

# QPD W 2PE1,5 M20 0,5 BK - Panel feed-through



1414690

<https://www.phoenixcontact.com/us/products/1414690>

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Panel feed-through, product family: QPD, connection method: Single wires (Welded-on), number of positions: 2+PE, M20, 0.5 mm<sup>2</sup> ... 1.5 mm<sup>2</sup>, 690 V, 17.5 A, PA, black, without QUICKON nut, coding: Coding profile, 1.5 mm<sup>2</sup>, wires cut flat at the end, cable length: 0.5 m

## 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
- Efficient - by using panel feed-throughs, devices no longer need to be opened in order to connect cables

## Commercial data

|                                      |                     |
|--------------------------------------|---------------------|
| Item number                          | 1414690             |
| Packing unit                         | 1 pc                |
| Minimum order quantity               | 1 pc                |
| Sales key                            | BF50                |
| Product key                          | BF6AAA              |
| Catalog page                         | Page 477 (C-2-2019) |
| GTIN                                 | 4055626031439       |
| Weight per piece (including packing) | 52 g                |
| Weight per piece (excluding packing) | 52.7 g              |
| Customs tariff number                | 85444290            |
| Country of origin                    | PL                  |

# QPD W 2PE1,5 M20 0,5 BK - Panel feed-through



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## Technical data

### Product properties

|                                    |                    |
|------------------------------------|--------------------|
| Product type                       | Panel feed-through |
| Product family                     | QPD                |
| Type                               | QPD 3x1,5          |
| Number of positions                | 3                  |
| Connection profile                 | 2+PE               |
| Position marking                   | 1, 2, PE           |
| Number of connections              | 10                 |
| Number of connections per position | 1                  |
| Coding                             | Coding profile     |

### Insulation characteristics

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

### Connection data

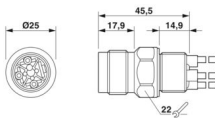
#### Connection technology

|                                                                       |                          |
|-----------------------------------------------------------------------|--------------------------|
| Connection method On the device side                                  | Single wires (Welded-on) |
| Frequency of connections between conductors of the same cross section | max. 10                  |

#### Conductor connection

|                                  |                     |
|----------------------------------|---------------------|
| Conductor cross section flexibel | 0.5 mm² ... 1.5 mm² |
| Conductor cross section solid    | 0.5 mm² ... 1.5 mm² |
| Connection cross section AWG     | 20 ... 16           |
| Tightening torque Union nut      | 8 Nm                |
| Tightening torque Locking nut    | 5 Nm                |

### Dimensions

|                     |                                                                                      |
|---------------------|--------------------------------------------------------------------------------------|
| Dimensional drawing |  |
| Width               | 25 mm                                                                                |
| Height              | 25 mm                                                                                |
| Length              | 45.5 mm                                                                              |
| Diameter            | 25 mm                                                                                |

### Electrical properties

|                             |      |
|-----------------------------|------|
| Rated surge voltage (II/2)  | 8 kV |
| Rated surge voltage (III/2) | 8 kV |
| Rated surge voltage (III/3) | 6 kV |

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|                       |          |
|-----------------------|----------|
| Rated current         | 17.5 A   |
| Contact resistance    | < 3 mΩ   |
| rated voltage (II/2)  | 1000 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 $I_N$ | 17.5 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

|                                                                             |                                    |
|-----------------------------------------------------------------------------|------------------------------------|
| Cable length                                                                | 0.5 m                              |
| Structure of individual litz in acc. with VDE 0295 / smallest wire diameter | VDE 0295 class 1 to 6/min. 0.15 mm |
| Wire diameter including insulation                                          | 1.6 mm ... 3 mm                    |
| Position marking                                                            | 1, 2, PE                           |
| Single wire, color                                                          | brown, blue, green/yellow          |
| Cable cross section                                                         | 1.5 mm <sup>2</sup>                |
| Material wire insulation                                                    | PVC/PE/TPE/rubber                  |

## Mounting

|               |                    |
|---------------|--------------------|
| Mounting type | Front mounting M20 |
|---------------|--------------------|

