        |        |            |
| 6: Plug                       |             |        |          |          |        |        |            |
| 7: Jam nut receptacle         |             |        |          |          |        |        |            |
| Shell size                    |             |        |          |          |        |        |            |
| 04, 08, 10, 12, 14, 16        |             |        |          |          |        |        |            |
| Contact layout                |             |        |          |          |        |        |            |
| See below                     |             |        |          |          |        |        |            |
| Type of contact               |             |        |          |          |        |        |            |
| P: Pin contacts               |             |        |          |          |        |        |            |
| S: Socket contacts            |             |        |          |          |        |        |            |
| Orientation                   |             |        |          |          |        |        |            |
| N: Red / A: Yellow / D: Green |             |        |          |          |        |        |            |
| Specification (mandatory)     |             |        |          |          |        |        |            |
| 022: Fuel immersible version  |             |        |          |          |        |        |            |

### Contact layouts



For both 8STA & 8TA, all others being for 8STA only.



8STA/8TA Series

# Common Section

|   |                                     |    |
|---|-------------------------------------|----|
| ■ | Contacts:                           |    |
|   | Crimp contacts .....                | 54 |
|   | PCB contacts .....                  | 55 |
| ■ | Tooling:                            |    |
|   | Crimping tools .....                | 56 |
|   | Wire stripping .....                | 57 |
|   | Insertion & extraction tools .....  | 57 |
| ■ | Accessories:                        |    |
|   | Filler plugs .....                  | 58 |
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|   | Gaskets .....                       | 59 |
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# 8STA/8TA Series

