

# Inverted POWER COMBICON feed-through plugs 10.16 mm pitch DFK-IPC 16/...-ST(F)-10,16

---

In the inverted versions of the DFK-IPC 16 feed-through connectors, the screw connection on the device side is designed with female instead of male contacts. This gives a touch-proof device output. This prevents the user from coming into contact with the live device interiors.

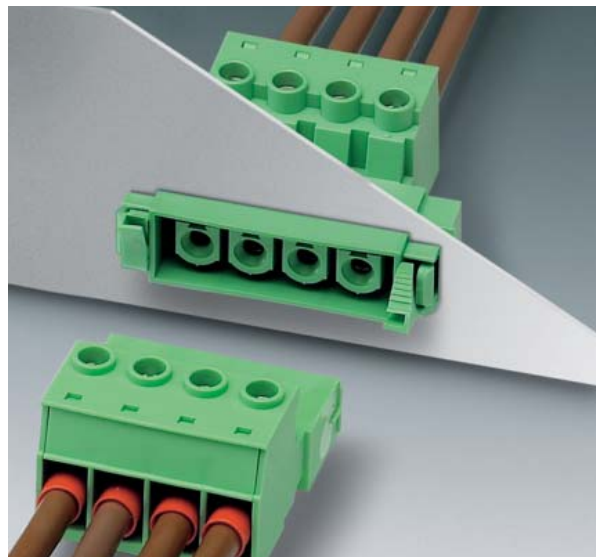
For fastening the feed-through plug connectors in the device housing, there are two possibilities:

- Either the fast snap-lock mechanism without tools or
- The conventional screw fastening.

Both options are included with the product.

The so-called PCB shield metal (in the SH version) provides three options for EMC shielding:

- Discharge of the shielding function to the PCB
- Discharge of the shielding function to the metal housing or
- Discharge through a solder or slip-on connection to the nearest shielding point.



## COMBICON Select The COMBICON search engine with CAD downloading



**Note:**  
In compliance with DIN EN 61984, COMBICON plug connectors come without switching capacity. During designated use, they must not be plugged in or disconnected when carrying voltage or under load.



Fast snap-lock mechanism



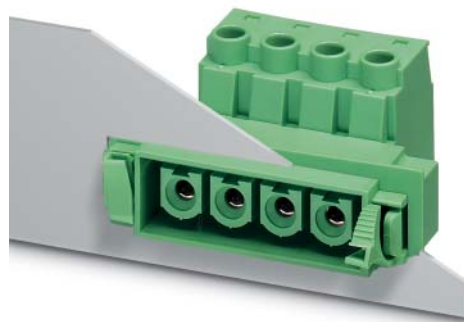
Screw fastening

COMBICON Select – the printed circuit board connection software supports your workflow from the PCB and housing layout to the ordering process with:

- Systematic and fast selection of products
- Universal Internet aided engineering with extensive CAD downloading
- Easy-to-use e-shopping functions.

[select.phoenixcontact.com/combicon](http://select.phoenixcontact.com/combicon)

# Inverted POWER COMBICON feed-through plugs DFK-IPC 16/...-ST-10,16 10.16 mm Pitch



| Description                                                            | No. of pos. | Dim.<br>a<br>[mm] |
|------------------------------------------------------------------------|-------------|-------------------|
| <b>Inverted POWER COMBICON plugs,<br/>10.16 mm pitch, color: green</b> | 2           | 10.16             |
|                                                                        | 3           | 20.32             |
|                                                                        | 4           | 30.48             |
|                                                                        | 5           | 40.64             |
|                                                                        | 6           | 50.80             |
|                                                                        | 7           | 60.96             |
|                                                                        | 8           | 71.12             |
|                                                                        | 9           | 81.28             |

**Keying profile**, is inserted into the slot on the plug and header, red insulating material

**Screws**, (DIN ISO 7049 screw ST 2,9 x 9,5), for fixing feed-through terminal blocks on the housing wall

**Screwdriver**, to actuate the terminal screws

**Marker card**, with 10 pcs., 10-section marker strips, white, self-adhesive, for 100 terminal blocks

**Crimp pliers**, for ferrules of up to 16 mm<sup>2</sup>

## Technical data

Dimensions  
Pitch [mm]

## Technical data in accordance with IEC/ DIN VDE

Insulating material group –  
Surge voltage category / contamination class – / –  
Rated voltage [V]  
Rated surge voltage [kV]  
Nominal current / cross section [A] / [mm<sup>2</sup>]  
Maximum load current / cross section [A] / [mm<sup>2</sup>]