## 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 |

# QPD W 2PE1,5 M20 0,5 BK - Panel feed-through

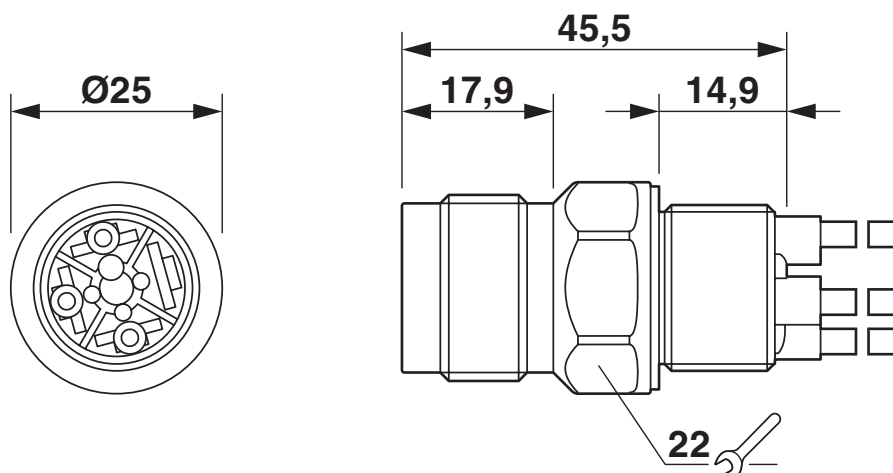


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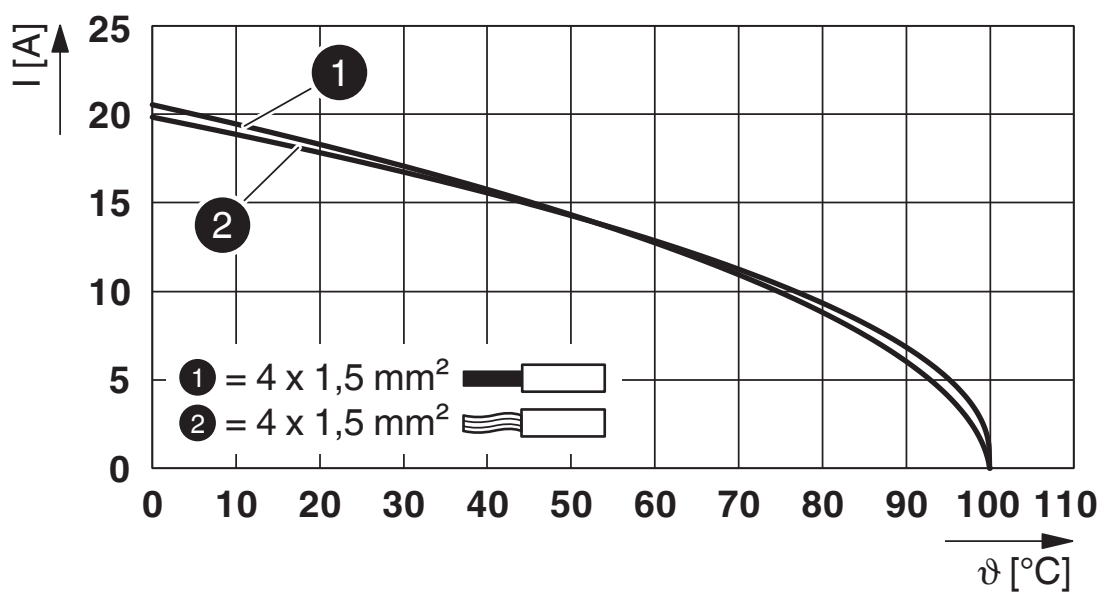
<https://www.phoenixcontact.com/us/products/1414690>