## Common Section

### Contacts

#### Crimp contacts

| Contact size                   | Shell size & layout                 | Contact type  | Contact Ø max. | Part numbers   | Admissible wire section                                                                 |       |                        |      | External Ø over insulation (mm) |      |
|--------------------------------|-------------------------------------|---------------|----------------|----------------|-----------------------------------------------------------------------------------------|-------|------------------------|------|---------------------------------|------|
|                                |                                     |               |                |                | mm²                                                                                     |       | AWG                    |      |                                 |      |
|                                |                                     |               |                |                | Min.                                                                                    | Max.  | Min.                   | Max. | Min.                            | Max. |
| 26 High Density                | Shell sizes 08 to 24                | Male          | 0.50           | 8599-0297      | 0.055                                                                                   | 0.215 | 30                     | 24   | 0.60                            | 0.83 |
|                                |                                     | Female        |                | 8599-0298      |                                                                                         |       |                        |      |                                 |      |
|                                | 04-05                               | Male          | 0.50           | 8599-0777 Ly   | 0.095                                                                                   | 0.24  | 30                     | 24   | 0.60                            | 0.83 |
|                                |                                     | Female        |                | 8599-0778 900  |                                                                                         |       |                        |      |                                 |      |
|                                | 02-05; 04-06 06-09                  | Male          |                | 8599-1001      |                                                                                         |       |                        |      |                                 |      |
|                                |                                     | Female        |                | 8599-1002      |                                                                                         |       |                        |      |                                 |      |
| 22D Signal contact             | Shell sizes 08 to 24                | Male          | 0.76           | 8599-0702 JJ   | 0.09                                                                                    | 0.38  | 28                     | 22   | 0.76                            | 1.37 |
|                                |                                     | Female        |                | 8599-0706 900  |                                                                                         |       |                        |      |                                 |      |
|                                | 02-35; 04-35 06-35 08-35 (8TA only) | Male          | 0.76           | 8599-0702 JJ   | 0.095                                                                                   | 0.38  | 28                     | 22   | 0.71                            | 1.37 |
|                                |                                     | Female        |                | 8599-0710 900  |                                                                                         |       |                        |      |                                 |      |
| 20 Signal contact              | Shell sizes 08 to 24                | Male          | 1.00           | 8599-0703 SA   | 0.21                                                                                    | 0.60  | 24                     | 20   | 1.02                            | 2.11 |
|                                |                                     | Female        |                | 8599-0707 900  |                                                                                         |       |                        |      |                                 |      |
| 16 Signal contact              | Shell sizes 08 to 24                | Male          | 1.60           | 8599-0704 MJ   | 0.60                                                                                    | 1.34  | 20                     | 16   | 1.65                            | 2.77 |
| Female                         |                                     | 8599-0708 900 |                |                |                                                                                         |       |                        |      |                                 |      |
| 16 Coaxial contact             | Shell sizes 08 to 24                | Male          |                | M39029/76 424  | RG 174; RG 179; RG 316                                                                  |       |                        |      | 1.65                            | 2.60 |
|                                |                                     | Female        |                | M39029/77 428  |                                                                                         |       |                        |      |                                 |      |
| 12 Signal contact              | Shell sizes 08 to 24                | Male          | 2.40           | 8599-0705 MJ   | 1.91                                                                                    | 3.18  | 14                     | 12   | 2.46                            | 3.61 |
|                                |                                     | Female        |                | 8599-0709 900  |                                                                                         |       |                        |      |                                 |      |
| 12 Coaxial contact             | Shell sizes 08 to 24                | Male          |                | M39029/28 211  | RG 174; RG 179; RG 316                                                                  |       |                        |      | 2.40                            | 2.60 |
|                                |                                     | Female        |                | M39029/75 416  |                                                                                         |       |                        |      |                                 |      |
| 08 Power contact               | Shell sizes 08 to 24                | Male          | 3.64           | 8599-7544      | -                                                                                       | 8.98  | -                      | 8    | 4.50                            | 6.50 |
|                                |                                     | Female        |                | 8599-7541      |                                                                                         |       |                        |      |                                 |      |
|                                |                                     | Boot          |                | 8599-4542      |                                                                                         |       |                        |      |                                 |      |
|                                |                                     | Reductor *    |                | 8599-7645      |                                                                                         |       |                        |      |                                 |      |
| 08 Coaxial contact             | Shell sizes 08 to 24                | Male          |                | M39029/59 366  | RG 188A/U                                                                               |       |                        |      | -                               | 2.80 |
|                                |                                     | Female        |                | M39029/60 367  |                                                                                         |       |                        |      |                                 |      |
|                                |                                     | Boot          |                | 8590-4571      |                                                                                         |       |                        |      |                                 |      |
| 08 Triaxial contact            | Shell sizes 08 to 24                | Male          |                | M39029/90-529  | MIL-C17/176 00002; FILECA F2703/14<br>RAYCHEM CHEMINAX 10612;<br>FILOTEX M 17/176 00002 |       |                        |      | 3.15                            | 3.40 |
|                                |                                     | Female        |                | M39029/91-530  |                                                                                         |       |                        |      |                                 |      |
|                                |                                     | Boot          |                | 8590-4571      |                                                                                         |       |                        |      |                                 |      |
| 04 Power contact<br>(see p.34) | Shell sizes 08 to 24                | Male          | 5.75           | 8599-7520A 900 | 7                                                                                       | 10    | According to wire used |      |                                 |      |
|                                |                                     | Female        |                | 8599-7521A 900 |                                                                                         |       |                        |      |                                 |      |
|                                |                                     | Boot          |                | 8599-4590      |                                                                                         |       |                        |      |                                 |      |
|                                |                                     | Reductor **   |                | 8400-2351A     | 4                                                                                       | 16    |                        |      |                                 |      |
|                                |                                     | Male          |                | 8599-7520A 900 |                                                                                         |       |                        |      |                                 |      |
|                                |                                     | Female        |                | 8599-7521A 900 |                                                                                         |       |                        |      |                                 |      |
|                                |                                     | Boot          |                | 8599-4591      |                                                                                         |       |                        |      |                                 |      |

\* Reductor must be used for wire 8 mm²

\*\* Reductor must be used for wire 8 & 10 mm²

Note: All dimensions are in millimeters (mm)

