

1441574

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Device connector front mounting, 8-position, Socket, straight, M12, coding: A, on free cable end, Front mounting, Square flange, Individual wires, cable length: 0.5 m, 0.25 mm^2 , TPE litz wire, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1239722

Your advantages

- · Preassembled with litz wires for immediate use
- · Customer-specific assemblies and litz wire lengths available
- Sealed on the litz wire side for optimum leak-tightness
- All standard pin assignments and codings for signal, data, and power transmission with a uniform design-in design
- · For high transmission safety: shield connection to the housing with optional EMC nut
- · SPEEDCON fast locking system reduces cabling times

Commercial data

| Item number | 1441574 |
|--------------------------------------|--------------------|
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Product key | ABQCFD |
| Catalog page | Page 43 (C-2-2019) |
| GTIN | 4046356533881 |
| Weight per piece (including packing) | 30.8 g |
| Weight per piece (excluding packing) | 30 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 | Contact connection method: Crimp connection |

Mounting

| Mounting type | Front mounting Square flange |
|---------------|------------------------------|
|---------------|------------------------------|

Product properties

| Product type | Circular connectors (device side) |
|----------------------------|-----------------------------------|
| Application | Signal |
| | |
| Number of positions | 8 |
| Shielded | no |
| Coding | A |
| Thread type | M12 |
| Insulation characteristics | |
| insulation characteristics | |
| Overvoltage category | II |

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Degree of pollution Material specifications

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

Electrical properties

| Rated surge voltage | 0.8 kV |
|--------------------------------|-----------|
| Contact resistance | ≤ 3 mΩ |
| Insulation resistance | ≥ 100 MΩ |
| Nominal voltage U _N | 30 V |
| Nominal current I _N | 2 A |
| Max. conductor resistance | 57.6 mΩ/m |



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Connection data

Conductor connection

| Connection method | Individual wires |
|-------------------------|-------------------------------|
| Contact connection type | Socket |
| Conductor cross section | 0.25 mm² |
| Tightening torque | 3 Nm 4 Nm (Installation-side) |

Mechanical properties

Mechanical data

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

Connector

Connection 1

| Head design | Socket |
|-------------------|----------|
| Head cable outlet | straight |
| Head thread type | M12 |
| Coding | A |

Connection 2

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, blue, white, gray, pink, green, yellow, red |
| Cable cross section | 0.25 mm² |
| Conductor material | Tin-plated Cu litz wires |
| Conductor structure signal line | 14x 0.15 mm |
| AWG signal line | 24 |
| Material wire insulation | TPE |
| Thickness, insulation | 0.21 mm (Core insulation) |
| Nominal voltage, cable | 300 V |
| Test voltage, cable | 2000 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



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| 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

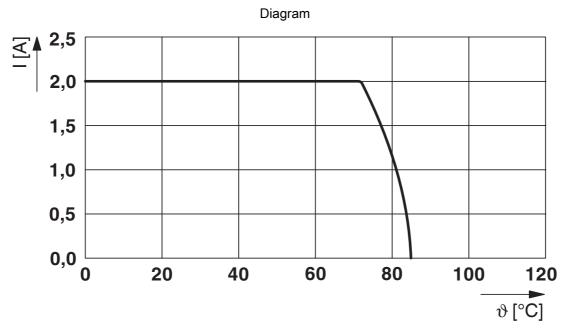
| Standard designation | M12 connector |
|--------------------------|-----------------|
| Standards/specifications | IEC 61076-2-101 |



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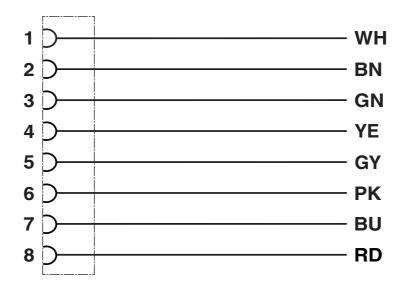
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Drawings



I = current strength, T = ambient temperature

Circuit diagram

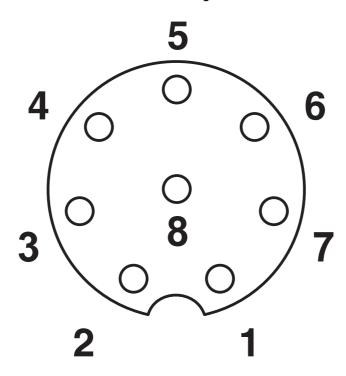




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Schematic diagram



Pin assignment M12 socket, 8-pos., A-coded, view female side



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/pc/products/1441574

| 7/ | UL Recognized Approval ID: E118976-20100522 | | | | |
|----|--|--------------------------------|--------------------------------|-------------------|-------------------------------|
| | | Nominal voltage U _N | Nominal current I _N | Cross section AWG | Cross section mm ² |
| | | 30 V | 2 A | 24 - 24 | - |

| c 911 us | cULus Recogniz Approval ID: E221474 | CULus Recognized Approval ID: E221474-20140616 | | | | |
|-----------------|--|--|--------------------------------|-------------------|-------------------------------|--|
| | | Nominal voltage U_N | Nominal current I _N | Cross section AWG | Cross section mm ² | |
| | | 30 V | 2 A | 24 - 22 | - | |



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Classifications

ECLASS

| | ECLASS-11.0 | 27440102 |
|--------|-------------|----------|
| | ECLASS-12.0 | 27440116 |
| | ECLASS-13.0 | 27440116 |
| ETIM | | |
| | ETIM 9.0 | EC002635 |
| 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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