

# QPD CW3PE2,5 1X6-10 BK - Conductor connector



1424040

<https://www.phoenixcontact.com/us/products/1424040>

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Conductor connector, product family: QPD, connection method: IDC connection, number of positions: 3+PE, 1 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, 690 V, 20 A, PA, black, with one QUICKON nut, coding: Coding profile, external cable diameter: 6 mm ... 10 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                          | 1424040       |
| Packing unit                         | 1 pc          |
| Minimum order quantity               | 1 pc          |
| Sales key                            | BF50          |
| Product key                          | BF6CBB        |
| GTIN                                 | 4055626366425 |
| Weight per piece (including packing) | 57.1 g        |
| Weight per piece (excluding packing) | 55.7 g        |
| Customs tariff number                | 85366990      |
| Country of origin                    | PL            |

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## Technical data

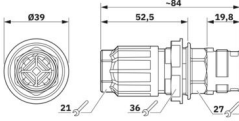
### Product properties

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

### Insulation characteristics

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

### Dimensions

|                     |                                                                                      |
|---------------------|--------------------------------------------------------------------------------------|
| Dimensional drawing |  |
| Width               | 39 mm                                                                                |
| Height              | 39 mm                                                                                |
| Length              | 84 mm                                                                                |
| Diameter            | 39 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  |

### Electrical properties

|                             |        |
|-----------------------------|--------|
| Rated surge voltage (II/2)  | 6 kV   |
| Rated surge voltage (III/2) | 6 kV   |
| Rated surge voltage (III/3) | 6 kV   |
| Rated current               | 20 A   |
| Contact resistance          | < 3 mΩ |
| rated voltage (II/2)        | 1000 V |

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|                       |          |
|-----------------------|----------|
| rated voltage (III/2) | 690 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 |
|-----------------------------|---------|

## 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                                                     | 6 mm ... 10 mm                     |
| Wire diameter including insulation                                          | 2 mm ... 3.8 mm                    |
| Position marking                                                            | 1, 2, 3, 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             |
| Ambient temperature (operation)         | -40 °C ... 100 °C |
| Temperature when conductor connected    | -5 °C ... 50 °C   |
| Ambient temperature (storage/transport) | -40 °C ... 100 °C |

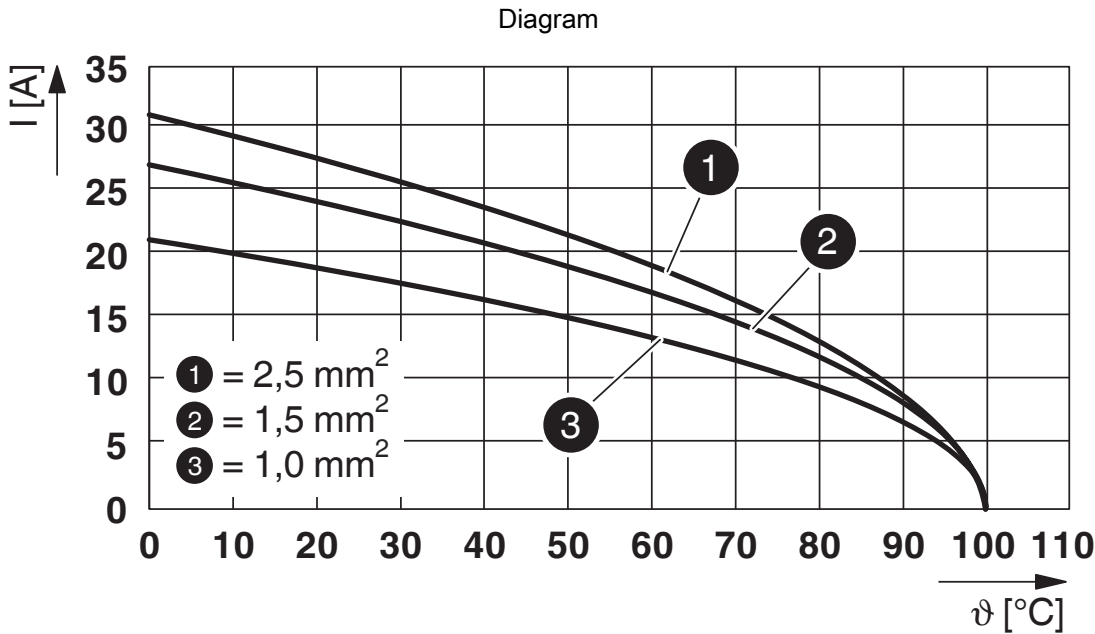
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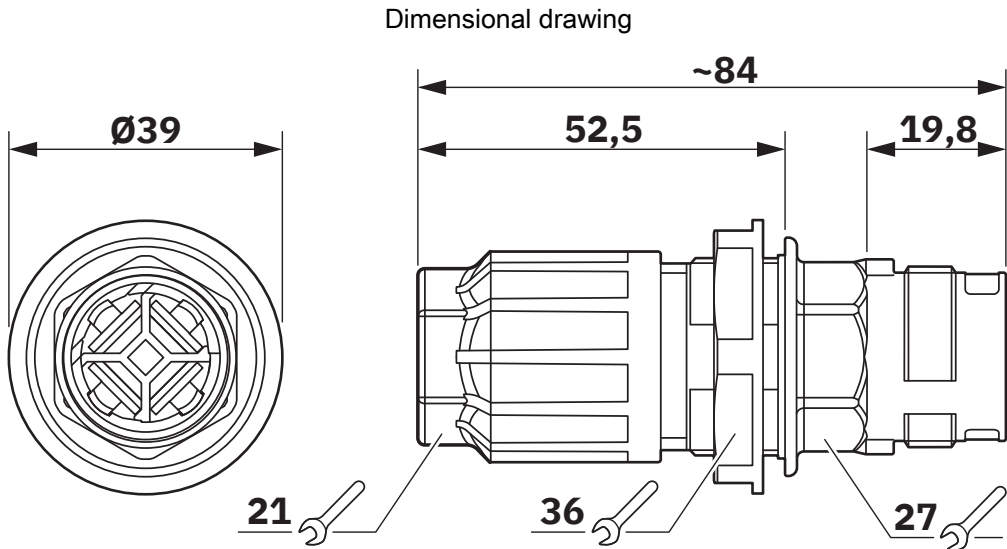
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Drawings



