

SACC-DSI-FSD-4CON-M16/0,5 PP - Device connector, rear mounting



1027670

<https://www.phoenixcontact.com/us/products/1027670>

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Device connector, rear mounting, PROFINET CAT5 (IEC 11801:2002), 4-position, Socket, straight, M12-Push-Pull, coding: D, on free cable end, Rear mounting, M16 x 1.5, Individual wires, cable length: 0.5 m, 0.34 mm², TPE litz wire, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1238101

Your advantages

- Established M12 standard for secure transmission of signals, data, and power
- Easy and quick cabling of devices and systems in hard-to-reach areas
- Manufacturer-independent M12 push-pull locking system for maximum availability
- Reliable shield connection even under extreme mechanical strain
- Compatible with connectors with screw or push-in connection

Commercial data

| | |
|--------------------------------------|--------------------|
| Item number | 1027670 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | AB24 |
| Product key | ABQCCB |
| Catalog page | Page 48 (C-2-2019) |
| GTIN | 4055626533902 |
| Weight per piece (including packing) | 37.7 g |
| Weight per piece (excluding packing) | 27 g |
| Customs tariff number | 85444290 |
| Country of origin | DE |

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Technical data

Notes

| | |
|---------|--|
| General | The electrical and mechanical data specified assume that the connector pair is correctly locked and mounted. If the connector is unlocked and if there is a danger of contamination, the connector must be sealed using a protective cap > IP54. Influences arising from litz wires, cables or PCB assembly must also be taken into consideration. |
| General | Lock nut is included in the scope of delivery |
| General | Push-pull external locking |

Safety note

| | |
|-------------|--|
| Safety note | <p>WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.</p> <ul style="list-style-type: none">• WARNING: Commission properly functioning products only. The products must be regularly inspected for damage. Decommission defective products immediately. Replace damaged products. Repairs are not possible.• WARNING: Only electrically qualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product.• The products are suitable for applications in plant, controller, and electrical device engineering.• When operating the connectors in outdoor applications, they must be separately protected against environmental influences.• Assembled products may not be manipulated or improperly opened.• Only use mating connectors that are specified in the technical data of the standards listed (e.g. the ones listed in the product accessories online at phoenixcontact.com/products).• When using the product in direct connection with third-party manufacturers, the user is responsible.• For operating voltages > 50 V AC, conductive connector housings must be grounded• Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.• Observe the corresponding technical data. You will find information:<ul style="list-style-type: none">◦ On the product◦ On the packing label◦ In the supplied documentation◦ Online at phoenixcontact.com/products under the product• Only use tools recommended by Phoenix Contact• Use a protective cap to protect connectors that are not in use. |
|-------------|--|

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| | |
|--|---|
| | <p>The suitable accessories are available online in the accessory section of the product at phoenixcontact.com/products</p> <ul style="list-style-type: none">• Ensure that the protective or functional ground has been properly connected.• VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1.3 are applicable when combining several circuits in a cable and/or connector• The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to warm up. In this case, the user is responsible for posting warnings (e.g. DIN EN ISO 13732-1:2008-12). |
|--|---|

Mounting

| | |
|-----------------------|---------------------------------------|
| Mounting type | Rear mounting M16 x 1.5 With flat nut |
| Assembly instructions | With flat nut |
| Connection method | Individual wires |

Product properties

| | |
|----------------------|-----------------------------------|
| Product type | Circular connectors (device side) |
| Sensor type | PROFINET |
| Number of positions | 4 |
| No. of cable outlets | 1 |
| Shielded | no |
| Coding | D |
| Thread type | M12 |

Insulation characteristics

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

Material specifications

| | |
|--|--------------------------|
| Material | Brass, nickel-plated |
| Flammability rating according to UL 94 | V0 |
| Seal material | NBR/FKM |
| Material of grip body | Brass, nickel-plated |
| Contact material | CuZn |
| Contact surface material | Au |
| Contact carrier material | PA 6.6 |
| Material for screw connection | Brass, nickel-plated |
| Conductor material | Tin-plated Cu litz wires |

Electrical properties

| | |
|--------------------------------|------------|
| Rated surge voltage | 2.5 kV |
| Contact resistance | ≤ 3 mΩ |
| Insulation resistance | ≥ 100 MΩ |
| Nominal voltage U _N | 250 V (AC) |

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| | |
|---|-----------------------|
| | 250 V (DC) |
| Nominal current I_N | 4 A |
| Transmission medium | Copper |
| Transmission characteristics (category) | CAT5 (IEC 11801:2002) |
| Max. conductor resistance | 57.6 m Ω /m |

Connection data

Conductor connection

| | |
|-------------------------|----------------------|
| Connection method | Individual wires |
| Contact connection type | Socket |
| Conductor cross section | 0.34 mm ² |
| Tightening torque | 3 Nm |
| | 4 Nm |