## Connection capacity

Solid / stranded / conductor sizes [mm<sup>2</sup>] / [mm<sup>2</sup>] / AWG  
Stranded with ferrule without / with plastic sleeve [mm<sup>2</sup>]

## Multiple connection (2 conductors with same cross section)

Solid / stranded [mm<sup>2</sup>]  
Stranded with ferrules without plastic sleeve [mm<sup>2</sup>]  
Stranded with TWIN ferrule with plastic sleeve [mm<sup>2</sup>]

**Stripping length** [mm]

**Internal cylindrical gage** (IEC 60947-1) –

**Screw thread** –

**Tightening torque** [Nm]

## Insulation material

Inflammability class acc. to UL 94

## Approval data (UL/CUL and CSA)

Usegroup B [V] / [A] / AWG  
Usegroup C [V] / [A] / AWG  
Usegroup D [V] / [A] / AWG

| Type                                  | Order No.      | Pcs./Pkt. |
|---------------------------------------|----------------|-----------|
| <b>DFK-IPC 16/ 2-ST-10,16</b>         | <b>1703690</b> | 10        |
| <b>DFK-IPC 16/ 3-ST-10,16</b>         | <b>1703700</b> | 10        |
| <b>DFK-IPC 16/ 4-ST-10,16</b>         | <b>1703713</b> | 10        |
| <b>DFK-IPC 16/ 5-ST-10,16</b>         | <b>1703726</b> | 10        |
| <b>DFK-IPC 16/ 6-ST-10,16</b>         | <b>1703739</b> | 10        |
| <b>DFK-IPC 16/ 7-ST-10,16</b>         | <b>1703742</b> | 10        |
| <b>DFK-IPC 16/ 8-ST-10,16</b>         | <b>1703755</b> | 10        |
| <b>DFK-IPC 16/ 9-ST-10,16</b>         | <b>1703768</b> | 10        |
| <b>CP-HCC 4</b>                       | <b>1600027</b> | 100       |
| <b>DFK-PC 16-SS</b>                   | <b>1705449</b> | 20        |
| <b>SZS 1,0 x 4,0</b>                  | <b>1205066</b> | 10        |
| <b>SK 10/5</b> (see COMBICON catalog) |                |           |
| <b>CRIMPFOX 16 S</b>                  | <b>1207983</b> | 1         |

see description

10.16

|         | I                     | II / 2 |
|---------|-----------------------|--------|
| III / 3 | III / 2               | 1000   |
| 1000    | 1000                  | 6      |
| 8       | 8                     |        |
|         | 57 <sup>1)</sup> / 10 |        |
|         | 76 <sup>1)</sup> / 16 |        |

0.75 - 16 / 0,75 - 16 / 18 - 6  
0.5 - 16 <sup>2)</sup> / 0,5 - 16 <sup>2)</sup>

0.75 - 6 / 0.75 - 6  
0.5 - 4  
0.5 - 6

14

A6

M4

1.5 - 1.7

PA

V0

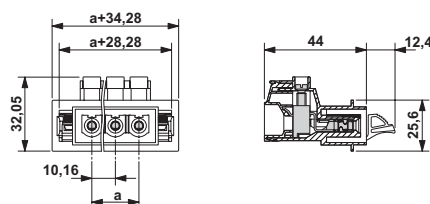
600 / 55 / 20 - 6

600 / 55 / 20 - 6

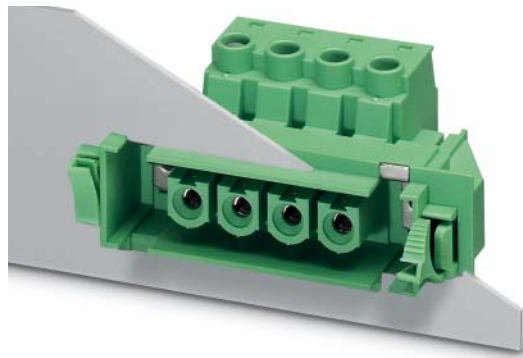
on request

<sup>1)</sup> Observe derating curve

<sup>2)</sup> Only in connection with CRIMPFOX 16 S



# Inverted POWER COMBICON feed-through plugs DFK-IPC 16/...-STF-10,16 10.16 mm Pitch



| Description                                                                                        | No. of pos. | Dim.<br>a<br>[mm] |
|----------------------------------------------------------------------------------------------------|-------------|-------------------|
| <b>Inverted POWER COMBICON feed-through plugs, 10.16 mm pitch, color: green, with screw flange</b> | 2           | 10.16             |
|                                                                                                    | 3           | 20.32             |
|                                                                                                    | 4           | 30.48             |
|                                                                                                    | 5           | 40.64             |
|                                                                                                    | 6           | 50.80             |
|                                                                                                    | 7           | 60.96             |
|                                                                                                    | 8           | 71.12             |
|                                                                                                    | 9           | 81.28             |

