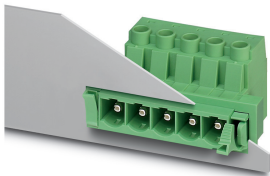


# Feed-through plug - DFK-PC 16/ 4-ST-10,16 - 1703399

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Feed-through connector, nominal cross section: 16 mm<sup>2</sup>, color: green, nominal current: 76 A, rated voltage (III/2): 1000 V, contact surface: Silver, type of contact: Male connector, number of potentials: 4, Number of rows: 1, Number of positions per row: 4, number of connections: 4, product range: DFK-PC 16/...-ST, pitch: 10.16 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 0 °, plug-in system: POWER COMBICON 16, Pin connector pattern alignment: Standard, Locking: without, mounting: without, type of packaging: packed in cardboard


The figure shows a 5-pos. version of the product

## Your advantages

- ✓ Well-known connection principle allows worldwide use
- ✓ Low temperature rise, thanks to maximum contact force
- ✓ Allows connection of two conductors
- ✓ Flange system enables secure fixing to the housing panel by means of tool-free snap-in locking or screws



## Key Commercial Data

Packing unit	10 pc
GTIN	 4 017918 994310
GTIN	4017918994310

## Technical data

### Item properties

Brief article description	Feed-through plug
Connector system	POWER COMBICON 16
Type of contact	Male connector
Range of articles	DFK-PC 16/...-ST
Pitch	10.16 mm
Number of positions	4
Screw thread	M4
Locking	without
Number of levels	1
Number of connections	4
Number of potentials	4

# Feed-through plug - DFK-PC 16/ 4-ST-10,16 - 1703399

## Technical data

### Item properties

Pin connector pattern alignment	Standard
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### Electrical parameters

Nominal current	76 A
Nom. voltage	1000 V
Rated voltage (III/3)	1000 V
Rated voltage (III/2)	1000 V
Rated voltage (II/2)	1000 V
Rated surge voltage (III/3)	8 kV
Rated surge voltage (III/2)	8 kV
Rated surge voltage (II/2)	6 kV

### Connection capacity

Connection method	Screw connection with tension sleeve
pluggable	Yes
Conductor cross section solid	0.75 mm <sup>2</sup> ... 16 mm <sup>2</sup>
Conductor cross section flexible	0.75 mm <sup>2</sup> ... 16 mm <sup>2</sup>
Conductor cross section AWG / kcmil	18 ... 6
Conductor cross section flexible, with ferrule without plastic sleeve	0.5 mm <sup>2</sup> ... 16 mm <sup>2</sup> (Only in connection with CRIMPFOX 16 S)
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.5 mm <sup>2</sup> ... 16 mm <sup>2</sup> (Only in connection with CRIMPFOX 16 S)
2 conductors with same cross section, solid	0.75 mm <sup>2</sup> ... 6 mm <sup>2</sup>
2 conductors with same cross section, flexible	0.75 mm <sup>2</sup> ... 6 mm <sup>2</sup>
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup>
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Cylindrical gauge a x b / diameter	4.3 mm x 4.0 mm / 5.4 mm
Stripping length	12 mm
Torque	1.7 Nm ... 1.8 Nm

### Material data - contact

Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/ JEDEC JESD 201
Contact material	Cu alloy
Surface characteristics	Electroplated silver
Metal surface terminal point (top layer)	Silver (4 - 8 µm Ag)
Metal surface contact area (top layer)	Silver (4 - 8 µm Ag)

### Material data - housing

Housing color	green (6021)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

# Feed-through plug - DFK-PC 16/ 4-ST-10,16 - 1703399

## Technical data

### Material data - housing

Glow wire flammability index GWFI according to EN 60695-2-12	850
Glow wire ignition temperature GWIT according to EN 60695-2-13	775
Temperature for the ball pressure test according to EN 60695-10-2	125 °C

### Dimensions for the product

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [ l ]	56.5 mm
Width [ w ]	60.08 mm
Height [ h ]	30.55 mm
Pitch	10.16 mm
Height (without solder pin)	27.8 mm

### Packaging information

Type of packaging	packed in cardboard
Pieces per package	10
Denomination packing units	Pcs.