Derating diagram



Dimensional drawing

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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1424040>



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



**EAC**  
Approval ID: RU C-DE.BL08.B.00511

|                                                                                   |                                                        |                       |                   |                             |
|-----------------------------------------------------------------------------------|--------------------------------------------------------|-----------------------|-------------------|-----------------------------|
|  | <b>VDE Zeichengenehmigung</b><br>Approval ID: 40029149 |                       |                   |                             |
|                                                                                   | Nominal voltage $U_N$                                  | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| Only flexible conductors                                                          | 400 V                                                  | 20 A                  | -                 | 1.5 - 2.5                   |
| Only rigid conductors                                                             | 690 V                                                  | 20 A                  | -                 | 1.5 - 2.5                   |

|                                                                                     |                                          |                       |                   |                             |
|-------------------------------------------------------------------------------------|------------------------------------------|-----------------------|-------------------|-----------------------------|
|  | <b>UL Listed</b><br>Approval ID: E468743 |                       |                   |                             |
|                                                                                     | Nominal voltage $U_N$                    | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|                                                                                     | 600 V                                    | 10 A                  | -                 | - 16                        |

|                                                                                     |                                           |                       |                   |                             |
|-------------------------------------------------------------------------------------|-------------------------------------------|-----------------------|-------------------|-----------------------------|
|  | <b>cUL Listed</b><br>Approval ID: E468743 |                       |                   |                             |
|                                                                                     | Nominal voltage $U_N$                     | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|                                                                                     | 600 V                                     | 10 A                  | - 16              | -                           |

**cULus Listed**

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## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-11.0 | 27440605 |
| ECLASS-12.0 | 27440605 |
| ECLASS-13.0 | 27440605 |

### ETIM

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

### UNSPSC

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

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%               |

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## Accessories

### CP QPD 4X2,5 - Coding profile

1425950

<https://www.phoenixcontact.com/us/products/1425950>



Coding profile red, for pushing into the QUICKON dome and connector, can be positioned in 90° steps.

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### QPD QSK 5X1,5 - Protective cap

1414758

<https://www.phoenixcontact.com/us/products/1414758>



Protective cap plastic, for QPD-QUICKON connection 5x 1.5 mm<sup>2</sup>, IP50



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## QPD QSK BK 5X1,5 FS - Protective cap

1414728

<https://www.phoenixcontact.com/us/products/1414728>

Protective cap, plastic, for QUICKON connection, black, with retaining cord, IP68



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## SEALING PLUG 10X16 RD - Closing cap

1400284

<https://www.phoenixcontact.com/us/products/1400284>

Closing cap, for threads pluggable, color: red



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## QSS 22 - Socket wrench

1670206

<https://www.phoenixcontact.com/us/products/1670206>



Allen wrench, for loosening and fastening the QUICKON union nut, WAF 22 mm

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