# 8STA/8TA Series

## Common Section

### Contacts

#### PCB contacts

| Contact size | Shell size & layouts                      | Contact type | Contact Ø | Part numbers    |
|--------------|-------------------------------------------|--------------|-----------|-----------------|
| 22D          | Shell size 02                             | Male         | 0.76      | 8599 1031-JJ    |
|              |                                           | Female       |           | 8599 1032-900   |
|              | Shell size 06                             | Male         | 0.76      | F1P1P3E-0002AJJ |
|              |                                           | Female       |           | F1P1ES3-2202A00 |
|              | Shell sizes 08 to 24<br>shell type 2 only | Male         | 0.76      | F1P1P3E-0001ALY |
|              |                                           | Female       |           | F1P1ES3-2201A00 |
| 26           | Shell size 02                             | Male         | 0.50      | 8599 1004-JL    |
|              |                                           | Female       |           | 8599 1005-900   |
|              | Shell sizes 08 to 24<br>shell type 2 only | Male         | 1.03      | F1P1P3E0020ALY  |
|              |                                           | Female       |           | F1P1ES32001A00  |

# 8STA/8TA Series

## Common Section

### Tooling

#### Crimp contacts

8TA Series & 8STA Series size 02, 04 & 06

| Contact size | Wire size | Shell size & layout                         | Contact type | Locator part number |           | Tool part number |         |
|--------------|-----------|---------------------------------------------|--------------|---------------------|-----------|------------------|---------|
|              |           |                                             |              | Spec.               | SOURIAU   | Spec.            | SOURIAU |
| 22D          | 22 to 28  | 02-35<br>04-35<br>06-35<br>08-35 (8TA only) | Male         | M22520/2-09         | 8476-09   | M22520/2-01      | 8476-01 |
|              |           |                                             | Female       | M22520/2-06         | 8476-06   |                  |         |
| 26           | 24 to 30  | 06-05                                       | Male         | -                   | 8599-0048 |                  |         |
|              |           |                                             | Female       |                     | 8599-0049 |                  |         |
|              |           | 04-05                                       | Male         | -                   | 8599-0050 |                  |         |
|              |           |                                             | Female       |                     | 8599-0051 |                  |         |
|              |           | 02-05<br>04-06<br>06-09                     | Male         | -                   | 640 088   |                  |         |
|              |           |                                             | Female       |                     | 640 089   |                  |         |

#### Crimp contacts

8STA Series size 08 to 24

| Contact size       | Contact type | Pliers             |         |                     |           |                     |                                |                     |
|--------------------|--------------|--------------------|---------|---------------------|-----------|---------------------|--------------------------------|---------------------|
|                    |              | M22520/1-01        |         | M22520/2-01         |           | M300BT              | M22520/23-01 (pneumatic plier) |                     |
|                    |              | Turret Part number |         | Locator Part number |           | Locator Part number | Die Part number                | Locator Part number |
|                    |              | Spec.              | SOURIAU | Spec.               | SOURIAU   | Spec.               | Spec.                          | Spec.               |
| 26<br>High Density | Male         | -                  | -       | -                   | 8599-0397 | -                   | -                              | -                   |
|                    | Female       |                    |         |                     | 8599-0398 |                     |                                |                     |
| 22D                | Male         | -                  | -       | M22520/2-09         | 8476-09   | -                   | -                              | -                   |
|                    | Female       |                    |         | M22520/2-07         | 8476-07   |                     |                                |                     |
| 20                 | Male         | M22520/1-04        | 8365-04 | M22520/2-10         | 8476-10   | -                   | -                              | -                   |
|                    | Female       |                    |         |                     |           |                     |                                |                     |
| 16                 | Male         |                    |         | -                   | -         | -                   | -                              | -                   |
|                    | Female       |                    |         |                     |           |                     |                                |                     |
| 12                 | Male         |                    |         | -                   | -         | -                   | -                              | -                   |
|                    | Female       |                    |         |                     |           |                     |                                |                     |
| 8                  | Male         | -                  | -       | -                   | -         | -                   | M22520/23-02                   | 8599-9601           |
|                    | Female       |                    |         |                     |           |                     |                                |                     |
| 4                  | Male         | -                  | -       | -                   | -         | -                   | M22520/23-04                   | M22520/23-11        |
|                    | Female       |                    |         |                     |           |                     |                                |                     |



