

1441561

https://www.phoenixcontact.com/pc/products/1441561

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Device connector front mounting, 8-position, Pin, straight, M12, coding: A, on free cable end, Front mounting, Square flange, Individual wires, cable length: 0.5 m, 0.25 mm², TPE litz wire, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1239721

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 | 1441561 |
|--------------------------------------|--------------------|
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Product key | ABQCED |
| Catalog page | Page 43 (C-2-2019) |
| GTIN | 4046356533874 |
| Weight per piece (including packing) | 29.3 g |
| Weight per piece (excluding packing) | 29.01 g |
| Customs tariff number | 85444290 |
| Country of origin | DE |



1441561

https://www.phoenixcontact.com/pc/products/1441561

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) |
|----------------------|-----------------------------------|
| Number of positions | 8 |
| Application | Signal |
| No. of cable outlets | 1 |
| Shielded | no |
| Coding | A |
| Thread type | M12 |
| I hread type | M12 |

Insulation characteristics

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

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 | 80 mΩ/m |



1441561

https://www.phoenixcontact.com/pc/products/1441561

Connection data

Conductor connection

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

Mechanical properties

Mechanical data

Connector

Connection 1

| Head design | Pin |
|-------------------|----------|
| 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 | 1.15 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 | 3000 V AC (Spark test) |
| Cable resistance | ≤ 80 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



1441561

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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

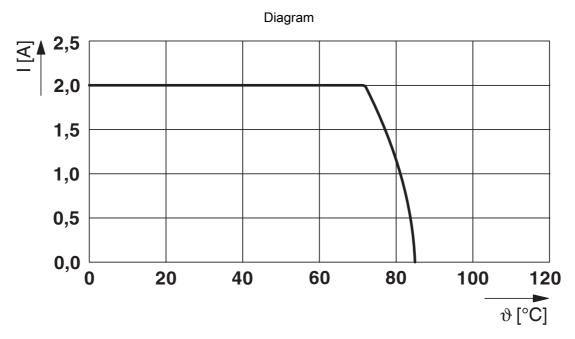
| Standard designation | M12 connector |
|--------------------------|-----------------|
| Standards/specifications | IEC 61076-2-101 |



1441561

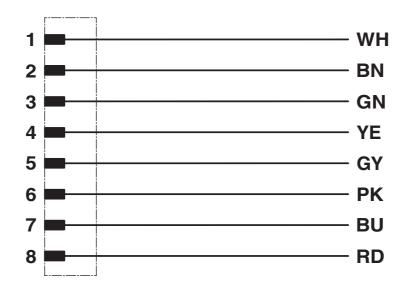
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Drawings



I = current strength, T = ambient temperature

Circuit diagram

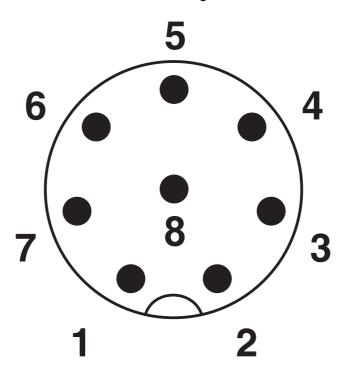




1441561

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Schematic diagram



Pin assignment M12 plug, 8-pos., view plug side



1441561

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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/pc/products/1441561

| 71 | 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 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

| 201.00 | | | |
|--------|-------------|----------|--|
| | 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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PHOENIX CONTACT GmbH & Co. KG Flachsmarktstraße 8 D-32825 Blomberg +49 (0) 5235-3 00 info@phoenixcontact.com