

# DFK-PC 16/ 8-STF-SH-10,16 - Feed-through plug



1703674

<https://www.phoenixcontact.com/gb/products/1703674>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



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: Ag, contact connection type: Pin, number of potentials: 8, number of rows: 1, number of positions: 8, number of connections: 8, product range: DFK-PC 16/...STF-SH, pitch: 10.16 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, solder pin [P]: 4.1 mm, plug-in system: COMBICON PC 16, Electrical properties: shielded, Pin connector pattern alignment: Standard, locking: Screw locking mechanism, mounting method: Screw flange, type of packaging: packed in cardboard

## 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
- Shroud for professional EMC shield feed-through on the inside of the device
- Screwable flange for superior mechanical stability

## Commercial data

|                                      |                                |
|--------------------------------------|--------------------------------|
| Item number                          | 1703674                        |
| Packing unit                         | 10 pc                          |
| Minimum order quantity               | 10 pc                          |
| Note                                 | Made to order (non-returnable) |
| Sales key                            | AAEWDC                         |
| Product key                          | AAEWDC                         |
| Catalog page                         | Page 583 (C-1-2013)            |
| GTIN                                 | 4017918994518                  |
| Weight per piece (including packing) | 95.06 g                        |
| Weight per piece (excluding packing) | 91.56 g                        |
| Customs tariff number                | 85366990                       |
| Country of origin                    | PL                             |

# DFK-PC 16/ 8-STF-SH-10,16 - Feed-through plug



1703674

<https://www.phoenixcontact.com/gb/products/1703674>

## Technical data

### Product properties

|                           |                        |
|---------------------------|------------------------|
| Product type              | Feed-through connector |
| Product family            | DFK-PC 16/...STF-SH    |
| Product line              | COMBICON Connectors XL |
| Type                      | Feed-through header    |
| Number of positions       | 8                      |
| Pitch                     | 10.16 mm               |
| Number of connections     | 8                      |
| Number of rows            | 1                      |
| Number of potentials      | 8                      |
| Mounting flange           | Screw flange           |
| Electrical characteristic | shielded               |

### Electrical properties

#### Properties

|                             |          |
|-----------------------------|----------|
| Nominal current $I_N$       | 76 A     |
| Nominal voltage $U_N$       | 1000 V   |
| Rated voltage (III/3)       | 1000 V   |
| Rated surge voltage (III/3) | 8 kV     |
| Rated voltage (III/2)       | 1000 V   |
| Rated surge voltage (III/2) | 8 kV     |
| Rated voltage (II/2)        | 1000 V   |
| Rated surge voltage (II/2)  | 6 kV     |
| Electrical characteristic   | shielded |

### Connection data

#### Connection technology

|                         |                     |
|-------------------------|---------------------|
| Type                    | Feed-through header |
| Connector system        | COMBICON PC 16      |
| Nominal cross section   | 16 mm <sup>2</sup>  |
| Contact connection type | Pin                 |

#### Interlock

|                   |                         |
|-------------------|-------------------------|
| Locking type      | Screw locking mechanism |
| Mounting flange   | Screw flange            |
| Tightening torque | 0.3 Nm                  |

#### Conductor connection

|                                                            |                                             |
|------------------------------------------------------------|---------------------------------------------|
| Connection method                                          | Screw connection with tension sleeve        |
| Connection direction of the conductor to plug-in direction | 0 °                                         |
| Conductor cross section rigid                              | 0.75 mm <sup>2</sup> ... 16 mm <sup>2</sup> |

# DFK-PC 16/ 8-STF-SH-10,16 - Feed-through plug



1703674

<https://www.phoenixcontact.com/gb/products/1703674>

|                                                                                           |                                                                                    |
|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Conductor cross section flexible                                                          | 0.75 mm <sup>2</sup> ... 16 mm <sup>2</sup>                                        |
| Conductor cross section AWG                                                               | 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                                                                              |
| Drive form screw head                                                                     | Slotted (L)                                                                        |
| Tightening torque                                                                         | 1.7 Nm ... 1.8 Nm                                                                  |

## Mounting

### Attachment to feed-through panel

|                   |                      |
|-------------------|----------------------|
| Tightening torque | 0.3 Nm               |
| Screw             | 1700368 DFK-PC 35 SS |

## Material specifications

### 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

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

## Notes

|                    |                                                                                                                                                                                          |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Notes on operation | 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. |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

# DFK-PC 16/ 8-STF-SH-10,16 - Feed-through plug



1703674

<https://www.phoenixcontact.com/gb/products/1703674>

## Dimensions

|                       |           |
|-----------------------|-----------|
| Dimensional drawing   |           |
| Pitch                 | 10.16 mm  |
| Width [w]             | 116.64 mm |
| Height [h]            | 32.25 mm  |
| Length [l]            | 44.1 mm   |
| Installed height      | 30.55 mm  |
| Solder pin length [P] | 4.1 mm    |

## PCB design

|               |        |
|---------------|--------|
| Hole diameter | 1.7 mm |
|---------------|--------|

## Electrical tests

### Air clearances and creepage distances |

|                                                        |                     |
|--------------------------------------------------------|---------------------|
| Specification                                          | IEC 60664-1:2007-04 |
| Insulating material group                              | I                   |
| Comparative tracking index (IEC 60112)                 | CTI 600             |
| Rated insulation voltage (III/3)                       | 1000 V              |
| Rated surge voltage (III/3)                            | 8 kV                |
| minimum clearance value - non-homogenous field (III/3) | 8 mm                |
| minimum creepage distance (III/3)                      | 12.5 mm             |
| Rated insulation voltage (III/2)                       | 1000 V              |
| Rated surge voltage (III/2)                            | 8 kV                |
| minimum clearance value - non-homogenous field (III/2) | 8 mm                |
| minimum creepage distance (III/2)                      | 8 mm                |
| Rated insulation voltage (II/2)                        | 1000 V              |
| Rated surge voltage (II/2)                             | 6 kV                |
| minimum clearance value - non-homogenous field (II/2)  | 5.5 mm              |
| minimum creepage distance (II/2)                       | 5.5 mm              |

