

# QPD P3PE2,5 6-10 BK BK - Connector



1424041

<https://www.phoenixcontact.com/us/products/1424041>

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.



Connector, 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 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 maintenance – the connectors enable fast device replacement and preassembled cables simplify startup

## Commercial data

Item number	1424041
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF50
Product key	AF6BBB
GTIN	4055626366432
Weight per piece (including packing)	50.5 g
Weight per piece (excluding packing)	48.4 g
Customs tariff number	85366990
Country of origin	PL

# QPD P3PE2,5 6-10 BK BK - Connector



1424041

<https://www.phoenixcontact.com/us/products/1424041>

## Technical data

### Product properties

Product type	Installation 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	4
Number of connections per position	1
Coding	Coding profile

### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### 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	< 4 mΩ
rated voltage (II/2)	1000 V
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

### Connection data

#### Connection technology

Connection method On the field side	IDC connection
Frequency of connections between conductors of the same cross section	max. 10

#### Conductor connection

Conductor cross-section flexibel	1 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section solid	1 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Connection cross section AWG	16 ... 14
Tightening torque Union nut	10 Nm

### Dimensions

# QPD P3PE2,5 6-10 BK BK - Connector



1424041

<https://www.phoenixcontact.com/us/products/1424041>

Dimensional drawing	
Width	30 mm
Height	30 mm
Length	71 mm
Diameter	30 mm

## Material specifications

Color	black (RAL 9005)
Material Housing	PA
Material Contact	Cu
Material Contact surface	silver-plated
Material Seal	NBR
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 ... 3.6 mm
Position marking	1, 2, 3, PE
Material wire insulation	PVC/PE/TPE/rubber
Halogen-free	yes

## Mechanical properties

### Mechanical data

Insertion/withdrawal cycles	max. 50
-----------------------------	---------

## 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

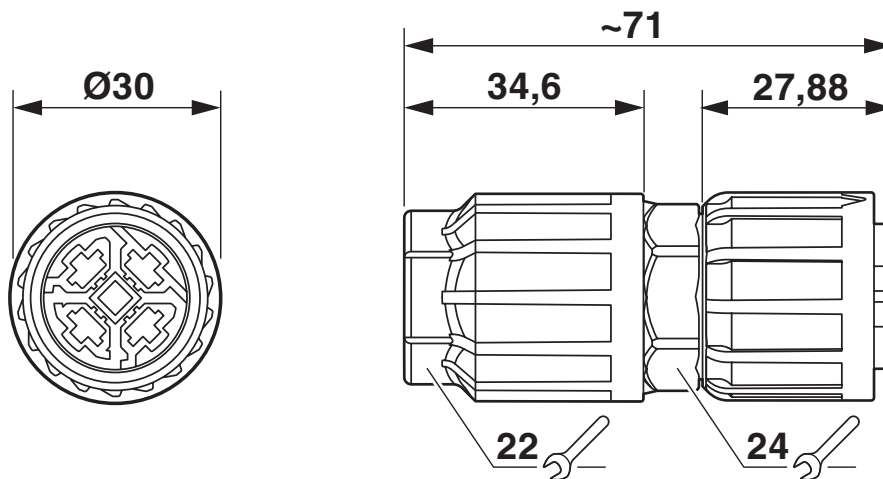
# QPD P3PE2,5 6-10 BK BK - Connector

1424041

<https://www.phoenixcontact.com/us/products/1424041>

## Drawings

Dimensional drawing



Diagram



Derating diagram

# QPD P3PE2,5 6-10 BK BK - Connector



1424041

<https://www.phoenixcontact.com/us/products/1424041>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1424041>



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



**VDE Zeichengenehmigung**  
Approval ID: 40029149



**UL Listed**  
Approval ID: E468743



**cUL Listed**  
Approval ID: E468743



**DNV GL**  
Approval ID: TAE00003J5



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



**VDE Zeichengenehmigung**  
Approval ID: 40029149



**cUL Listed**  
Approval ID: E468743



**UL Listed**  
Approval ID: E468743



**DNV GL**  
Approval ID: TAE00003J5

# QPD P3PE2,5 6-10 BK BK - Connector



1424041

<https://www.phoenixcontact.com/us/products/1424041>

## Classifications

### ECLASS

ECLASS-13.0	27440605
ECLASS-15.0	27440605

### ETIM

ETIM 10.0	EC002560
-----------	----------

### UNSPSC

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

# QPD P3PE2,5 6-10 BK BK - Connector



1424041

<https://www.phoenixcontact.com/us/products/1424041>

## 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 2026 © - 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)