### General product information

Type of note	Notes on operation
Note	In accordance with IEC 61984, COMBICON connectors have no switching power (COC). During designated use, they must not be plugged in or disconnected when carrying voltage or under load.

### Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C ... 100 °C (dependent on the derating curve)

### Termination and connection method

Conductor connection test	The stripped-off ends of the largest conductor can be completely inserted in the opening of the terminal point without using excessive force.
Test result	Test passed
Test – repeated connection and release	IEC 60999-1:1999-11
	Test passed
Test for conductor damage and slackening	IEC 60999-1:1999-11
	Test passed

### Pull-out test

Pull-out test	IEC 60999-1:1999-11
Conductor cross section / conductor type / tensile force	0.75 mm <sup>2</sup> / solid / > 30 N
	0.75 mm <sup>2</sup> / flexible / > 30 N
	16 mm <sup>2</sup> / solid / > 100 N
	16 mm <sup>2</sup> / flexible / > 100 N

# Feed-through plug - DFK-PC 16/ 4-ST-10,16 - 1703399

## Technical data

### Mechanical tests according to standard

Test specification	IEC 61984
Visual inspection	IEC 60512-1-1:2002-02
Dimension check	IEC 60512-1-2:2002-02
Resistance of inscriptions	IEC 60068-2-70:1995-12
Insertion and withdrawal force	IEC 60512-13-2:2006-02
No. of cycles	50
Insertion strength per pos. approx.	7 N
Withdraw strength per pos. approx.	7 N
Polarization and coding	IEC 60512-13-5:2006-02

### Air clearances and creepage distances

Clearances and creepage distances	IEC 60664-1:2007-04
Specification	IEC 60664-1:2007-04
Minimum clearance - inhomogeneous field (III/3)	8 mm
Minimum clearance - inhomogeneous field (III/2)	8 mm
Minimum clearance - inhomogeneous field (II/2)	5.5 mm
Minimum creepage distance value (III/3)	12.5 mm
Minimum creepage distance value (III/2)	5 mm
Minimum creepage distance value (II/2)	5 mm

### Electrical tests - Function

Specification	IEC 60999-1:1999-11
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### Temperature cycles

Specification	IEC 60999-1:1999-11
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### Current carrying capacity / derating curves

Caption	Type: SPC 16/...-ST(F)-10,16 with DFK-PC 16/...-ST(F)-10,16
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### Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	7 N
Withdraw strength per pos. approx.	7 N
Polarization when inserted requirement >20 N	Test passed

### Durability tests (B)

Specification	IEC 60512-9-1:2010-03
Contact resistance R <sub>1</sub>	0.5 mΩ
Insertion/withdrawal cycles	50
Contact resistance R <sub>2</sub>	0.5 mΩ
Impulse withstand voltage at sea level	9.8 kV

### Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
Number of positions	9

# Feed-through plug - DFK-PC 16/ 4-ST-10,16 - 1703399

## Technical data

### Thermal tests (C)

Upper limiting temperature requirements <100 °C	Test passed
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### Climatic tests (D)

Specification	ISO 6988:1985-02
Cold stress	-40 °C/2 h
Thermal stress	100 °C/168 h
Corrosive stress	0.2 dm <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> /40 °C/1 cycle
Impulse withstand voltage at sea level	9.8 kV
Power-frequency withstand voltage	4.26 kV

### Environmental and durability tests (E)

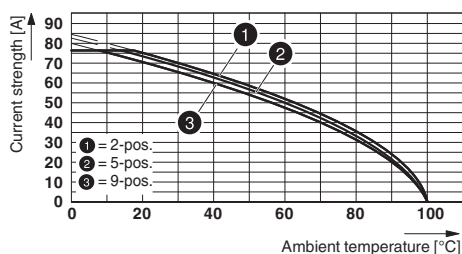
Specification	IEC 61984:2008-10
Result, degree of protection, IP code	Finger safety with IP20 test finger

### Environmental Product Compliance

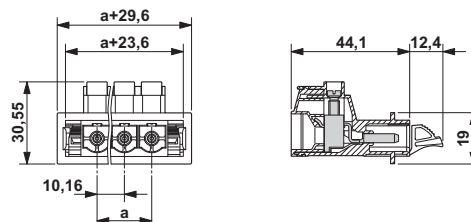
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