M22520/1-01 + M22520/1-04



M22520/2-01  
+ M22520/2-09 & M22520/2-07



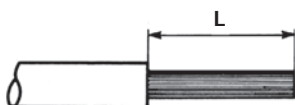
M22520/23-01

# 8STA/8TA Series

## Common Section

### Tooling

#### Wire stripping



| Contact size | 26 | 22D | 20 | 16 | 12 | 8  | 4 |
|--------------|----|-----|----|----|----|----|---|
| L (mm)       | 4  |     | 6  |    |    | 12 |   |

#### Insertion & extraction tools



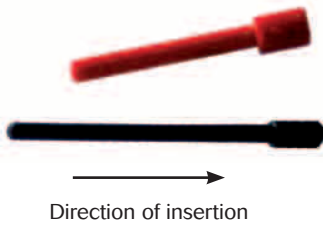
| Contact size                      | Material | Part numbers  |               | Colour    |            |
|-----------------------------------|----------|---------------|---------------|-----------|------------|
|                                   |          | Specification | SOURIAU       | Insertion | Extraction |
| <b>26</b><br>Shell sizes 02 to 06 | Plastic  | -             | 8599-0444 900 | Blue      | Red        |
| <b>26</b><br>Shell sizes 08 to 24 | Plastic  | -             | 8599-0399 900 | Black     | White      |
| <b>22D</b>                        | Plastic  | M81969/14-01  | -             | Green     | White      |
| <b>20</b>                         | Plastic  | M81969/14-10  | -             | Red       | Orange     |
| <b>16</b>                         | Plastic  | M81969/14-03  | -             | Blue      | White      |
| <b>12</b>                         | Plastic  | M81969/14-04  | -             | Yellow    |            |
| <b>8</b>                          | Plastic  | M81969/14-06  | -             | -         | Red        |
|                                   | Metallic | -             | 8660-197      |           | -          |
| <b>4</b>                          | Plastic  | M81969/14-07  | -             | -         | Blue       |
|                                   | Metallic | -             | 8533-8175     |           | -          |

# 8STA/8TA Series

## Common Section

### Accessories

#### Filler plugs



| Contact size | Part numbers  |           | Colour |
|--------------|---------------|-----------|--------|
|              | Specification | SOURIAU   |        |
| 22D          | MS27488-22    | 8660-212  | Black  |
| 20           | MS27488-20    | 8522-389A | Red    |
| 16           | MS27488-16    | 8522-390A | Blue   |
| 12           | MS27488-12    | 8522-391A | Yellow |

Not available for #26.

#### Boots

##### 8STA Series

| Shell size | Straight boot  |           | 90° boot       |           |
|------------|----------------|-----------|----------------|-----------|
|            | Raychem        | Hellerman | Raychem        | Hellerman |
| 02         | 203W301-25-G02 | 1037-4-G  | 223W601-25     | 1182-4-G  |
| 04         | 204W221-25-G03 | 1037-4-G  | 224W221-25-G03 | 1182-4-G  |
| 06         | 204W221        | 1030-4-G  | 224W221        | 1181-4-G  |
| 08         | 202K121        | 152-42-G  | 222K121        | 1152-4-G  |
| 10         | 202K132        | 152-42-G  | 222K132        | 1152-4-G  |
| 12         | 202K142        | 154-42-G  | 222K142        | 1154-4-G  |
| 14         | 202K142        | 155-42-G  | 222K142        | 1155-4-G  |
| 16         | 202K153        | 156-42-G  | 222K153        | 1156-4-G  |
| 18         | 202K153        | 156-42-G  | 222K153        | 1156-4-G  |
| 20         | 202K163        | 157-43-G  | 222K163        | 1157-4-G  |
| 22         | 202K163        | 157-43-G  | 222K163        | 1157-4-G  |
| 24         | 202K174        | 157-43-G  | 222K174        | 1157-4-G  |

##### 8TA Series

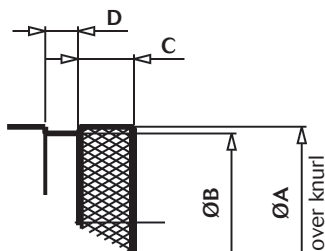
| Shell size | Straight boot |           | 90° boot |           |
|------------|---------------|-----------|----------|-----------|
|            | Raychem       | Hellerman | Raychem  | Hellerman |
| 08         | 202K121       | 152-42-G  | 222K121  | 1152-4-G  |