## Environmental and real-life conditions

### Ambient conditions

|                                         |                                                     |
|-----------------------------------------|-----------------------------------------------------|
| Ambient temperature (operation)         | -40 °C ... 100 °C (dependent on the derating curve) |
| Ambient temperature (storage/transport) | -40 °C ... 70 °C                                    |
| Relative humidity (storage/transport)   | 30 % ... 70 %                                       |
| Ambient temperature (assembly)          | -5 °C ... 100 °C                                    |

## Packaging specifications

# DFK-PC 16/ 8-STF-SH-10,16 - Feed-through plug

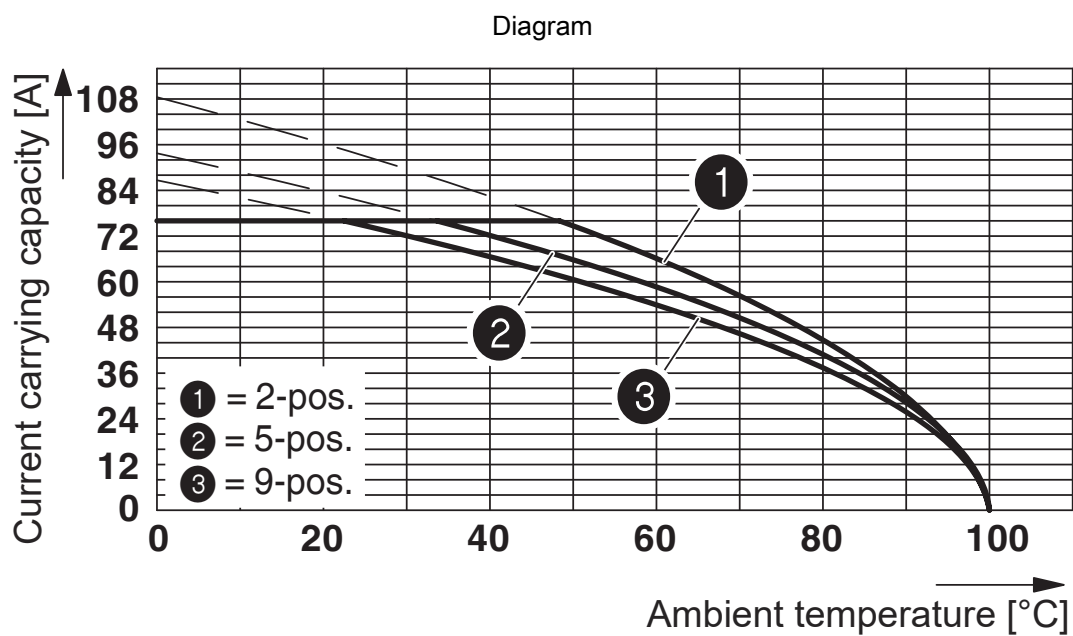


1703674

<https://www.phoenixcontact.com/gb/products/1703674>

|                   |                     |
|-------------------|---------------------|
| Type of packaging | packed in cardboard |
|-------------------|---------------------|

## Drawings



Derating curve for: PC 16/...-ST-10.16 with DFK-PC 16/...-ST-10.16

# DFK-PC 16/ 8-STF-SH-10,16 - Feed-through plug



1703674

<https://www.phoenixcontact.com/gb/products/1703674>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/gb/products/1703674>

|  <b>cULus Recognized</b><br>Approval ID: E60425-20040202 |                       |                       |                   |                             |
|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
|                                                                                                                                           | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| Use group B                                                                                                                               | 600 V                 | 55 A                  | 20 - 6            | -                           |
| Use group C                                                                                                                               | 600 V                 | 55 A                  | 20 - 6            | -                           |

|  <b>VDE approval of drawings</b><br>Approval ID: 40055586 |                       |                       |                   |                             |
|--------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
|                                                                                                                                            | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|                                                                                                                                            | 1000 V                | 76 A                  | -                 | 0.75 - 16                   |

# DFK-PC 16/ 8-STF-SH-10,16 - Feed-through plug



1703674

<https://www.phoenixcontact.com/gb/products/1703674>

## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27460202 |
|-------------|----------|

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC002638 |
|----------|----------|

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 39121400 |
|-------------|----------|

# DFK-PC 16/ 8-STF-SH-10,16 - Feed-through plug



1703674

<https://www.phoenixcontact.com/gb/products/1703674>

## Environmental product compliance

### EU RoHS

|                                         |                    |
|-----------------------------------------|--------------------|
| Fulfills EU RoHS substance requirements | Yes, No exemptions |
|-----------------------------------------|--------------------|

### China RoHS

|                                        |                                          |
|----------------------------------------|------------------------------------------|
| Environment friendly use period (EFUP) | EFUP-E                                   |
|                                        | No hazardous substances above the limits |

### EU REACH SVHC

|                                     |                            |
|-------------------------------------|----------------------------|
| REACH candidate substance (CAS No.) | No substance above 0.1 wt% |
|-------------------------------------|----------------------------|

Phoenix Contact 2025 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT Ltd  
Halesfield 13, Telford  
Shropshire, TF7 4PG  
01952 681700  
[info@phoenixcontact.co.uk](mailto:info@phoenixcontact.co.uk)