

# QPD CW 4PE2,5 1X9-16 BK - Conductor connector



1403846

<https://www.phoenixcontact.com/us/products/1403846>

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.



Cable connector panel feed-through, single-sided with QPD nut, black, 4+PE-pos., 1.0 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>/690 V/20 A, for cable diameter of 9 mm ... 16 mm.

## Your advantages

- Innovative and time saving - QUICKON fast connection for time saving of up to 80 % for on-site connection
- Robust throughout: housing with IP68/IP69K and IK07 protection for a wide range of applications
- Safer connection with mechanical coding to protect against mismatching, and touch-proof protection in accordance with DIN EN 0105
- Easy and safe - with the cable connector, you can repair or extend cables quickly, in combination with the connector as well as the coupling connection

## Commercial data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 1403846       |
| Packing unit                         | 1 pc          |
| Minimum order quantity               | 1 pc          |
| Sales key                            | BF50          |
| Product key                          | AF6CCB        |
| GTIN                                 | 4046356670418 |
| Weight per piece (including packing) | 82.2 g        |
| Weight per piece (excluding packing) | 85 g          |
| Customs tariff number                | 85366990      |
| Country of origin                    | PL            |

# QPD CW 4PE2,5 1X9-16 BK - Conductor connector



1403846

<https://www.phoenixcontact.com/us/products/1403846>

## Technical data

### Product properties

|                                    |                 |
|------------------------------------|-----------------|
| Product type                       | Cable connector |
| Product family                     | QPD             |
| Type                               | QPD 5x2,5       |
| Number of positions                | 5               |
| Connection profile                 | 4+PE            |
| Position marking                   | 1, 2, 3, N, PE  |
| Number of connections per position | 1               |
| Coding                             | Coding profile  |

### Insulation characteristics

|                      |     |
|----------------------|-----|
| Overvoltage category | III |
| Degree of pollution  | 3   |

### Dimensions

|                          |         |
|--------------------------|---------|
| Dimensional drawing      |         |
| Width                    | 50 mm   |
| Height                   | 50 mm   |
| Length                   | 96.3 mm |
| Diameter                 | 50 mm   |
| Wrench size              | 27 mm   |
| Wrench size for mounting | 27 mm   |

### Connection data

#### Connection technology

|                                                                       |         |
|-----------------------------------------------------------------------|---------|
| Frequency of connections between conductors of the same cross section | max. 10 |
|-----------------------------------------------------------------------|---------|

#### Conductor connection

|                               |       |
|-------------------------------|-------|
| Tightening torque             | 10 Nm |
|                               | 5 Nm  |
| Tightening torque Union nut   | 10 Nm |
| Tightening torque Locking nut | 5 Nm  |
| Wrench size Union nut         | 27 mm |

### Electrical properties

|                             |      |
|-----------------------------|------|
| Rated surge voltage (II/2)  | 8 kV |
| Rated surge voltage (III/2) | 8 kV |

# QPD CW 4PE2,5 1X9-16 BK - Conductor connector



1403846

<https://www.phoenixcontact.com/us/products/1403846>

|                             |          |
|-----------------------------|----------|
| Rated surge voltage (III/3) | 6 kV     |
| Rated current               | 20 A     |
| Contact resistance          | < 3 mΩ   |
| rated voltage (II/2)        | 1250 V   |
| rated voltage (III/2)       | 1000 V   |
| Rated voltage (III/3)       | 690 V    |
| Nominal voltage $U_N$       | 690 V AC |
|                             | 690 V DC |
| Nominal current $I_N$       | 20 A     |

## Mechanical properties

### Mechanical data

|                             |                                       |
|-----------------------------|---------------------------------------|
| Insertion/withdrawal cycles | max. 50 (QUICKON connections max. 10) |
|-----------------------------|---------------------------------------|

## Material specifications

|                                        |                   |
|----------------------------------------|-------------------|
| Color                                  | black (RAL 9005)  |
| Material Housing                       | PA                |
| Material Contact                       | Cu                |
| Material Contact surface               | silver-plated     |
| Flammability rating according to UL 94 | V0                |
| Material wire insulation               | PVC/PE/TPE/rubber |

## Cable/line

|                                                                             |                                    |
|-----------------------------------------------------------------------------|------------------------------------|
| Structure of individual litz in acc. with VDE 0295 / smallest wire diameter | VDE 0295 class 1 to 6/min. 0.15 mm |
| External cable diameter                                                     | 9 mm ... 16 mm                     |
| Wire diameter including insulation                                          | 2 mm ... 3.8 mm                    |
| Position marking                                                            | 1, 2, 3, N, PE                     |
| Material wire insulation                                                    | PVC/PE/TPE/rubber                  |
| Halogen-free                                                                | yes                                |

