#### 1072547

https://www.phoenixcontact.com/us/products/1072547

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Data connector, CANopen<sup>®</sup>, DeviceNet<sup>™</sup>, 5-position, unshielded, Socket angled M12, A, Pushlock spring connection, knurl material: Plastic, external cable diameter 4 mm ... 8 mm



### Your advantages

- Time-saving Push-Lock connection: Tool-free connection and disconnection of conductors by opening the contact levers
- · Intuitive connection: Easy assignment of individual litz wires with color-coded and numerical identification of the contact levers
- · Integrated Push-in Technology: Wire rigid and pretreated conductors easily by means of simple, direct insertion
- · Shock- and vibration-resistant connection: Proven spring-cage technology guarantees secure and reliable contacting
- · Flexible cable outlets with angled connectors

### Commercial data

| Item number                          | 1072547       |
|--------------------------------------|---------------|
| Packing unit                         | 1 pc          |
| Minimum order quantity               | 1 pc          |
| Sales key                            | BF33          |
| Product key                          | BF2CEA        |
| GTIN                                 | 4063151356460 |
| Weight per piece (including packing) | 15.5 g        |
| Weight per piece (excluding packing) | 15.5 g        |
| Customs tariff number                | 85366990      |
| Country of origin                    | DE            |



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### Technical data

### Notes

| General               | <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. |
|-----------------------|--|
| Mounting              |  |
| Assembly instructions | The connector pin assignment can be rotated 45° to the cable outlet  |
|                       | The wires can be connected both with ferrules and without ferrules   |
| Connection method     | Push-lock spring connection  |

### **Product properties**

| Product type         | Circular connector (cable-side) |
|----------------------|---------------------------------|
| Sensor type          | CANopen <sup>®</sup>            |
| Number of positions  | 5                               |
| Application          | Data                            |
| No. of cable outlets | 1                               |
| Shielded             | no                              |
| Coding               | A                               |
| Cable outlet         | angled                          |

Insulation characteristics

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

### Dimensions

| Dimensional drawing |           |
|---------------------|-----------|
| Length              | 49 mm     |
| External dimensions |           |
| Outside diameter    | 4 mm 8 mm |
| lousing             |           |
| Diameter housing    | 19 mm     |

Material specifications



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| Flammability rating according to UL 94 | VO      |
|--|---------|
| Seal material                          | NBR     |
| Material of grip body                  | PA 6.6  |
| Contact material                       | CuSn    |
| Contact surface material               | Ni/Au   |
| Contact carrier material               | PA 6.6  |
| Material for screw connection          | Plastic |

### Connection data

Conductor connection

| Connection method                       | Push-lock spring connection                                 |
|---|---|
| Connection cross section                | 0.14 mm <sup>2</sup> 0.75 mm <sup>2</sup> (without ferrule) |
|   | 0.08 mm <sup>2</sup> 0.5 mm <sup>2</sup> (with ferrule)     |
|   | 0.14 mm² 0.75 mm² (solid)                                   |
| Connection cross section AWG            | 26 18 (without ferrule)                                     |
|   | 28 20 (with ferrule)  |
| Stripping length of the individual wire | 7 mm  |
| Tightening torque                       | 0.4 Nm (M12 knurl)  |
|   | 0.4 Nm (Connector with coupling sleeve)                     |
|   | 1.5 Nm (Pressure nut with coupling sleeve)                  |

### Pin assignment

| Contact   Color (signal designation)   Contact (optional) | 1 = GY (shield) |
|---|-----------------|
|   | 2 = RD          |
|   | 3 = BK          |
|   | 4 = WH          |
|   | 5 = BU          |
|   |                 |

### **Electrical properties**

| Rated surge voltage            | 1.5 kV   |
|--------------------------------|--|
| Contact resistance             | ≤ 5 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 (2 A when using 0.14 mm <sup>2</sup> conductors) |

### Mechanical properties

Mechanical data

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

### Connector

| Connection 1 |        |
|--------------|--------|
| Head design  | Socket |



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| Head cable outlet | angled |
|-------------------|--------|
| Head thread type  | M12    |
| Coding            | A      |

### Cable/line

| Signal type/category                    | CANopen®   |
|---|------------|
|   | DeviceNet™ |
| Stripping length of the individual wire | 7 mm       |