## Drawings

Dimensional drawing



Diagram



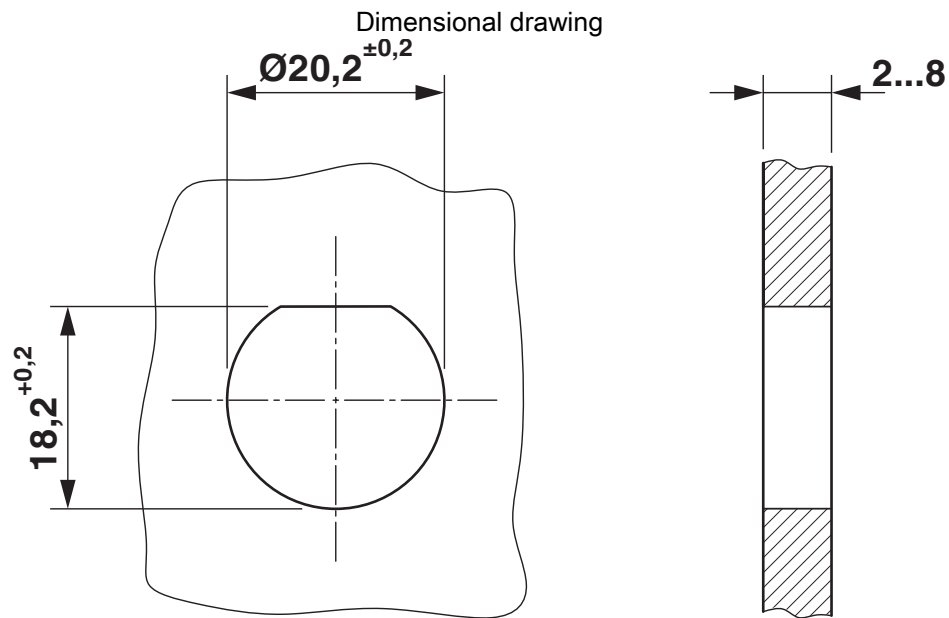
Derating diagram

# QPD W 2PE1,5 M20 0,5 BK - Panel feed-through



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Housing cutout

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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1414690>



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



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



**DNV GL**  
Approval ID: TAE00003J5



**VDE Zeichengenehmigung**  
Approval ID: 40029149

|                                                                                     |                                          |                       |                   |                             |
|-------------------------------------------------------------------------------------|------------------------------------------|-----------------------|-------------------|-----------------------------|
|  | <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                                    | 8 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                                     | 8 A                   | - 16              | -                           |

**cULus Listed**

# QPD W 2PE1,5 M20 0,5 BK - Panel feed-through



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## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-11.0 | 27440602 |
| ECLASS-12.0 | 27440602 |
| ECLASS-13.0 | 27440602 |

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC002566 |
|----------|----------|

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 39121500 |
|-------------|----------|

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%               |

# QPD W 2PE1,5 M20 0,5 BK - Panel feed-through



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## Mandatory accessories

### QPD P 2PE1,5 4-9 BK - Connector

1414705

<https://www.phoenixcontact.com/us/products/1414705>



Connector, product family: QPD, connection method: IDC connection, number of positions: 2+PE, 0.5 mm<sup>2</sup> ... 1.5 mm<sup>2</sup>, 690 V, 17.5 A, PA, black, with QUICKON nut, coding: Coding profile, external cable diameter: 5 mm ... 7 mm and 7 mm ... 9.5 mm

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### QPD P 2PE1,5 8-13 BK - Connector

1414706

<https://www.phoenixcontact.com/us/products/1414706>



Connector, product family: QPD, connection method: IDC connection, number of positions: 2+PE, 0.5 mm<sup>2</sup> ... 1.5 mm<sup>2</sup>, 690 V, 17.5 A, PA, black, with QUICKON nut, coding: Coding profile, external cable diameter: 10 mm ... 13 mm

# QPD W 2PE1,5 M20 0,5 BK - Panel feed-through



1414690

<https://www.phoenixcontact.com/us/products/1414690>

## QPD N 2PE1,5 4-9 BK - Nut

1415099

<https://www.phoenixcontact.com/us/products/1415099>



Nut, product family: QPD, connection method: IDC connection, number of positions: 2+PE, 0.5 mm<sup>2</sup> ... 1.5 mm<sup>2</sup>, 690 V, 17.5 A, PA, black, external cable diameter: 5 mm ... 7 mm and 7 mm ... 9.5 mm

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## QPD N 2PE1,5 8-13 BK - Nut

1415100

<https://www.phoenixcontact.com/us/products/1415100>



Nut, product family: QPD, connection method: IDC connection, number of positions: 2+PE, 0.5 mm<sup>2</sup> ... 1.5 mm<sup>2</sup>, 690 V, 17.5 A, PA, black, external cable diameter: 10 mm ... 13 mm

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## Accessories

## QPD W 2PE1,5 M20 0,5 BK - Panel feed-through



1414690

<https://www.phoenixcontact.com/us/products/1414690>

### QPD QSK 3/4X1,5 - Protective cap

1414723

<https://www.phoenixcontact.com/us/products/1414723>

Protective cap plastic, for QPD-QUICKON connection 3(4) x 1.5 mm<sup>2</sup>, IP50



