#### 1521261

https://www.phoenixcontact.com/in/products/1521261

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.



Data connector, Ethernet CAT5 (100 Mbps), 4-position, shielded, Plug straight M12, D, Screw connection, knurl material: Nickel-plated brass, cable gland Pg9, external cable diameter 6 mm .. . 8 mm

### Your advantages

- · Safe use in the field, thanks to a high degree of protection
- · Screw connection: proven connection technology for a large selection of different conductors
- · Reliable signal transmission 360° shielding in environments with electromagnetic interference

### **Commercial Data**

| Item number                          | 1521261             |
|--------------------------------------|---------------------|
| Packing unit                         | 1 pc                |
| Minimum order quantity               | 1 pc                |
| Sales Key                            | BF2                 |
| Product Key                          | BF2CBI              |
| Catalog Page                         | Page 236 (C-4-2013) |
| GTIN                                 | 4017918968618       |
| Weight per Piece (including packing) | 55.7 g              |
| Weight per Piece (excluding packing) | 55.8 g              |
| Customs tariff number                | 85366990            |
| Country of origin                    | CN                  |

PHŒN

1521261

https://www.phoenixcontact.com/in/products/1521261

# 

### **Technical Data**

#### Notes

| General               | This product corresponds to the PROFINET Cabling and<br>Interconnection Technology Guideline for PROFINET<br>regulations, version 2.00, order no: 2.252, Chapter 8.2<br>Connectors for Outside Environment (Balanced cabling)                        |
|-----------------------|--|
| Assembly instruction: | <b>NOTE:</b> Observe the permissible bending radii when laying conductors, since the degree of protection may be put in jeopardy if the bending forces are too high. Alleviate mechanical loads upstream of the connector, e.g. by using cable ties. |

### Product properties

| Product type               | Circular connector (cable-side) |  |
|----------------------------|---------------------------------|--|
| Number of positions        | 4                               |  |
| Application                | Data                            |  |
| No. of cable outlets       | 1                               |  |
| Shielded                   | yes                             |  |
| Coding                     | D                               |  |
| Pg screw connection        | Pg9                             |  |
| Insulation characteristics |                                 |  |
| Overvoltage category       | II                              |  |
| Degree of pollution        | 3                               |  |

#### Dimensions

Contact surface material

| Dimensional drawing                    |                     |
|--|---------------------|
| Width                                  | 20 mm               |
| Height                                 | 20 mm               |
| Length                                 | 62 mm               |
| External dimensions Outside diameter   | 6 mm 8 mm           |
| Housing                                |                     |
| Diameter housing                       | 20 mm               |
| Material specifications                |                     |
| Flammability rating according to UL 94 | НВ                  |
| Seal material                          | NBR                 |
| Material of grip body                  | Nickel-plated brass |
| Contact material                       | CuZn                |

Au



https://www.phoenixcontact.com/in/products/1521261

| 5 | PHŒNIX<br>CONTACT |
|---|-------------------|
| Ľ | CONTACT           |

| Contact carrier material      | PA                  |
|-------------------------------|---------------------|
| Material for screw connection | Nickel-plated brass |

#### Connection data

| Conductor connection                    |   |
|---|---|
| Connection method                       | Screw connection  |
| Connection cross section                | 0.25 mm <sup>2</sup> 0.75 mm <sup>2</sup> (without ferrule) |
|   | 0.14 mm <sup>2</sup> 0.75 mm <sup>2</sup> (with ferrule)    |
|   | 0.25 mm² 0.75 mm² (solid)                                   |
| Connection cross section AWG            | 24 18 (without ferrule)                                     |
|   | 26 20 (with ferrule)  |
| Stripping length of the individual wire | 5 mm  |
| Tightening torque                       | 0.4 Nm (M12 knurl)  |
|   | 0.2 Nm (Screw terminal blocks)                              |
|   | 0.8 Nm 1 Nm (Pressure nut with coupling sleeve)             |

#### **Electrical properties**

| Rated surge voltage            | 2.5 kV   |
|--------------------------------|----------|
| Contact resistance             | ≤ 3 mΩ   |
| Insulation resistance          | ≥ 100 MΩ |
| Nominal voltage U <sub>N</sub> | 48 V AC  |
|                                | 60 V DC  |
| Nominal current I <sub>N</sub> | 4 A      |

