

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

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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.

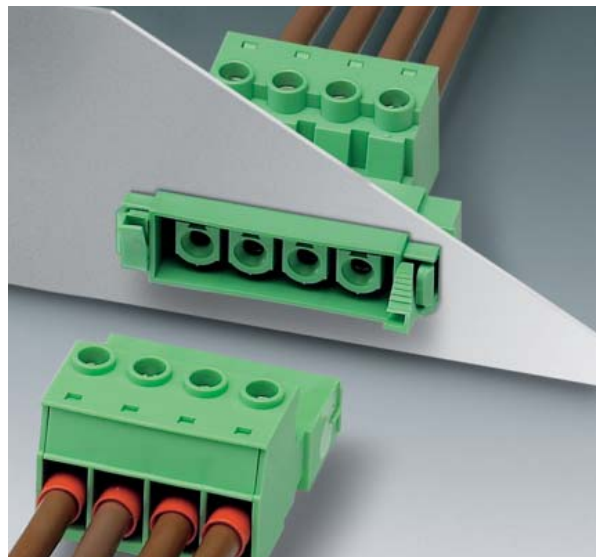
For fastening the feed-through plug connectors in the device housing, there are two possibilities:

- 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.



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- Systematic and fast selection of products
- Universal Internet aided engineering with extensive CAD downloading
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[select.phoenixcontact.com/combicon](http://select.phoenixcontact.com/combicon)

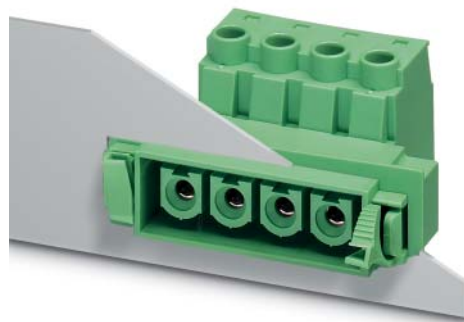
**Note:**  
In compliance with DIN EN 61984, COMBICON plug connectors come without switching capacity. During designated use, they must not be plugged in or disconnected when carrying voltage or under load.



Fast snap-lock mechanism

Screw fastening

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



Description	No. of pos.	Dim. a [mm]
<b>Inverted POWER COMBICON plugs, 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

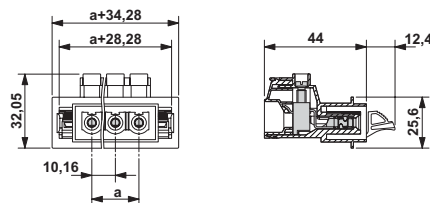
### Approval data (UL/CUL and CSA)

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

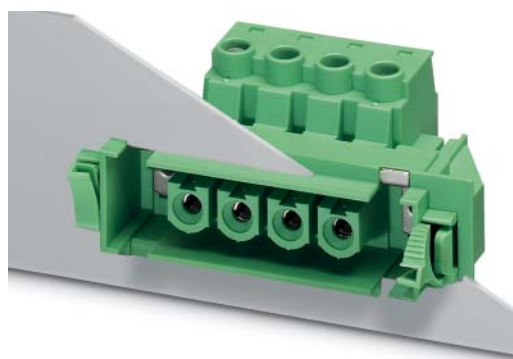
Type	Order No.	Pcs./Pkt.
<b>DFK-IPC 16/ 2-ST-10,16</b>	<b>1703690</b>	10
<b>DFK-IPC 16/ 3-ST-10,16</b>	<b>1703700</b>	10
<b>DFK-IPC 16/ 4-ST-10,16</b>	<b>1703713</b>	10
<b>DFK-IPC 16/ 5-ST-10,16</b>	<b>1703726</b>	10
<b>DFK-IPC 16/ 6-ST-10,16</b>	<b>1703739</b>	10
<b>DFK-IPC 16/ 7-ST-10,16</b>	<b>1703742</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 (see COMBICON catalog)</b>		
<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>2)</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



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Description	No. of pos.	Dim. a [mm]
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	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