# 8STA/8TA Series

## Common Section

### Accessories

#### Shrinkable termination detail



| Shell size    | 02   | 04   | 06          | 08   |       | 10    | 12    | 14    | 16    | 18    | 20    | 22    | 24    |
|---------------|------|------|-------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|               |      |      |             | 8TA  | 8STA  |       |       |       |       |       |       |       |       |
| ØA            | 7.20 | 8.65 | 9.90        | 8.65 | 10.62 | 13.72 | 17.26 | 20.41 | 23.6  | 26.76 | 29.93 | 33.11 | 36.3  |
| ØB $\pm 0.05$ | 6.55 | 8.00 | 9.25 - 9.40 | 8.00 | 9.70  | 12.65 | 16.02 | 19.00 | 22.23 | 25.22 | 28.37 | 31.86 | 34.67 |
| C $\pm 0.05$  | 2.20 | 2.70 | 4.20        | 2.70 | 6     |       |       |       |       |       |       |       |       |
| D             | 2.30 | 2.30 | 3.50        | 2.30 | 3.5   |       |       |       |       |       |       |       |       |

#### Nut plates



- Nut plates are available for all 8STA (sizes 02 to 24) two holes flanges mounted connector receptacles.
- Their design was specially made for Motorsport market.

| Shell size | P/N         | T (Thread) |
|------------|-------------|------------|
| 02         | 8STA-02 M25 | M2.5       |
| 02         | 8STA-02 M20 | M2         |
| 04         | 8STA-04     | M2         |
| 04         | 8STA-04 M25 | M2.5       |
| 06         | 8STA-06 M25 | M2.5       |
| 08         | 8STA-08     | M3         |
| 10         | 8STA-10     |            |
| 12         | 8STA-12     |            |
| 14         | 8STA-14     |            |
| 16         | 8STA-16     |            |
| 18         | 8STA-18     |            |
| 20         | 8STA-20     |            |
| 22         | 8STA-22     |            |
| 24         | 8STA-24     |            |

#### Gaskets



- Gaskets are available for all 8STA sizes (02 to 24)
- They are available in two versions:
  - Standard version: Liquid silicone rubber
  - Fuel tank version: Fluorel

| Shell size | P/N Standard | P/N Fuel tank |
|------------|--------------|---------------|
| 02         | 8STA-G02     | 8STA-G02 022  |
| 04         | 8STA-G04     | 8STA-G04 022  |
| 06         | 8STA-G06     | 8STA-G06 022  |
| 08         | 8STA-G08     | 8STA-G08 022  |
| 10         | 8STA-G10     | 8STA-G10 022  |
| 12         | 8STA-G12     | 8STA-G12 022  |
| 14         | 8STA-G14     | 8STA-G14 022  |
| 16         | 8STA-G16     | 8STA-G16 022  |
| 18         | 8STA-G18     | 8STA-G18 022  |
| 20         | 8STA-G20     | 8STA-G20 022  |
| 22         | 8STA-G22     | 8STA-G22 022  |
| 24         | 8STA-G24     | 8STA-G24 022  |

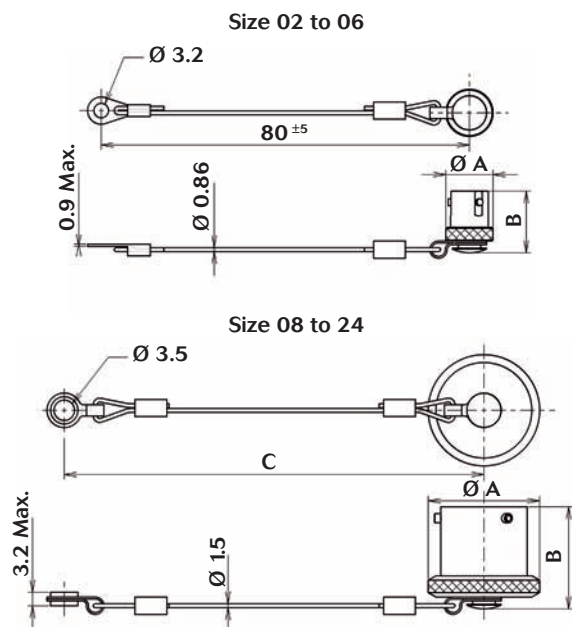
Note: All dimensions are in millimeters (mm)