## Environmental and real-life conditions

### Ambient conditions

|                                         |                                        |
|-----------------------------------------|----------------------------------------|
| Degree of protection                    | IP66                                   |
|                                         | IP68 (2 m / 24 h)                      |
|                                         | IP69K                                  |
|                                         | Touch-proof when not plugged in (IP2X) |
| Impact strength                         | IK07                                   |
| Ambient temperature (operation)         | -40 °C ... 100 °C                      |
| Temperature when conductor connected    | -5 °C ... 50 °C                        |
| Ambient temperature (storage/transport) | -40 °C ... 100 °C                      |

# QPD CW 4PE2,5 1X9-16 BK - Conductor connector

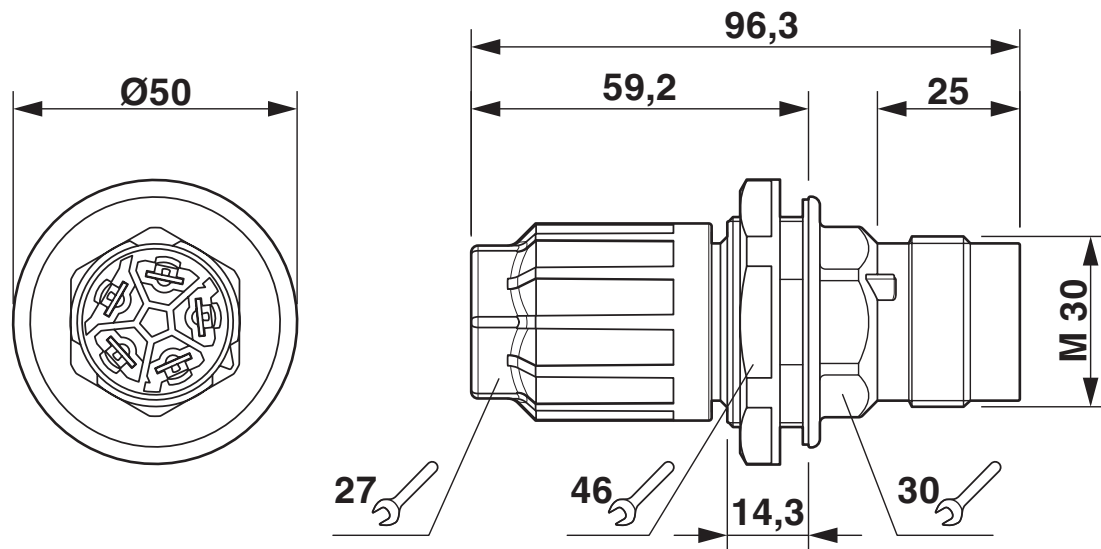


1403846

<https://www.phoenixcontact.com/us/products/1403846>

## Drawings

Dimensional drawing



Dimensional drawing of the QPD CW 5x2.5

# QPD CW 4PE2,5 1X9-16 BK - Conductor connector



1403846

<https://www.phoenixcontact.com/us/products/1403846>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1403846>



**IECEE CB Scheme**  
Approval ID: DE1-65875



**DNV GL**  
Approval ID: TAE00003J5



**VDE Zeichengenehmigung**  
Approval ID: 40029149

| <div><div><b>UL Listed</b><br/>Approval ID: E468743</div></div> |                       |                       |                   |                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
|                                                                                                                                                  | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| keine                                                                                                                                            |                       |                       |                   |                             |
|                                                                                                                                                  | 600 V                 | 10 A                  | - 14              | - 14                        |

| <div><div><b>cUL Listed</b><br/>Approval ID: E468743</div></div> |                       |                       |                   |                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
|                                                                                                                                                     | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| keine                                                                                                                                               |                       |                       |                   |                             |
|                                                                                                                                                     | 600 V                 | 10 A                  | - 14              | -                           |

# QPD CW 4PE2,5 1X9-16 BK - Conductor connector



1403846

<https://www.phoenixcontact.com/us/products/1403846>

## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27440605 |
| ECLASS-15.0 | 27440605 |

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC002560 |
|----------|----------|

### UNSPSC

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

# QPD CW 4PE2,5 1X9-16 BK - Conductor connector



1403846

<https://www.phoenixcontact.com/us/products/1403846>

## 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% |
|-------------------------------------|----------------------------|

### EF3.0 Climate Change

|         |              |
|---------|--------------|
| CO2e kg | 0.85 kg CO2e |
|---------|--------------|

Phoenix Contact 2025 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)