

1446388

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Device connector front mounting, 8-position, Plug, straight, M12-SPEEDCON, coding: A, on free cable end, Front mounting, Individual wires, cable length: 2 m, 0.25 mm<sup>2</sup>, TPE litz wire, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1239792

#### Commercial data

| Item number                          | 1446388       |  |
|--------------------------------------|---------------|--|
| Packing unit                         | 1 pc          |  |
| Minimum order quantity               | 50 pc         |  |
| Sales key                            | AB24          |  |
| Product key                          | ABQCEB        |  |
| GTIN                                 | 4046356628358 |  |
| Weight per piece (including packing) | 69 g          |  |
| Weight per piece (excluding packing) | 22.22 g       |  |
| Customs tariff number                | 85444290      |  |
| Country of origin                    | DE            |  |



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#### Technical data

#### Notes

|          | General           | Lock nut is included in the scope of delivery |  |
|----------|-------------------|---|--|
| Mounting |                   |   |  |
|          | Mounting type     | Front mounting                                |  |
|          | Connection method | Individual wires                              |  |

#### Product properties

| Product type               | Circular connectors (device side) |  |  |
|----------------------------|-----------------------------------|--|--|
| Number of positions        | 8                                 |  |  |
| No. of cable outlets       | 1                                 |  |  |
| Shielded                   | no                                |  |  |
| Coding                     | A                                 |  |  |
| Thread type                | M12                               |  |  |
| Insulation characteristics |                                   |  |  |
| Overvoltage category       | II                                |  |  |

#### Material specifications

Degree of pollution

| Flammability rating according to UL 94     | V0                           |  |
|--|------------------------------|--|
| Seal material                              | NBR                          |  |
| Contact material                           | CuZn                         |  |
| Contact surface material                   | Au                           |  |
| Contact carrier material                   | PA 6.6                       |  |
| Material for screw connection              | Zinc die-cast, nickel-plated |  |
| onductor material Tin-plated Cu litz wires |                              |  |

#### Electrical properties

| Contact resistance             | ≤ 3 mΩ   |
|--------------------------------|----------|
| Insulation resistance          | ≥ 100 MΩ |
| Nominal voltage U <sub>N</sub> | 30 V     |
| Nominal current I <sub>N</sub> | 2 A      |
| Max. conductor resistance      | 80 mΩ/m  |

#### Connection data

#### Conductor connection

| Connection method       | Individual wires |  |
|-------------------------|------------------|--|
| Contact connection type | Pin              |  |
| Conductor cross section | 0.25 mm²         |  |



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#### Connector

#### Connection 1

| Head design       | Plug     |
|-------------------|----------|
| Head cable outlet | straight |
| Head thread type  | M12      |
| Head locking type | SPEEDCON |
| Coding            | A        |

#### Connection 2

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

#### Cable/line

| Cable length                                    | 2 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 |  |
| 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 ≤ 80 mΩ/m                      |  |  |
| Cable insulation resistance                     | ≥ 20 MΩ*km   |  |

#### Environmental and real-life conditions

#### Ambient conditions

| Degree of protection            | IP67                                     |  |
|---------------------------------|--|--|
|                                 | IP67                                     |  |
| Ambient temperature (operation) | -25 °C 85 °C (Plug / socket)             |  |
|                                 | -25 °C 90 °C (cable, fixed installation) |  |

#### Standards and regulations

#### M12

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

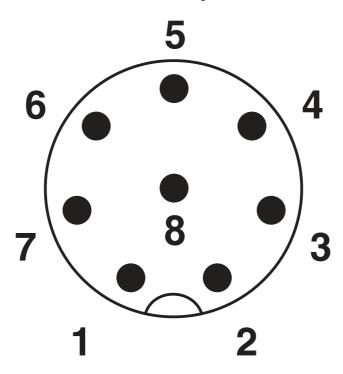


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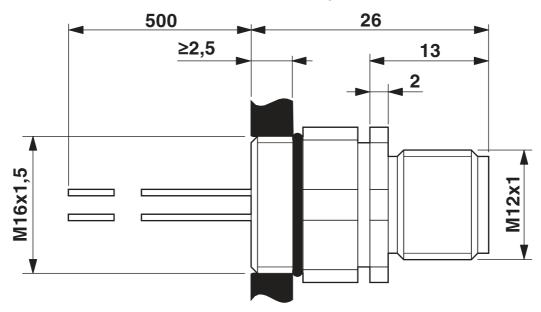
### Drawings

Schematic diagram



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

Dimensional drawing



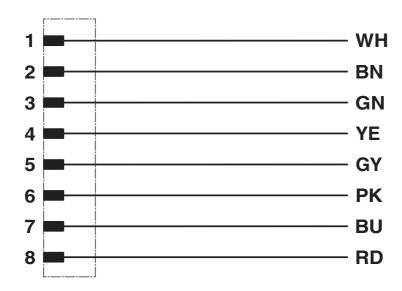
Dimensional drawing



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#### Circuit diagram





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### Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1446388

| UL Recognized Approval ID: E118976-20100522 |  |                                |                                |                   |                               |
|---|--|--------------------------------|--------------------------------|-------------------|-------------------------------|
|   |  | Nominal voltage U <sub>N</sub> | Nominal current I <sub>N</sub> | Cross section AWG | Cross section mm <sup>2</sup> |
|   |  | 30 V                           | 2 A                            | - 24              | -                             |

| EOF  | EAC Approval ID: B 01687 |
|------|--------------------------|
| LIIL | Approval ID: B.01687     |

| cULus Recognized Approval ID: E221474-20140616 |  |                                |                                |                   |                               |
|--|--|--------------------------------|--------------------------------|-------------------|-------------------------------|
|  |  | Nominal voltage U <sub>N</sub> | Nominal current I <sub>N</sub> | Cross section AWG | Cross section mm <sup>2</sup> |
|  |  | 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 8.0    | EC002635 |  |  |
| UNSPSC |             |          |  |  |
| UI     | NOFOL       |          |  |  |
|        | 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 USA 586 Fulling Mill Road Middletown, PA 17057, United States (+717) 944-1300 info@phoenixcon.com