# 8STA/8TA Series

## Common Section

### Accessories

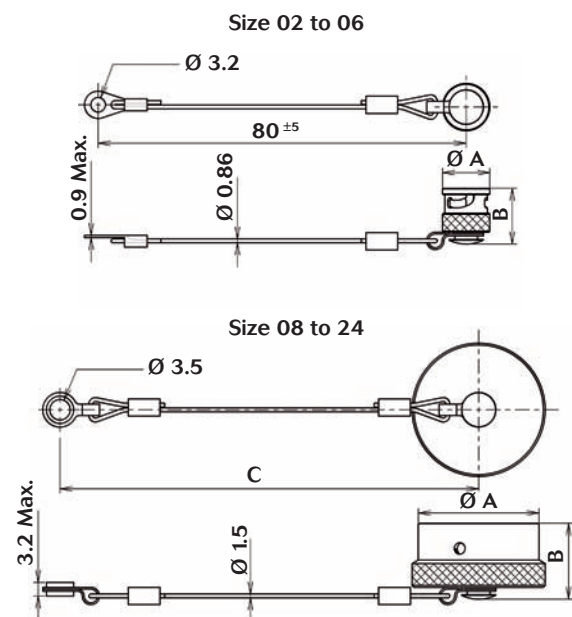
#### Plug metal protective cap & lanyard



| Part number | Size  | Ø A Max. | B Max. | C ±5 |
|-------------|-------|----------|--------|------|
| 8STA802A    | 02    | 10.60    | 13.20  | -    |
| 8STA804A    | 04    | 12.20    | 13.80  | -    |
| 8STA806A    | 06-05 | 15.10    | 14.00  | -    |
| 8STA8F06A   | 06-35 | 15.10    | 14.00  | -    |
| 8STA808A    | 08    | 17.50    | 27.44  | 128  |
| 8STA810A    | 10    | 20.50    |        | 128  |
| 8STA812A    | 12    | 24.50    |        | 140  |
| 8STA814A    | 14    | 27.50    |        | 140  |
| 8STA816A    | 16    | 30.90    |        | 140  |
| 8STA818A    | 18    | 34.00    |        | 140  |
| 8STA820A    | 20    | 37.20    |        | 153  |
| 8STA822A    | 22    | 40.40    |        | 153  |
| 8STA824A    | 24    | 43.50    |        | 153  |

Cord material: Nylon  
Cap plating: Black anodic oxydation

#### Receptacle metal protective cap & lanyard



| Part number | Size  | Ø A Max. | B Max. | C ±5 |
|-------------|-------|----------|--------|------|
| 8STA902A    | 02    | 10.60    | 13.20  | -    |
| 8STA904A    | 04    | 13.50    | 13.80  | -    |
| 8STA906A    | 06-05 | 15.10    | 14.00  | -    |
| 8STA9F06A   | 06-35 | 15.10    | 14.00  | -    |
| 8STA908A    | 08    | 19.05    | 21.44  | 128  |
| 8STA910A    | 10    | 21.85    |        | 128  |
| 8STA912A    | 12    | 26.15    |        | 140  |
| 8STA914A    | 14    | 29.35    |        | 140  |
| 8STA916A    | 16    | 32.55    |        | 140  |
| 8STA918A    | 18    | 35.35    |        | 140  |
| 8STA920A    | 20    | 38.85    |        | 153  |
| 8STA922A    | 22    | 42.05    |        | 153  |
| 8STA924A    | 24    | 45.15    | 22.22  | 153  |

Cord material: Nylon  
Cap plating: Black anodic oxydation

Note: All dimensions are in millimeters (mm)

