

1507777

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Data connector, PROFIBUS, INTERBUS, 5-position, shielded, Socket straight M12, coding: B, Screw connection, knurl material: Zinc die-cast, nickel-plated, cable gland Pg9, external cable diameter 6.5 mm ... 8.5 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                          | 1507777             |
|--------------------------------------|---------------------|
| Packing unit                         | 1 pc                |
| Sales key                            | BF30                |
| Product key                          | BF2CBA              |
| Catalog page                         | Page 422 (C-2-2019) |
| GTIN                                 | 4017918900434       |
| Weight per piece (including packing) | 47.86 g             |
| Weight per piece (excluding packing) | 47.86 g             |
| Customs tariff number                | 85366990            |
| Country of origin                    | DE                  |



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# Technical data

#### Notes

| General | NOTE: 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.        |

### Mounting

| Connection method | Screw connection |  |
|-------------------|------------------|--|
| Connection method | Screw connection |  |

### Product properties

| Product type         | Circular connector (cable-side) |
|----------------------|---------------------------------|
| Sensor type          | PROFIBUS                        |
| Number of positions  | 5                               |
| Application          | Data                            |
| No. of cable outlets | 1                               |
| Shielded             | yes                             |
| Coding               | В                               |
| Cable outlet         | straight                        |
| Pg screw connection  | Pg9                             |

### Insulation characteristics

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

### **Dimensions**

| Differsions                            |               |
|--|---------------|
| Dimensional drawing                    | CB. 56        |
| Width                                  | 20 mm         |
| Height                                 | 20 mm         |
| Length                                 | 56 mm         |
| External dimensions                    |               |
| Outside diameter                       | 6.5 mm 8.5 mm |
| Housing                                |               |
| Diameter housing                       | 20 mm         |
| Material specifications                |               |
| Flammability rating according to UL 94 | НВ            |
|  |               |



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| Material of grip body         | Zinc die-cast, nickel-plated |
|-------------------------------|------------------------------|
| Contact material              | CuZn                         |
| Contact surface material      | Au                           |
| Contact carrier material      | PA 6.6                       |
| Material for screw connection | Zinc die-cast, nickel-plated |

### 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 4 mm 8 mm external cable diameter)  |
|   | 1 Nm 1.4 Nm (Pressure nut with 8 mm 12 mm external cable diameter) |

# Electrical properties

| Rated surge voltage            | 1.5 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       | Socket   |
|-------------------|----------|
| Head cable outlet | straight |
| Head thread type  | M12      |
| Coding            | В        |

## Cable/line

| Signal type/category | PROFIBUS |
|----------------------|----------|
|                      | INTERBUS |



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| 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) |
| Standards and regulations               |                              |
| M12                                     |                              |
| Standard designation                    | M12 connector                |

IEC 61076-2-101

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Standards/specifications

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