#### Mechanical properties

| Mechanical data             |       |
|-----------------------------|-------|
| Insertion/withdrawal cycles | ≥ 100 |

#### Connector

| Connection 1      |          |
|-------------------|----------|
| Head design       | Plug     |
| Head cable outlet | straight |
| Head thread type  | M12      |
| Coding            | D        |

#### Cable/line

| Signal type/category                    | Ethernet CAT5 (on the basis of IEC 11801), 100 Mbps |
|---|---|
| Stripping length of the individual wire | 5 mm  |

#### Environmental and real-life conditions

| Ambient conditions              |                              |
|---------------------------------|------------------------------|
| Degree of protection            | IP67                         |
| Ambient temperature (operation) | -40 °C 85 °C (Plug / socket) |





1521261

https://www.phoenixcontact.com/in/products/1521261

Standards and regulations

Standards/specifications

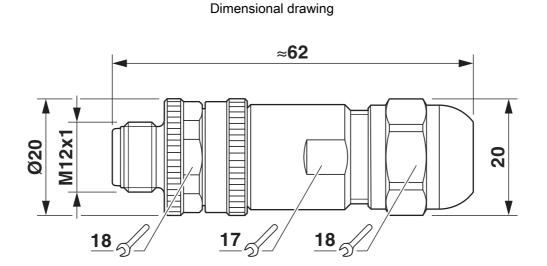
IEC 61076-2-101



1521261

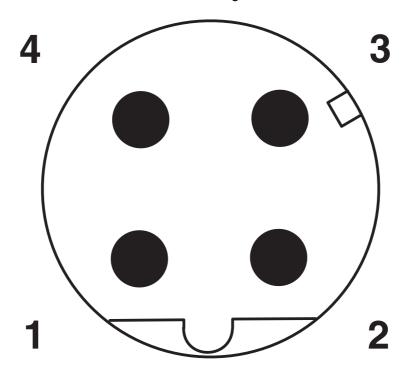
https://www.phoenixcontact.com/in/products/1521261

### Drawings



Plug, M12 x 1, straight, shielded

Schematic diagram



Pin assignment M12 male connector, 4-pos., D-coded, male side



1521261

https://www.phoenixcontact.com/in/products/1521261

### Approvals

| <b>.R</b> . | cUL Recognized<br>Approval ID: FILE E 221474 |                                |                                |                   |                               |
|-------------|--|--------------------------------|--------------------------------|-------------------|-------------------------------|
|             |  | Nominal Voltage U <sub>N</sub> | Nominal Current I <sub>N</sub> | Cross Section AWG | Cross Section mm <sup>2</sup> |
|             |  | 250 V                          | 4 A                            | -                 | -                             |
|             |  |                                |                                |                   |                               |
|             |  |                                |                                |                   |                               |
| <b>7/</b>   | UL Recognized<br>Approval ID: FILE E 221     | 474                            |                                |                   |                               |
|             |  | NI : 137.16 II                 |                                |                   | 2 2 4 2                       |

| Nominal Voltage U <sub>N</sub> | Nominal Current I <sub>N</sub> | Cross Section AWG | Cross Section mm <sup>2</sup> |
|--------------------------------|--------------------------------|-------------------|-------------------------------|
| 250 V                          | 4 A                            | -                 | -                             |



https://www.phoenixcontact.com/in/products/1521261



### Classifications

#### ECLASS

| ECLASS-11.0 | 27440102 |
|-------------|----------|
| ECLASS-12.0 | 27440116 |
| ECLASS-13.0 | 27440116 |

#### ETIM

|        | ETIM 8.0    | EC002635 |  |  |
|--------|-------------|----------|--|--|
| UNSPSC |             |          |  |  |
|        | UNSPSC 21.0 | 39121400 |  |  |



1521261

https://www.phoenixcontact.com/in/products/1521261



### **Environmental Product Compliance**

| REACh SVHC | Lead 7439-92-1   |
|------------|--|
|            |  |
| China RoHS | Environmentally Friendly Use Period = 50 years   |
|            | For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads" |