Mechanical properties

Mechanical data

| | |
|-----------------------------|-------|
| Insertion/withdrawal cycles | > 100 |
|-----------------------------|-------|

Connector

Connection 1

| | |
|-------------------|-----------|
| Head design | Socket |
| Head cable outlet | straight |
| Head thread type | M12 |
| Head locking type | Push-Pull |
| Coding | D |

Connection 2

| | |
|-------------|----------------|
| Head design | free cable end |
|-------------|----------------|

Cable/line

| | |
|---------------------------------|--------------------------------|
| Cable length | 0.5 m |
| Cable type | TPE litz wire |
| Signal type/category | PROFINET CAT5 (IEC 11801:2002) |
| Wire diameter incl. insulation | 1.2 mm ± 0.07 mm |
| Single wire, color | yellow, orange, white, blue |
| Conductor material | Tin-plated Cu litz wires |
| Conductor structure signal line | 7x 0.25 mm |
| AWG signal line | 22 |
| Material wire insulation | TPE |
| Thickness, insulation | 0.21 mm |
| Nominal voltage, cable | 300 V |
| Test voltage, cable | 2000 V AC |

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| | |
|---------------------------------|---|
| Cable resistance | ≤ 57.6 mΩ/m |
| Cable insulation resistance | ≥ 20 MΩ*km |
| Ambient temperature (operation) | -40 °C ... 85 °C (cable, fixed installation) |
| | -25 °C ... 85 °C (Cable, flexible installation) |

Environmental and real-life conditions

Ambient conditions

| | |
|---------------------------------|---|
| Degree of protection | IP67 (When plugged in) |
| | IP65 (When plugged in) |
| | IP65/IP67 |
| Ambient temperature (operation) | -25 °C ... 85 °C (Plug / socket) |
| | -40 °C ... 85 °C (without mechanical actuation) |
| | -25 °C ... 85 °C (Cable, flexible installation) |
| | -40 °C ... 85 °C (cable, fixed installation) |

Standards and regulations

M12

| | |
|--------------------------|--------------------|
| Standard designation | M12 connector |
| Standards/specifications | IEC 61076-2-010 |
| Note | Push-pull (type 2) |

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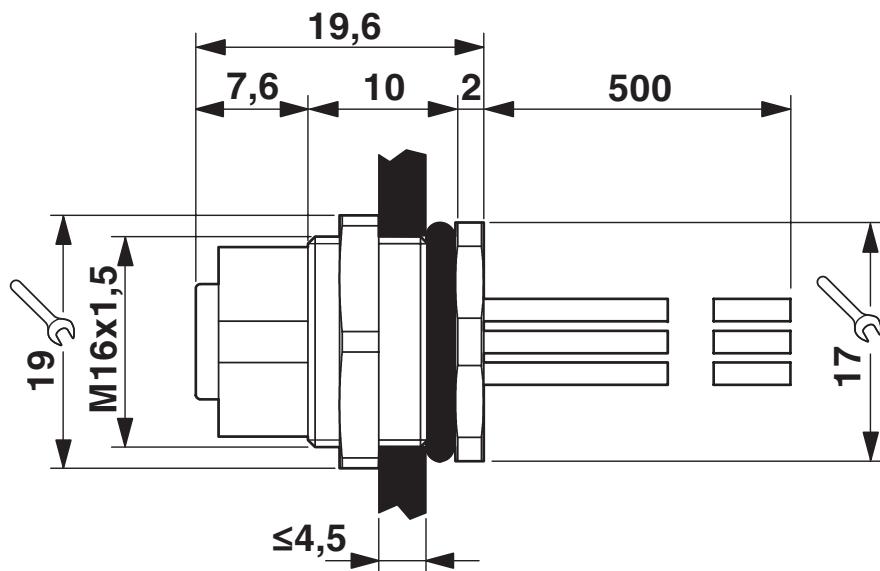