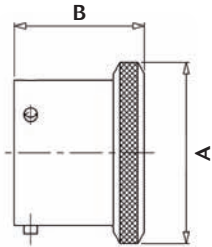
# 8STA/8TA Series

## Common Section

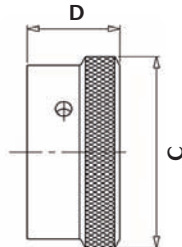
### Accessories

#### Metal protective cap

Plug cap  
Type 8



Receptacle cap  
Type 9



Cap design may vary according to shell size.

| Shell size |         | Part numbers |                | Dimensions |        |                |        |
|------------|---------|--------------|----------------|------------|--------|----------------|--------|
|            |         | Plug cap     | Receptacle cap | Plug cap   |        | Receptacle cap |        |
|            |         |              |                | ØA Max.    | B Max. | ØC Max.        | D Max. |
| 02         |         | 8STA802      | 8STA902        | 10.60      | 11.20  | 10.60          | 9.80   |
| 04         |         | 8STA804      | 8STA904        | 12.20      | 10.80  | 13.50          | 10.80  |
| 06         |         | 8STA8F06     | 8STA9F06       | 15.10      | 11.00  | 15.10          | 13.00  |
| 08         | 8TA     | 8TA808       | 8TA908         | -          | -      | -              | -      |
|            | 8STA    | 8STA808      | 8STA908        | 17.50      | 21.00  | 19.00          | 14.20  |
| 10         | 8STA810 | 8STA910      | 20.50          | 21.80      |        |                |        |
| 12         | 8STA812 | 8STA912      | 24.50          | 26.10      |        |                |        |
| 14         | 8STA814 | 8STA914      | 27.70          | 29.30      |        |                |        |
| 16         | 8STA816 | 8STA916      | 30.90          | 32.50      |        | 15.00          |        |
| 18         | 8STA818 | 8STA918      | 34.00          | 35.30      |        |                |        |
| 20         | 8STA820 | 8STA920      | 37.20          | 38.80      |        |                |        |
| 22         | 8STA822 | 8STA922      | 40.40          | 42.00      |        |                |        |
| 24         | 8STA824 | 8STA924      | 43.50          | 45.10      |        |                | 15.85  |



8STA/8TA Series

# Range Extension

|                                   |    |
|-----------------------------------|----|
| ■ 209 Series .....                | 64 |
| ■ High power contact .....        | 64 |
| ■ micro38999: 8BA Series .....    | 65 |
| ■ Composite connectors .....      | 65 |
| ■ <i>microComp</i> ® Series ..... | 66 |
| ■ UTS Series .....                | 66 |

# 8STA/8TA Series

## Products Range Extension

### 209 Series

**Terminal Blocks for Power Distribution.**  
Distribution of electrical current for aircraft equipment.

**Versatility:**

- . The terminal blocks allow connection from 1 to 12 terminals.
- . A shunt can link the terminals.

**Easy to install:**

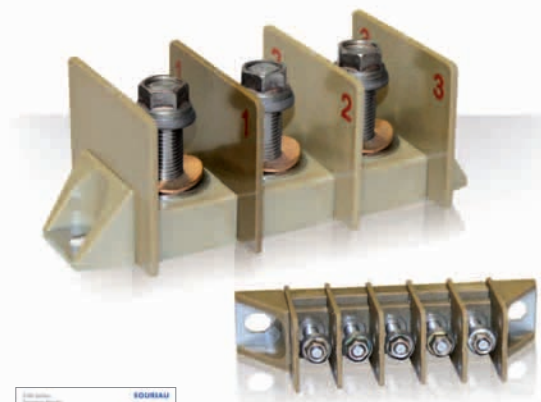
- . Screw mounting.
- . Covers are available to electrically and mechanically protect the connections.

**Flight proven:**

- . Used on major Airbus programs: A300, A320, A321, A319, A330, A340, A318, A380.

**Airbus qualified:**

- . NSA 937903 / 937904 / 937905 / 937906.
- . ASNE 0421 / 0467.



See «209 Series Terminal Blocks» product news on [www.souriau.com](http://www.souriau.com)

### High Power Contact

**38999 High Power (up to 850A). Designed to meet the harshest military requirement where high power and shielding are needed.**

**3 aluminum shell sizes available:**

- . Size 19 (450A max); size 23 (650A max); size 25 (850A max).
- . Different finish: cadmium, zinc nickel, electroless nickel.
- . Threaded coupling.