**Keying profile**, is inserted into the slot on the plug and header, red insulating material

**Screws**, (DIN ISO 7049 screw ST 2,9 x 9,5), for fixing feed-through terminal blocks on the housing wall

**Screwdriver**, to actuate the terminal screws

**Marker card**, with 10 pcs., 10-section marker strips, white, self-adhesive, for 100 terminal blocks

**Crimp pliers**, for ferrules of up to 16 mm<sup>2</sup>

## Technical data

Dimensions  
Pitch [mm]

## Technical data in accordance with IEC/ DIN VDE

|                                              |                          |
|----------------------------------------------|--------------------------|
| Insulating material group                    | –                        |
| Surge voltage category / contamination class | – / –                    |
| Rated voltage                                | [V]                      |
| Rated surge voltage                          | [kV]                     |
| Nominal current / cross section              | [A] / [mm <sup>2</sup> ] |
| Maximum load current / cross section         | [A] / [mm <sup>2</sup> ] |

## Connection capacity

|                                                     |                                               |
|-----------------------------------------------------|-----------------------------------------------|
| Solid / stranded / conductor sizes                  | [mm <sup>2</sup> ] / [mm <sup>2</sup> ] / AWG |
| Stranded with ferrule without / with plastic sleeve | [mm <sup>2</sup> ]                            |

## Multiple connection (2 conductors with same cross section)

|                                                |                    |
|------------------------------------------------|--------------------|
| Solid / stranded                               | [mm <sup>2</sup> ] |
| Stranded with ferrules without plastic sleeve  | [mm <sup>2</sup> ] |
| Stranded with TWIN ferrule with plastic sleeve | [mm <sup>2</sup> ] |

**Stripping length** [mm]

**Internal cylindrical gage (IEC 60947-1)** –

**Screw thread** –

**Tightening torque** [Nm]

## Insulation material

Inflammability class acc. to UL 94

## Approval data (UL/CUL and CSA)

|            |                 |
|------------|-----------------|
| Usegroup B | [V] / [A] / AWG |
| Usegroup C | [V] / [A] / AWG |
| Usegroup D | [V] / [A] / AWG |

| Type                                  | Order No.      | Pcs./Pkt. |
|---------------------------------------|----------------|-----------|
| <b>DFK-IPC 16/ 2-STF-10,16</b>        | <b>1703771</b> | 10        |
| <b>DFK-IPC 16/ 3-STF-10,16</b>        | <b>1703784</b> | 10        |
| <b>DFK-IPC 16/ 4-STF-10,16</b>        | <b>1703797</b> | 10        |
| <b>DFK-IPC 16/ 5-STF-10,16</b>        | <b>1703807</b> | 10        |
| <b>DFK-IPC 16/ 6-STF-10,16</b>        | <b>1703810</b> | 10        |
| <b>DFK-IPC 16/ 7-STF-10,16</b>        | <b>1703823</b> | 10        |
| <b>DFK-IPC 16/ 8-STF-10,16</b>        | <b>1703836</b> | 10        |
| <b>DFK-IPC 16/ 9-STF-10,16</b>        | <b>1703849</b> | 10        |
| <b>CP-HCC 4</b>                       | <b>1600027</b> | 100       |
| <b>DFK-PC 16-SS</b>                   | <b>1705449</b> | 20        |
| <b>SZS 1,0 x 4,0</b>                  | <b>1205066</b> | 10        |
| <b>SK 10/5</b> (see COMBICON catalog) |                |           |
| <b>CRIMPFOX 16 S</b>                  | <b>1207983</b> | 1         |

see description

10.16

|         |                       |        |
|---------|-----------------------|--------|
| III / 3 | I                     | II / 2 |
| 1000    | 1000                  | 1000   |
| 8       | 8                     | 6      |
|         | 57 <sup>1)</sup> / 10 |        |
|         | 76 <sup>1)</sup> / 16 |        |

