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Flush-type connector, 4-position, Plug, M12, A - standard, Front mounting, M20 x 1,5, Individual wires, cable length: 0.5 m

Why buy this product

- Pre-assembled with litz wires for immediate use
- Customer-specific assemblies and litz wire lengths available
- Sealed on the litz wire side for optimum leak-tightness
- Mall 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



Key Commercial Data

| Packing unit | 1 STK |
|--------------------------------------|-----------------|
| GTIN | 4 046356 812597 |
| GTIN | 4046356812597 |
| Weight per Piece (excluding packing) | 40.000 g |
| Custom tariff number | 85444290 |
| Country of origin | Germany |

Technical data

Dimensions

| Length of cable | 0.5 m |
|-----------------|-------|
|-----------------|-------|

Ambient conditions

| Ambient temperature (operation) | -25 °C 85 °C (Plug / socket) |
|---------------------------------|---|
| | -40 °C 85 °C (without mechanical actuation) |



Technical data

Ambient conditions

| Degree of protection | IP67 |
|----------------------|------|
| | |

General

| Note | 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. |
|-----------------------------|--|
| Rated current at 40°C | 4 A |
| Rated voltage | 250 V |
| Rated surge voltage | 2.5 kV |
| Number of positions | 4 |
| Insulation resistance | \geq 100 M Ω |
| Coding | A - standard |
| Standards/regulations | M12 connector IEC 61076-2-101 |
| Overvoltage category | II |
| Degree of pollution | 3 |
| Connection method | Individual wires |
| Insertion/withdrawal cycles | > 100 |
| Torque | 3 Nm 4 Nm (Installation-side) |
| Mounting type | Front mounting M20 x 1,5 |

Material

| Flammability rating according to UL 94 | V0 |
|--|-----------------|
| Contact material | CuZn |
| Contact surface material | Au |
| Contact carrier material | PA 6.6 |
| Material, knurls | Stainless steel |

Cable

| Cable type | TPE litz wire |
|------------------------------------|-------------------------------|
| Conductor cross section | 0.34 mm² |
| AWG signal line | 22 |
| Conductor structure signal line | 7x 0.25 mm |
| Core diameter including insulation | 1.2 mm ±0.07 mm |
| Thickness, insulation | 0.21 mm |
| Wire colors | brown, white, blue, black |
| Material conductor insulation | TPE |
| Conductor material | Tin-plated Cu litz wires |
| Standards/specifications | M12 connector IEC 61076-2-101 |



Technical data

Cable

| Insulation resistance | $\geq 20~\text{M}\Omega^*\text{km}$ |
|---------------------------------|---|
| Conductor resistance | ≤ 57.6 mΩ/m |
| Nominal voltage, cable | 300 V |
| Test voltage, cable | 2000 V AC |
| Ambient temperature (operation) | -40 °C 85 °C (cable, fixed installation) |
| | -25 °C 85 °C (cable, flexible installation) |

Standards and Regulations

| Standard designation | M12 connector |
|--|-----------------|
| Standards/regulations | IEC 61076-2-101 |
| Flammability rating according to UL 94 | V0 |

Environmental Product Compliance

| China RoHS | Environmentally Friendly Use Period = 50 |
|------------|---|
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

Drawings

Dimensional drawing

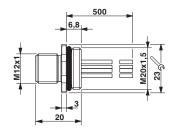


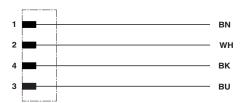
Schematic diagram



Housing cutout for M20 fastening thread, mounting panel with thread

Circuit diagram Dimensional drawing





M12 flush-type plug

Contact assignment of the M12 plug and the M12 socket

Pin assignment M12 plug, 4-pos., A-coded, view plug side



Classifications

eCl@ss

| eCl@ss 4.0 | 27250313 |
|------------|----------|
| eCl@ss 4.1 | 27250313 |
| eCl@ss 5.0 | 27143423 |
| eCl@ss 5.1 | 27279200 |
| eCl@ss 6.0 | 27279200 |
| eCl@ss 7.0 | 27440103 |
| eCl@ss 8.0 | 27440103 |
| eCl@ss 9.0 | 27440102 |

ETIM

| ETIM 3.0 | EC002062 |
|----------|----------|
| ETIM 4.0 | EC002061 |
| ETIM 5.0 | EC002061 |
| ETIM 6.0 | EC002061 |

UNSPSC

| UNSPSC 6.01 | 31251501 |
|---------------|----------|
| UNSPSC 7.0901 | 31251501 |
| UNSPSC 11 | 31251501 |
| UNSPSC 12.01 | 31251501 |
| UNSPSC 13.2 | 39121413 |

Approvals

Approvals

Approvals

UL Recognized / cULus Recognized / EAC

Ex Approvals

Approval details



Approvals

| UL Recognized | <i>7</i> . | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 118976 | | |
|--------------------|------------|---|-------|--|
| | | | | |
| Nominal voltage UN | | | 250 V | |
| Nominal current IN | | | 4 A | |
| mm²/AWG/kcmil | | | 22 | |

| cULus Recognized | c 511 us | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm E221474-2014 | | E221474-20140616 |
|--------------------|-----------------|--|-------|------------------|
| | | | | |
| Nominal voltage UN | | | 250 V | |
| Nominal current IN | | | 4 A | |
| mm²/AWG/kcmil | | | 22-20 | |

| EAC EH | B.00767 |
|---------------|---------|
|---------------|---------|

Accessories

Accessories

Protective cap

Sealing cap - PROT-M12 FS - 1560251



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

Sealing cap - PROT-M12 FS-M - 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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