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Drawings

Dimensional drawing



Circuit diagram



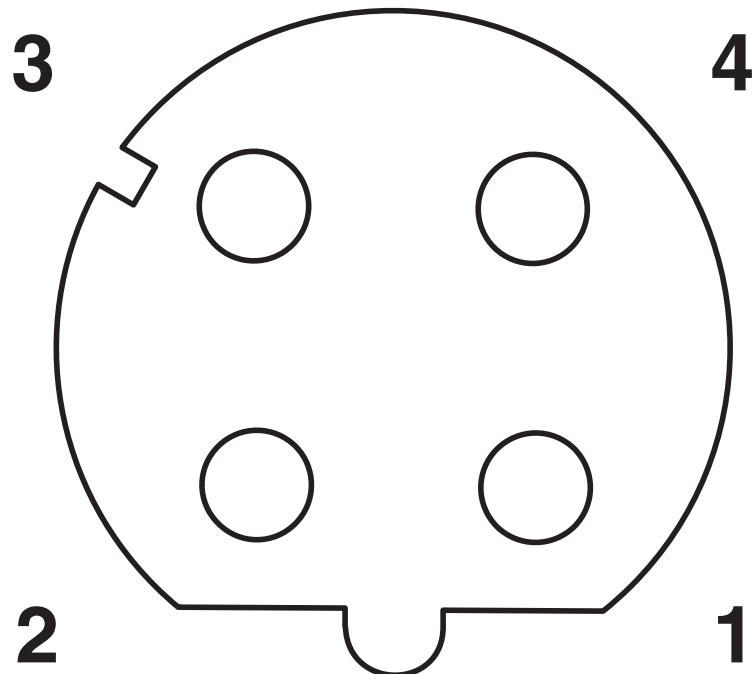
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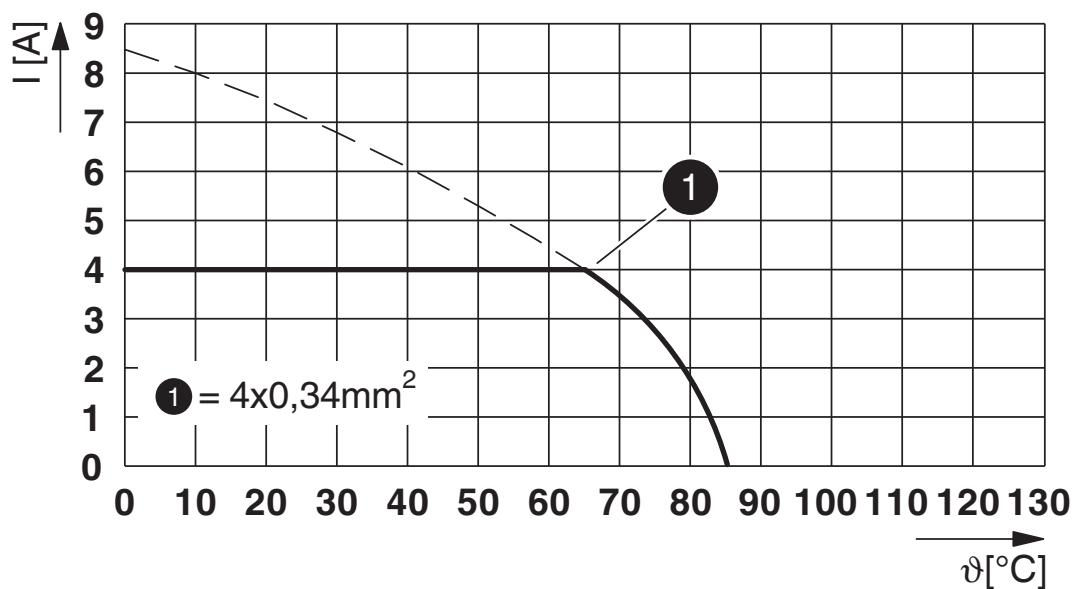
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Schematic diagram



Pin assignment M12 socket, 4-pos., D-coded, female side

Diagram



I = current strength, T = ambient temperature

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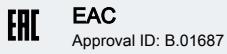


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Approvals

>To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1027670>



| cULus Recognized | | | | |
|-------------------------------|-----------------------|-----------------------|-------------------|----------------------|
| Approval ID: E221474-20140616 | | | | |
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| | 250 V | 4 A | 22 - 20 | - |

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Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-11.0 | 27440103 |
| ECLASS-12.0 | 27440103 |
| ECLASS-13.0 | 27440103 |

ETIM

| | |
|----------|----------|
| ETIM 8.0 | EC003570 |
|----------|----------|

UNSPSC

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

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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"

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Accessories

SACC-E-MU-M16 - Flat nut

1504097

<https://www.phoenixcontact.com/us/products/1504097>

Flat nut, Screw mounting, M16 x 1.5, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1239863



SACC-M16-SEAL CLM - Flat gasket

1430394

<https://www.phoenixcontact.com/us/products/1430394>

M16 flat gasket for M12 flush-type connectors with M16 fastening thread



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PROT-M12 - Screw plug

1680539

<https://www.phoenixcontact.com/us/products/1680539>

An M12 screw plug for the unoccupied M12 sockets of the sensor/actuator cable, boxes and flush-type connectors



PROT-M12 SH - Screw plug

1503302

<https://www.phoenixcontact.com/us/products/1503302>

An M12 screw plug for the unoccupied M12 sockets of the shielded sensor/actuator cable, boxes and flush-type connectors



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PROT-M12 FB - Screw plug

1555538

<https://www.phoenixcontact.com/us/products/1555538>

M12 high-grade steel screw plug, for unoccupied M12 sockets of the sensor/actuator cables, boxes and flush-type connectors for the food industry



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