0.75 - 16 / 0.75 - 16 / 18 - 6  
0.5 - 16 <sup>2)</sup> / 0.5 - 16 <sup>2)</sup>

0.75 - 6 / 0.75 - 6  
0.5 - 4  
0.5 - 6

14

A6

M4

1.5 - 1.7

PA

V0

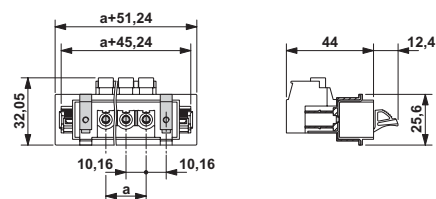
600 / 55 / 20 - 6

600 / 55 / 20 - 6

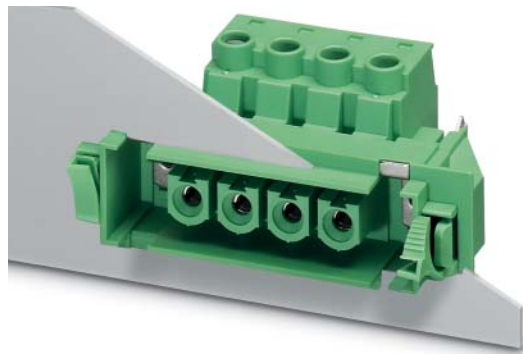
on request

<sup>1)</sup> Observe derating curve

<sup>2)</sup> Only in connection with CRIMPFOX 16 S



# Inverted POWER COMBICON feed-through plugs DFK-IPC 16/...-STF-SH-10,16 10.16 mm Pitch



| Description                                                                                                     | No. of pos. | Dim.<br>a<br>[mm] |
|-----------------------------------------------------------------------------------------------------------------|-------------|-------------------|
| <b>Inverted POWER COMBICON plugs,<br/>10.16 mm pitch, color: green,<br/>shielded version, with screw flange</b> | 2           | 10.16             |
|                                                                                                                 | 3           | 20.32             |
|                                                                                                                 | 4           | 30.48             |
|                                                                                                                 | 5           | 40.64             |
|                                                                                                                 | 6           | 50.80             |
|                                                                                                                 | 7           | 60.96             |
|                                                                                                                 | 8           | 71.12             |
|                                                                                                                 | 9           | 81.28             |

**Keying profile**, is inserted into the slot on the plug and header, red insulating material

**Screws**, (DIN ISO 7049 screw ST 2,9 x 9,5), for fixing feed-through terminal blocks on the housing wall

**Screwdriver**, to actuate the terminal screws

**Marker card**, with 10 pcs., 10-section marker strips, white, self-adhesive, for 100 terminal blocks

**Crimp pliers**, for ferrules of up to 16 mm<sup>2</sup>

## Technical data

Dimensions  
Pitch [mm]

## Technical data in accordance with IEC/ DIN VDE

|                                              |                          |
|----------------------------------------------|--------------------------|
| Insulating material group                    | –                        |
| Surge voltage category / contamination class | – / –                    |
| Rated voltage                                | [V]                      |
| Rated surge voltage                          | [kV]                     |
| Nominal current / cross section              | [A] / [mm <sup>2</sup> ] |
| Maximum load current / cross section         | [A] / [mm <sup>2</sup> ] |

## Connection capacity

|                                                     |                                               |
|-----------------------------------------------------|-----------------------------------------------|
| Solid / stranded / conductor sizes                  | [mm <sup>2</sup> ] / [mm <sup>2</sup> ] / AWG |
| Stranded with ferrule without / with plastic sleeve | [mm <sup>2</sup> ]                            |

## Multiple connection (2 conductors with same cross section)

|                                                |                    |
|------------------------------------------------|--------------------|
| Solid / stranded                               | [mm <sup>2</sup> ] |
| Stranded with ferrules without plastic sleeve  | [mm <sup>2</sup> ] |
| Stranded with TWIN ferrule with plastic sleeve | [mm <sup>2</sup> ] |

**Stripping length** [mm]

**Internal cylindrical gage (IEC 60947-1)** –

**Screw thread** –

**Tightening torque** [Nm]

## Insulation material

Inflammability class acc. to UL 94

## Approval data (UL/CUL and CSA)

|            |                 |
|------------|-----------------|
| Usegroup B | [V] / [A] / AWG |
| Usegroup C | [V] / [A] / AWG |
| Usegroup D | [V] / [A] / AWG |