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### QPD QSK BK 3/4X1,5 FS - Protective cap

1414722

<https://www.phoenixcontact.com/us/products/1414722>

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



## QPD W 2PE1,5 M20 0,5 BK - Panel feed-through



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### CP-QPD 3/4X1,5 - Coding profile

1414729

<https://www.phoenixcontact.com/us/products/1414729>



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

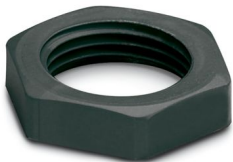
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### Q-MU-M20 BK - Flat nut

1586099

<https://www.phoenixcontact.com/us/products/1586099>

Flat nut, color: black



## QPD W 2PE1,5 M20 0,5 BK - Panel feed-through

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## QPD W 2PE1,5 M20 1,0 BK - Panel feed-through

1414691

<https://www.phoenixcontact.com/us/products/1414691>



Panel feed-through, product family: QPD, connection method: Single wires, number of positions: 2+PE, M20, 0.5 mm<sup>2</sup> ... 1.5 mm<sup>2</sup>, 690 V, 17.5 A, PA, black, without QUICKON nut, coding: Coding profile, 1.5 mm<sup>2</sup>, cable length: 1 m

## QPD W 2PE1,5 M20 FC BK - Panel feed-through

1414692

<https://www.phoenixcontact.com/us/products/1414692>



Panel feed-through, product family: QPD, connection method: Spade connection (For slip-on sleeves according to DIN 46247-2), number of positions: 2+PE, M20, 0.5 mm<sup>2</sup> ... 1.5 mm<sup>2</sup>, 690 V, 15 A, PA, black, without QUICKON nut, coding: Coding profile, 1.5 mm<sup>2</sup>

## QPD W 2PE1,5 M20 0,5 BK - Panel feed-through

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## QPD H 2PE1,5 BK - H distributor

1414721

<https://www.phoenixcontact.com/us/products/1414721>



H distributor, product family: QPD, connection method: IDC connection/ QUICKON fast connection, number of positions: 2+PE, 0.5 mm<sup>2</sup> ... 1.5 mm<sup>2</sup>, 690 V, 17.5 A, PA, black, without QUICKON nut, coding: Coding profile

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## QPD C 2PE1,5 1X4-9 BK - Conductor connector

1414699

<https://www.phoenixcontact.com/us/products/1414699>



Conductor connector, product family: QPD, connection method: IDC connection, number of positions: 2+PE, 0.5 mm<sup>2</sup> ... 1.5 mm<sup>2</sup>, 690 V, 17.5 A, PA, black, with one QUICKON nut, coding: Coding profile, external cable diameter: 5 mm ... 7 mm and 7 mm ... 9.5 mm

## QPD W 2PE1,5 M20 0,5 BK - Panel feed-through

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## QPD C 2PE1,5 1X8-13 BK - Conductor connector

1414701

<https://www.phoenixcontact.com/us/products/1414701>



Conductor connector, product family: QPD, connection method: IDC connection, number of positions: 2+PE, 0.5 mm<sup>2</sup> ... 1.5 mm<sup>2</sup>, 690 V, 17.5 A, PA, black, with one QUICKON nut, coding: Coding profile, external cable diameter: 10 mm ... 13 mm

## QPD T 2PE1,5 2X4-9 BK - T distributor

1414711

<https://www.phoenixcontact.com/us/products/1414711>



T distributor, product family: QPD, connection method: IDC connection, number of positions: 2+PE, 0.5 mm<sup>2</sup> ... 1.5 mm<sup>2</sup>, 690 V, 17.5 A, PA, black, With two QUICKON nuts, coding: Coding profile, external cable diameter: 5 mm ... 7 mm and 7 mm ... 9.5 mm

## QPD W 2PE1,5 M20 0,5 BK - Panel feed-through

1414690

<https://www.phoenixcontact.com/us/products/1414690>



## QPD T 2PE1,5 2X8-13 BK - T distributor

1414713

<https://www.phoenixcontact.com/us/products/1414713>



T distributor, product family: QPD, connection method: IDC connection, number of positions: 2+PE, 0.5 mm<sup>2</sup> ... 1.5 mm<sup>2</sup>, 690 V, 17.5 A, PA, black, With two QUICKON nuts, coding: Coding profile, external cable diameter: 10 mm ... 13 mm

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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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