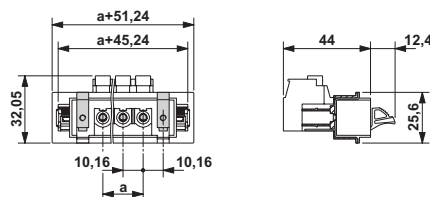
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Usegroup B	[V] / [A] / AWG
Usegroup C	[V] / [A] / AWG
Usegroup D	[V] / [A] / AWG

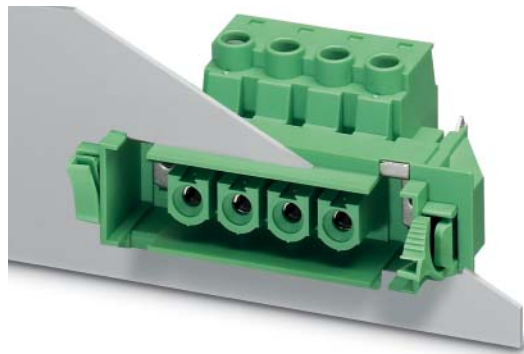
Type	Order No.	Pcs./Pkt.
<b>DFK-IPC 16/ 2-STF-10,16</b>	<b>1703771</b>	10
<b>DFK-IPC 16/ 3-STF-10,16</b>	<b>1703784</b>	10
<b>DFK-IPC 16/ 4-STF-10,16</b>	<b>1703797</b>	10
<b>DFK-IPC 16/ 5-STF-10,16</b>	<b>1703807</b>	10
<b>DFK-IPC 16/ 6-STF-10,16</b>	<b>1703810</b>	10
<b>DFK-IPC 16/ 7-STF-10,16</b>	<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 (see COMBICON catalog)</b>		
<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



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## 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> ]
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**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
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Usegroup D	[V] / [A] / AWG

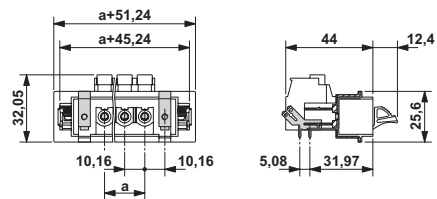
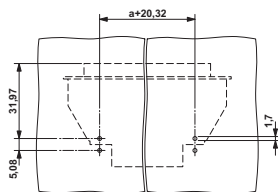
Type	Order No.	Pcs./Pkt.
<b>DFK-IPC 16/ 2-STF-SH-10,16</b>	<b>1703933</b>	10
<b>DFK-IPC 16/ 3-STF-SH-10,16</b>	<b>1703946</b>	10
<b>DFK-IPC 16/ 4-STF-SH-10,16</b>	<b>1703959</b>	10
<b>DFK-IPC 16/ 5-STF-SH-10,16</b>	<b>1703962</b>	10
<b>DFK-IPC 16/ 6-STF-SH-10,16</b>	<b>1703975</b>	10
<b>DFK-IPC 16/ 7-STF-SH-10,16</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

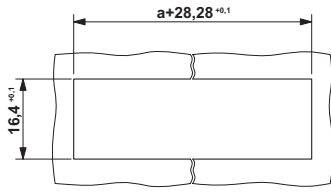
  

see description		
10.16		
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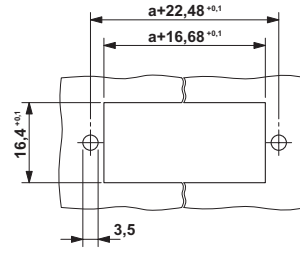
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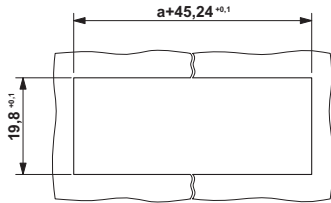




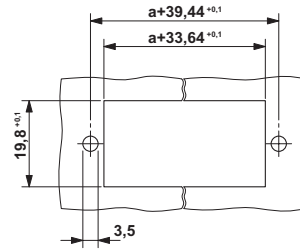
Sheet metal cutout for snap-lock mechanism for "ST" versions



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