| Type                                  | Order No.      | Pcs./Pkt. |
|---------------------------------------|----------------|-----------|
| <b>DFK-IPC 16/ 2-STF-SH-10,16</b>     | <b>1703933</b> | 10        |
| <b>DFK-IPC 16/ 3-STF-SH-10,16</b>     | <b>1703946</b> | 10        |
| <b>DFK-IPC 16/ 4-STF-SH-10,16</b>     | <b>1703959</b> | 10        |
| <b>DFK-IPC 16/ 5-STF-SH-10,16</b>     | <b>1703962</b> | 10        |
| <b>DFK-IPC 16/ 6-STF-SH-10,16</b>     | <b>1703975</b> | 10        |
| <b>DFK-IPC 16/ 7-STF-SH-10,16</b>     | <b>1703988</b> | 10        |
| <b>DFK-IPC 16/ 8-STF-SH-10,16</b>     | <b>1703991</b> | 10        |
| <b>DFK-IPC 16/ 9-STF-SH-10,16</b>     | <b>1704000</b> | 10        |
| <b>CP-HCC 4</b>                       | <b>1600027</b> | 100       |
| <b>DFK-PC 16-SS</b>                   | <b>1705449</b> | 20        |
| <b>SZS 1,0 x 4,0</b>                  | <b>1205066</b> | 10        |
| <b>SK 10/5</b> (see COMBICON catalog) |                |           |
| <b>CRIMPFOX 16 S</b>                  | <b>1207983</b> | 1         |

see description

10.16

|         |                       |        |
|---------|-----------------------|--------|
|         | I                     |        |
| III / 3 | III / 2               | II / 2 |
| 1000    | 1000                  | 1000   |
| 8       | 8                     | 6      |
|         | 57 <sup>1)</sup> / 10 |        |
|         | 76 <sup>1)</sup> / 16 |        |

0.75 - 16 / 0.75 - 16 / 18 - 6  
0.5 - 16 <sup>2)</sup> / 0.5 - 16 <sup>2)</sup>

0.75 - 6 / 0.75 - 6  
0.5 - 4  
0.5 - 6

14

A6

M4

1.5 - 1.7

PA

V0

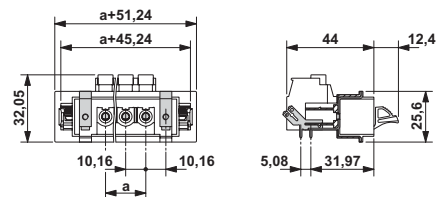
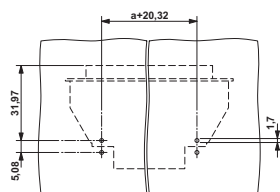
600 / 55 / 20 - 6

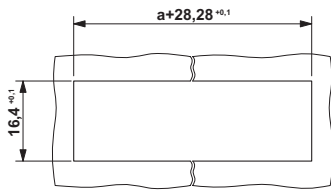
600 / 55 / 20 - 6

on request

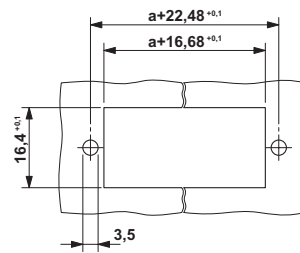
<sup>1)</sup> Observe derating curve

<sup>2)</sup> Only in connection with CRIMPFOX 16 S

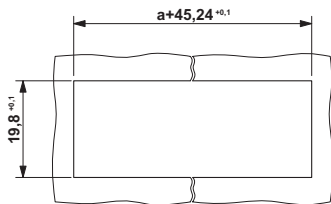




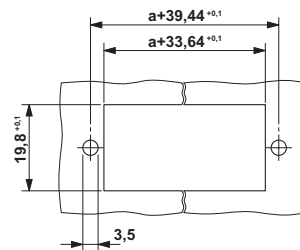
Sheet metal cutout for snap-lock mechanism  
for "ST" versions



Sheet metal cutout for screw connection  
for "ST" versions

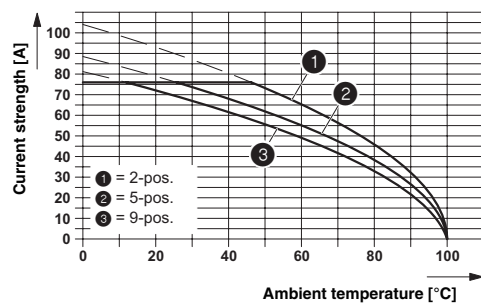


Sheet metal cutout for snap-lock mechanism  
for "STF" versions



Sheet metal cutout for screw connection  
for "STF" versions

**Derating curve**  
Type: IPC 16/...-ST-10,16 with DFK-IPC 16/...-ST-10,16  
Connected conductor cross section = 16 mm<sup>2</sup>  
Reduction factor = 0.8  
Number of positions = see diagram



## Данный компонент на территории Российской Федерации

**Вы можете приобрести в компании MosChip.**

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

moschip.ru\_4

moschip.ru\_6

moschip.ru\_9