

1411893

https://www.phoenixcontact.com/gb/products/1411893

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.

Connector, 5-pos., shielded, angled M12 plug, A-coded, screw connection with pin screws, knurl material: brass, nickel-plated, Pg9 cable gland, outer cable diameter of 6 mm ... 8 mm



### Your advantages

- · Safe use in the field, thanks to a high degree of protection
- Screw connection: proven connection technology for a large selection of different conductors
- Reliable signal transmission 360° shielding in environments with electromagnetic interference

#### Commercial data

| Item number                          | 1411893       |
|--------------------------------------|---------------|
| Packing unit                         | 1 pc          |
| Minimum order quantity               | 1 pc          |
| Sales key                            | AF2CBA        |
| Product key                          | AF2CBA        |
| GTIN                                 | 4046356944632 |
| Weight per piece (including packing) | 67 g          |
| Weight per piece (excluding packing) | 67 g          |
| Customs tariff number                | 85366990      |
| Country of origin                    | DE            |



1411893

https://www.phoenixcontact.com/gb/products/1411893

### Technical data

#### Notes

| Assembly note | NOTE: Observe the permissible bending radii when routing cables, since the degree of protection may be at risk if the bending forces are too high. Reduce mechanical loads upstream of the connector, e.g., by using cable ties. |
|---------------|--|
|---------------|--|

### Mounting

| Assembly note | The connector pin assignment can be rotated 90° to the cable |
|---------------|--|
|               | outlet   |

### Product properties

| Product type               | Circular connector (cable-side) |
|----------------------------|---------------------------------|
| Number of positions        | 5                               |
| No. of cable outlets       | 1                               |
| Shielded                   | yes                             |
| Coding                     | A                               |
| Cable outlet               | angled                          |
| Pg screw connection        | Pg9                             |
| Insulation characteristics |                                 |

#### Insulation characteristics

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

### **Dimensions**

### External dimensions

| Outside diameter | 6 mm 8 mm |
|------------------|-----------|
|------------------|-----------|

### Material specifications

| Flammability rating according to UL 94 | НВ                           |
|--|------------------------------|
| Seal material                          | NBR                          |
| Material of grip body                  | Zinc die-cast, nickel-plated |
| Contact material                       | CuZn                         |
| Contact surface material               | Au                           |
| Contact carrier material               | PA                           |
| Material for screw connection          | Zinc die-cast, nickel-plated |

### Connection data

#### Conductor connection

| Connection method                       | Screw connection  |
|---|-------------------|
| Connection cross section                | 0.25 mm² 0.75 mm² |
| Connection cross section AWG            | 24 18             |
| Stripping length of the individual wire | 5 mm              |



1411893

https://www.phoenixcontact.com/gb/products/1411893

| Tightening torque                       | 0.4 Nm (M12 knurl)                              |  |
|---|---|--|
|   | 0.2 Nm (Screw terminal blocks)                  |  |
|   | 0.8 Nm 1 Nm (Pressure nut with coupling sleeve) |  |
| Electrical properties                   |   |  |
| Contact resistance                      | ≤ 3 mΩ  |  |
| Insulation resistance                   | ≥ 100 MΩ  |  |
| Nominal voltage U <sub>N</sub>          | 60 V DC   |  |
|   | 48 V AC   |  |
| Nominal current I <sub>N</sub>          | 4 A   |  |
| Mechanical properties                   |   |  |
|   |   |  |
| Mechanical data                         |   |  |
| Insertion/withdrawal cycles             | ≥ 50  |  |
| Connector                               |   |  |
| Connection 1                            |   |  |
| Head design                             | Plug  |  |
| Head cable outlet                       | angled  |  |
| Head thread type                        | M12   |  |
| Coding                                  | A   |  |
| Cable/line                              |   |  |
| Stripping length of the individual wire | 5 mm  |  |
| Environmental and real-life conditions  |   |  |
| Ambient conditions                      |   |  |
| Degree of protection                    | IP67  |  |
| Ambient temperature (operation)         | -40 °C 85 °C (Plug / socket)                    |  |
| Standards and regulations               |   |  |
| Standard designation                    | M12 connector                                   |  |
| Standards/specifications                | IEC 61076-2-101                                 |  |
|   |   |  |