1521261

https://www.phoenixcontact.com/in/products/1521261



Accessories

TSD 04 SAC - Torque screwdriver

1208429 https://www.phoenixcontact.com/in/products/1208429



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

#### SACC BIT M12-D20 - Tool

1208445 https://www.phoenixcontact.com/in/products/1208445

Nut for assembling M12 connectors for assembly with a knurl diameter of 20 mm, for 4 mm hexagonal drive



1521261

https://www.phoenixcontact.com/in/products/1521261



TSD-M 1,2NM - Torque screwdriver

1212224

https://www.phoenixcontact.com/in/products/1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0. 3 - 1.2  $\mbox{Nm}$ 

#### TSD-M SAC-BIT ADAPTER - Adapter insert

1212600 https://www.phoenixcontact.com/in/products/1212600



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

1521261

https://www.phoenixcontact.com/in/products/1521261

#### PROT-M12 FS-PA-CHAIN - Sealing cap

#### 1430873

https://www.phoenixcontact.com/in/products/1430873

 $\mathsf{M12}$  sealing cap made of plastic with fixing band, for sensor cables, for free  $\mathsf{M12}$  plugs



#### VS-OE-OE-93E-100,0 - Data cable

1416295 https://www.phoenixcontact.com/in/products/1416295



Data cable, Ethernet CAT5 (100 Mbps), 4-position halogen-free, shielded, free cable end, on free cable end, cable length: 100 m

PHŒN

1521261

https://www.phoenixcontact.com/in/products/1521261

# 

VS-OE-OE-93B-100,0 - Data cable

#### 1416389

https://www.phoenixcontact.com/in/products/1416389



Data cable, PROFINET CAT5 (100 Mbps), 4-position, shielded, free cable end, on free cable end, cable length: 100 m  $\,$ 

#### VS-OE-OE-93C-100,0 - Data cable

1416376 https://www.phoenixcontact.com/in/products/1416376



Data cable, PROFINET CAT5 (100 Mbps), 4-position halogen-free, shielded, free cable end, on free cable end, cable length: 100 m

1521261

https://www.phoenixcontact.com/in/products/1521261

### **PHŒNIX** CONTACT

VS-OE-OE-93R-100,0 - Data cable

#### 1416363

https://www.phoenixcontact.com/in/products/1416363



Data cable, PROFINET CAT5 (100 Mbps), 4-position halogen-free, shielded, free cable end, on free cable end, cable length: 100 m

#### VS-OE-OE-936-100,0 - Data cable

1416570 https://www.phoenixcontact.com/in/products/1416570



Data cable, PROFINET CAT5 (100 Mbps), 4-position halogen-free, shielded, free cable end, on free cable end, cable length: 100 m

1521261

https://www.phoenixcontact.com/in/products/1521261

# 

VS-OE-OE-93G-100,0 - Data cable

#### 1419152

https://www.phoenixcontact.com/in/products/1419152



Data cable, EtherCAT  $^{\$}$  CAT5 (100 Mbps), 4-position, shielded, free cable end, on free cable end, cable length: 100 m

#### VS-OE-OE-93K-100,0 - Data cable

1419173 https://www.phoenixcontact.com/in/products/1419173



Data cable, Sercos CAT5 (100 Mbps), 4-position, shielded, free cable end, on free cable end, cable length: 100 m  $\,$ 

1521261

https://www.phoenixcontact.com/in/products/1521261



A 0,25-5-Ferrule

3202465

https://www.phoenixcontact.com/in/products/3202465



Ferrule, length: 5 mm, color: silver

#### **CRIMPFOX 6H - Crimping pliers**

1212046 https://www.phoenixcontact.com/in/products/1212046



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.14 mm<sup>2</sup> ... 6 mm<sup>2</sup>, unlockable pressure lock, lateral entry

1521261

https://www.phoenixcontact.com/in/products/1521261



SZF 1-0,6X3,5 - Screwdriver

#### 1204517

https://www.phoenixcontact.com/in/products/1204517



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size:  $0.6 \times 3.5 \times 100$  mm, 2-component grip, with non-slip grip

Phoenix Contact 2023 © - all rights reserved https://www.phoenixcontact.com

PHOENIX CONTACT (I) Pvt. Ltd. A-58/2, Okhla Industrial Area, Phase - II, New Delhi-110 020

+91.1275.71420 info@phoenixcontact.co.in