### Environmental and real-life conditions

Ambient conditions

| Degree of protection            | IP65                         |  |
|---------------------------------|------------------------------|--|
|                                 | IP67                         |  |
| Ambient temperature (operation) | -40 °C 85 °C (Plug / socket) |  |

### Standards and regulations

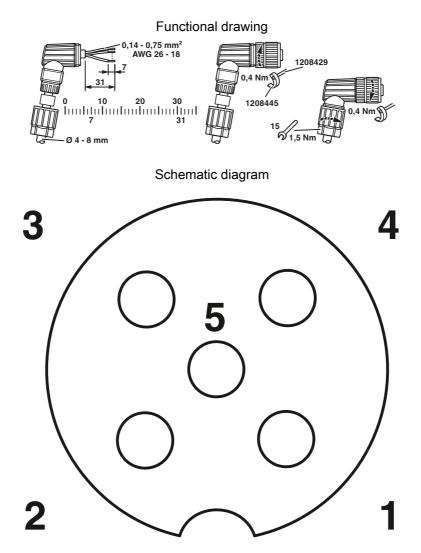
| Μ | 1 | 2 |
|---|---|---|
|---|---|---|

| Standard designation     | M12 connector   |
|--------------------------|-----------------|
| Standards/specifications | IEC 61076-2-101 |

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### Drawings



Pin assignment M12 socket, 5-pos., A-coded, socket side view

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M12 x 1 socket, angled



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### Approvals

🌣 To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1072547

| Nominal voltage U <sub>N</sub> Nominal current I <sub>N</sub> Cross section AWG Cross secti  |                    |
|--|--------------------|
| Normal Voltage O <sub>N</sub> Normal current I <sub>N</sub> Oross section AVVO Oross section | on mm <sup>2</sup> |
| 250 V 4 A - 26 - 18  |                    |

| <b>.</b> | <b>CUL Listed</b><br>Approval ID: E221474 |                                |                                |                   |                               |
|----------|---|--------------------------------|--------------------------------|-------------------|-------------------------------|
|          |   | 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                            | 26 - 18           | -                             |

cULus Listed

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### Classifications

### ECLASS

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

### ETIM

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

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## Environmental product compliance

| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
|------------|---|
|            | No hazardous substances above threshold values          |

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Accessories

PROT-M12 MS-PA-CHAIN - Screw plug

1430899 https://www.phoenixcontact.com/us/products/1430899

M12 sealing cap with fixing band, for sensor cables, for free M12 sockets



SAC-5P-920/... - Bus system cable

1511504 https://www.phoenixcontact.com/us/products/1511504



Bus system cable, CANopen<sup>®</sup>, DeviceNet<sup>™</sup>, 4-position halogen-free, shielded, cable length: Free entry (0.5 ... 400 m)

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### AI 0,25-6 YE - Ferrule

3203024

https://www.phoenixcontact.com/us/products/3203024



Ferrule, sleeve length: 6 mm, length: 10.5 mm, color: yellow

### A 0,25-7 - Ferrule

3202478 https://www.phoenixcontact.com/us/products/3202478



Ferrule, length: 7 mm, color: silver

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A 0,34-7 - Ferrule

3009202 https://www.phoenixcontact.com/us/products/3009202



Ferrule, length: 7 mm, color: silver

### A 0,5 - 6 - Ferrule

3200218 https://www.phoenixcontact.com/us/products/3200218



Ferrule, length: 6 mm, color: silver

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AI 0,5 - 6 WH - Ferrule

3200687

https://www.phoenixcontact.com/us/products/3200687



Ferrule, sleeve length: 6 mm, length: 12 mm, color: white

### TSD 04 SAC - Torque screwdriver

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



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

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SACC BIT M12-D20 - Tool

#### 1208445

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

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



### TSD-M 1,2NM - Torque screwdriver

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



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

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

#### 1212600

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



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

### WIREFOX 2,5 - Stripping tool

1212368 https://www.phoenixcontact.com/us/products/1212368



Stripping tool, for conductors and cables with a conductor cross section from 0. 08 to 2.5 mm, self-adjusting, stripping length adjustable up to 15 mm, cutting capacity up to 6 mm<sup>2</sup> stranded/1.5 mm<sup>2</sup> solid

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WIREFOX SAC - Stripping tool

#### 1212623

https://www.phoenixcontact.com/us/products/1212623



Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from  $\emptyset$  of 4.4 to 7 mm, any stripping length

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

1212046 https://www.phoenixcontact.com/us/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

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