**Superior contact technology equipped with a silver plated braid:**

- . High contact endurance.
- . Low contact resistance.
- . No microcut under vibration.

**Modular design for easy installation:**

- . Removable backshell: straight, right angle or bus bar.
- . Backshell termination: for thread or shrink boot.
- . Possible to crimp various cable (Ø from 50 to 185mm).

**Safety.**



See «38999 Series III - High Power Contacts» product news on [www.souriau.com](http://www.souriau.com)

# 8STA/8TA Series

## Products Range Extension

### Composite Connectors

**SOURIAU leader on composite circular connectors. Denser and lighter than MIL-C-26500 and 852. Better performances compared to 38999 Series III at similar price.**

**Low weight:**

- . Up to 25% weight saving compared to aluminum.

**High performance:**

- . According to D38999 (QPL approved).
- . 1500 hours salt spray.

**Superior design:**

- . Match the latest lightning strike and 230V requirement.



See «8D Series - MIL-DTL-38999» catalog on [www.souriau.com](http://www.souriau.com)

### micro38999 8BA Series

**Miniature Product with a Break Away Release. Space saving with scoop proof connector for harsh and EMI applications.**

**A compact and high density solution:**

- . Diameter up to 45% smaller than size 9 (D38999).
- . Up to 50% shorter.
- . Integrated backshell: Cost and space saving.
- . #26 & #22 contacts

**Excellent features:**

- . Designed for D38999 requirements.
- . IP67 sealing when mated.
- . Ballseal (EMI).
- . Stainless steel shell (1500 matings) & aluminum shell (500 matings).

**RoHS and Cadmium free:**

- . Available in zinc nickel (RoHS) plating.
- . Nickel and olive drab cadmium plating available.



See «micro38999, 8BA Break Away» product news on [www.souriau.com](http://www.souriau.com)

# 8STA/8TA Series

## Products Range Extension

### *microComp*<sup>®</sup> Series

To respond to miniaturization and weight saving trends in aeronautical and defense applications SOURIAU has developed an innovative high density connector range.

**Very light & high density:**

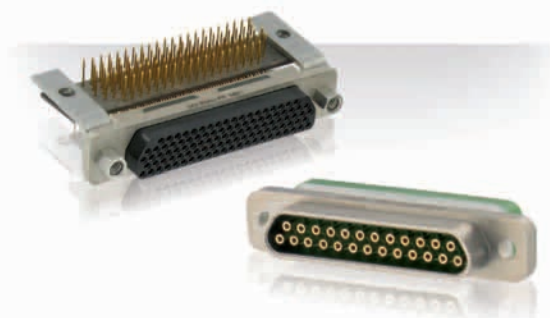
- . Shell in composite (or aluminum).
- . Up to 66% lighter than HD D-Sub.
- . Very high density up to 40% smaller than HD D-Sub.

**Excellent features:**

- . With crimp removable contacts for wire AWG 24 to 28
- . Temperature up to 175°C
- . High vibration and shock withstanding
- . Standard MIL-STD 83513 accessories
- . Compatible with high speed data rates (Gigabit Ethernet...)

**Quick connect version for harsh environment:**

- . 104 contacts push-push



See «*microComp*<sup>®</sup> Series - Miniature High Density» catalog on [www.souriau.com](http://www.souriau.com)

### UTS Series

The UTS series is a plastic connector range but rugged enough to withstand industrial applications.

**A wide range:**

- . Based on multiple power & signal connectors and offers everything from box mounted receptacles and cable mounted plugs to cable mounted in-line and PCB mounted receptacles.
- . Almost all ways to accommodate wires exist: crimp, solder, screw termination.

**A philosophy built around three key elements:**

- . Dynamic IP68/69K.
- . UV Resistant.
- . UL/IEC Compliant.



See «UTS Series» catalog on [www.souriau.com](http://www.souriau.com)



**SOURIAU**  
[www.motorsport-connectors.com](http://www.motorsport-connectors.com)  
[contactmilaero@souriau.com](mailto:contactmilaero@souriau.com)



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