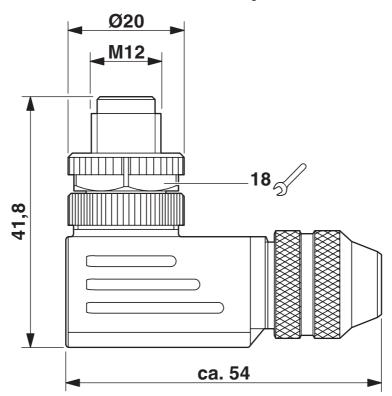


1411893

https://www.phoenixcontact.com/gb/products/1411893

## Drawings

### Dimensional drawing



M12 x 1 male plug, angled, shielded

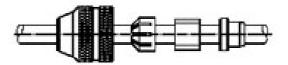


1411893

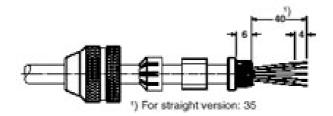
https://www.phoenixcontact.com/gb/products/1411893

#### Functional drawing

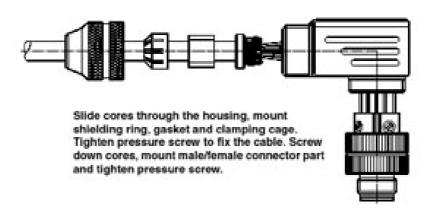
### Assembly steps for M 12 male/female connector and conductor



Slide parts onto the conductor



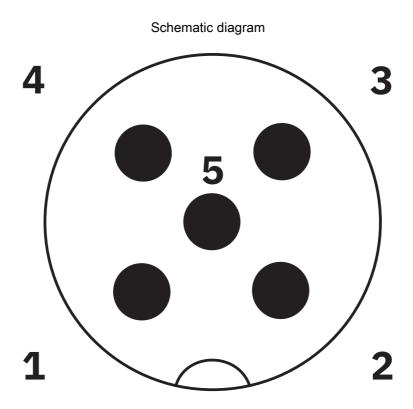
Strip conductor, widen shield and lay around the shielding ring, cut off projecting mesh.





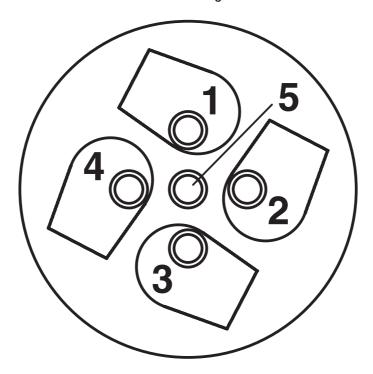
1411893

https://www.phoenixcontact.com/gb/products/1411893



Pin assignment M12 male connector, 5-pos., A-coded, male side

Schematic diagram



Cable connection side M12 (screw connection)



1411893

https://www.phoenixcontact.com/gb/products/1411893

### Classifications

| <b>ECLASS</b> |
|---------------|
|---------------|

|        | ECLASS-13.0 | 27440116 |  |
|--------|-------------|----------|--|
| ETIM   |             |          |  |
|        | ETIM 9.0    | EC002635 |  |
| UNSPSC |             |          |  |
|        | UNSPSC 21.0 | 39121400 |  |



1411893

https://www.phoenixcontact.com/gb/products/1411893

### 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                                    | cc1db260-11e7-40cb-a0e6-123fef3d397f  |

Phoenix Contact 2025 @ - all rights reserved https://www.phoenixcontact.com

PHOENIX CONTACT Ltd Halesfield 13, Telford Shropshire, TF7 4PG 01952 681700 info@phoenixcontact.co.uk