Diagram



Dimensional drawing



Type: SPC 16/...-ST(F)-10,16 with DFK-PC 16/...-ST(F)-10,16

## Classifications

eCl@ss

eCl@ss 10.0.1	27440309
eCl@ss 11.0	27460202
eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27141100
eCl@ss 5.1	27141100
eCl@ss 6.0	27141100
eCl@ss 7.0	27141134
eCl@ss 9.0	27440309

# Feed-through plug - DFK-PC 16/ 4-ST-10,16 - 1703399

## Classifications

### ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC002638
ETIM 6.0	EC002638
ETIM 7.0	EC002638

### UNSPSC

UNSPSC 6.01	30211810
UNSPSC 7.0901	39121409
UNSPSC 11	39121409
UNSPSC 12.01	39121409
UNSPSC 13.2	39121410
UNSPSC 18.0	39121409
UNSPSC 19.0	39121409
UNSPSC 20.0	39121409
UNSPSC 21.0	39121409

## Approvals


### Approvals


#### Approvals

IECEE CB Scheme / SEV / EAC / cULus Recognized

#### Ex Approvals

### Approval details

IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	CH-10654-M1
Nominal voltage UN	1000 V		
Nominal current IN	76 A		
mm <sup>2</sup> /AWG/kcmil	0.75-16		

SEV		<a href="https://www.eurofins.ch/de/">https://www.eurofins.ch/de/</a>	IK-4469-M1
Nominal voltage UN	1000 V		

# Feed-through plug - DFK-PC 16/ 4-ST-10,16 - 1703399

## Approvals

Nominal current I <sub>N</sub>	76 A
mm <sup>2</sup> /AWG/kcmil	0.75-16

EAC		B.01687
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cULus Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	E60425-20040202
	B	C	
Nominal voltage U <sub>N</sub>	600 V	600 V	
Nominal current I <sub>N</sub>	55 A	55 A	
mm <sup>2</sup> /AWG/kcmil	20-6	20-6	

## Accessories

### Accessories

#### Coding element

Coding profile - CP-PC RD - 1701967



Coding profile, for plugging into the coding ribs of the plug at a later date, insulating material, color: Red

### Connector set

Accessories - DFK-PC MOUNT SET - 1054021

Contains 20 pcs. latch and screw elements for feed-through connectors each

## Additional products

Printed-circuit board connector - PC 16/ 4-ST-10,16 - 1967391



PCB connector, nominal cross section: 16 mm<sup>2</sup>, color: green, nominal current: 76 A, rated voltage (III/2): 1000 V, contact surface: Silver, type of contact: Female connector, number of potentials: 4, Number of rows: 1, Number of positions per row: 4, number of connections: 4, product range: PC 16/..-ST, pitch: 10.16 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, Locking clip: - without locking clip, plug-in system: POWER COMBICON 16, Locking: without, mounting: without, type of packaging: packed in cardboard

## Feed-through plug - DFK-PC 16/ 4-ST-10,16 - 1703399

### Accessories

#### Printed-circuit board connector - SPC 16/ 4-ST-10,16 - 1711284



PCB connector, nominal cross section: 16 mm<sup>2</sup>, color: green, nominal current: 76 A, rated voltage (III/2): 1000 V, contact surface: Silver, type of contact: Female connector, number of potentials: 4, Number of rows: 1, Number of positions per row: 4, number of connections: 4, product range: SPC 16/...-ST, pitch: 10.16 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, Locking clip: - without locking clip, plug-in system: POWER COMBICON 16, Locking: without, mounting: without, type of packaging: packed in cardboard

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#### Printed-circuit board connector - TPC 16/ 4-ST-10,16 - 1715196



PCB connector, nominal cross section: 16 mm<sup>2</sup>, color: green, nominal current: 76 A, rated voltage (III/2): 1000 V, contact surface: Silver, type of contact: Female connector, number of potentials: 4, Number of rows: 1, Number of positions per row: 4, number of connections: 8, product range: TPC 16/...-ST, pitch: 10.16 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 50 °, Locking clip: - without locking clip, plug-in system: POWER COMBICON 16, Locking: without, mounting: without, type of packaging: packed in cardboard

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