

1440821

https://www.phoenixcontact.com/pc/products/1440821

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Contact carrier, 4-position, Pin, straight, M12, coding: D, Front mounting, Square flange, Individual wires, cable length: 0.5 m, 0.34 mm^2 , TPE litz wire, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1239713

Your advantages

- · Convenient field assembly: device connectors for fast on-site mounting
- · Contact carriers that are designed for assembly or available with preassembled litz wires
- · Customer-specific assemblies and litz wire lengths available
- · Standard pin assignments for signal and power transmission with a uniform design-in design

Commercial data

| Item number | 1440821 |
|--------------------------------------|--------------------|
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Product key | ABQCED |
| Catalog page | Page 44 (C-2-2019) |
| GTIN | 4046356533638 |
| Weight per piece (including packing) | 22 g |
| Weight per piece (excluding packing) | 19 g |
| Customs tariff number | 85444290 |
| Country of origin | DE |



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Technical data

Notes

| Notes | on | opera | tion |
|--------|-----|-------|-------|
| 140103 | 011 | opoid | LIOII |

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.

Safety note

Safety note

WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.

- 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:
- o On the product
- o On the packing label
- o In the supplied documentation
- o 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. The suitable accessories are available online in the accessory section of the product at phoenixcontact.com/products
- Ensure that the protective or functional ground has been properly connected.



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| | 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). |
| Product properties | |
| Application | Signal |
| Number of positions | 4 |
| No. of cable outlets | 1 |
| Seal present | no |
| Shielded | no |
| Coding | D |
| Thread type | M12 |
| Data management status | |
| Article revision | 03 |
| Insulation characteristics | |
| Overvoltage category | II |
| Degree of pollution | 3 |
| Degree of pollution | J |
| Electrical properties | |
| Rated surge voltage | 0.8 kV |
| Contact resistance | ≤ 3 mΩ |
| Insulation resistance | ≥ 100 MΩ |
| Nominal voltage U _N | 250 V AC |
| | 250 V DC |
| Nominal current I _N | 4 A |
| Transmission medium | Copper |
| Max. conductor resistance | 57.6 mΩ/m |
| Connection data | |
| Connection method | Individual wires |
| Signaling | |
| Status display | no |
| Status display present | No |
| Naterial specifications | |
| Flammability rating according to UL 94 | V0 |
| Contact material | CuZn |
| | · · · · · · · · · · · · · · · · · |
| Contact surface material | Au |
| Contact surface material Contact carrier material | Au PA 6.6 |



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Connector

Connection 1

| Head design | Pin |
|-------------------|----------|
| Head cable outlet | straight |
| Head thread type | M12 |
| Coding | D |

Cable/line

| Cable length | 0.5 m |
|---------------------------------|---|
| Cable type | TPE litz wire |
| Wire diameter incl. insulation | 1.2 mm ±0.07 mm |
| Single wire, color | brown, white, blue, black |
| Cable cross section | 0.34 mm² |
| 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 (Core insulation) |
| Nominal voltage, cable | 300 V |
| Test voltage, cable | 3000 V AC |
| 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 |
|---------------------------------|---|
| | 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 61076-2-101 |

Mounting

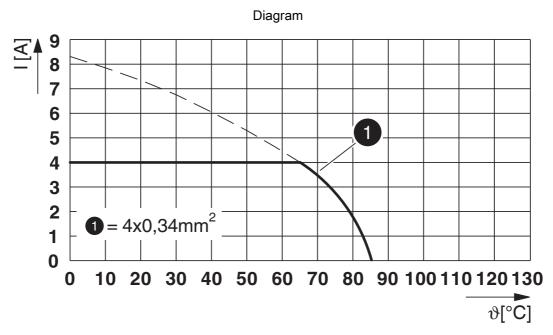
| Mounting type | Front mounting Square flange 25 mm side length |
|---------------|--|
| Assembly note | 25 mm side length |



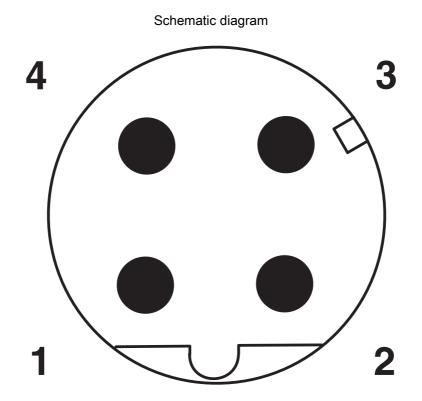
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Drawings



I = current strength, T = ambient temperature



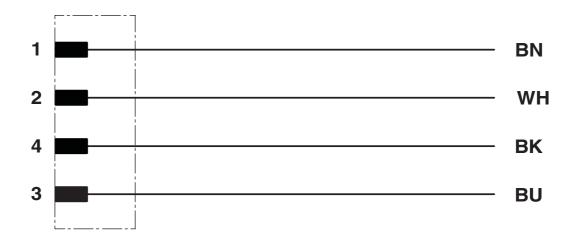
Pin assignment M12 male connector, 4-pos., D-coded, male side



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Circuit diagram





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Classifications

ECLASS

| | ECLASS-11.0 | 27440223 | | | |
|--------|-------------|----------|--|--|--|
| | ECLASS-13.0 | 27440223 | | | |
| ΕΊ | ETIM | | | | |
| | ETIM 9.0 | EC003557 | | | |
| UNSPSC | | | | | |
| | UNSPSC 21.0 | 39121400 | | | |



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Environmental product compliance

EU RoHS

| Fulfills EU RoHS substance requirements | Yes |
|---|---|
| Exemption | 6(c) |
| China RoHS | |
| Environment friendly use period (EFUP) | EFUP-50 |
| | An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required. |
| EU REACH SVHC | |
| REACH candidate substance (CAS No.) | Lead(CAS: 7439-92-1) |
| SCIP | 4ed335f4-58b2-4b86-beb3-6ced84906549 |



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Accessories

SACC-MSQ-M12MS-25-3,2 SCO - Housing screw connection

1419959

https://www.phoenixcontact.com/pc/products/1419959



Housing screw connection, M12-SPEEDCON, Front mounting, square flange 25 mm side length, Square flange

PROT-M12 FS - Sealing cap

1560251

https://www.phoenixcontact.com/pc/products/1560251



 $\,$ M12 sealing cap for unoccupied M12 plugs of the sensor/actuator cable, flush-type plugs and I/O devices in the field



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PROT-M12 FS-M - Sealing cap

1430488

https://www.phoenixcontact.com/pc/products/1430488



 $\,$ M12 metal sealing cap for unoccupied M12 plugs of the sensor/actuator cable, flush-type plugs and I/O devices in the field

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