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Sensor/actuator flush-type plug, 4-pos., M12 SPEEDCON, rear/screw mounting with M16 thread, with 0.5 m TPE litz wire, 4 x 0.34 mm^2

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
- 🗹 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



Key Commercial Data

| Packing unit | 1 STK |
|--------------------------------------|-----------------|
| GTIN | 4 046356 533478 |
| GTIN | 4046356533478 |
| Weight per Piece (excluding packing) | 23.480 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) |
|---------------------------------|------------------------------|
| Degree of protection | IP67 |
| | IP67 |

General



Technical data

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 | ≥ 100 MΩ |
| Coding | A - standard |
| Standards/regulations | M12 connector IEC 61076-2-101 |
| Signal type/category | Universal |
| Status display | No |
| Overvoltage category | 11 |
| Degree of pollution | 3 |
| Connection method | Individual wires |
| Insertion/withdrawal cycles | > 100 |
| Torque | 3 Nm 4 Nm (Installation-side) |
| Mounting type | Rear mounting M16 x 1.5 With flat nut |

Material

| Flammability rating according to UL 94 | V0 |
|--|------------------------------|
| Contact material | CuZn |
| Contact surface material | Au |
| Contact carrier material | PA 66 |
| Material, knurls | Zinc die-cast, nickel-plated |
| Sealing material | FKM |

Cable

| Cable type | TPE litz wire |
|------------------------------------|-------------------------------|
| Conductor cross section | 0.34 mm ² |
| 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 (Core insulation) |
| 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 |
| Insulation resistance | $\geq 20 \ M\Omega^* km$ |
| Conductor resistance | \leq 57.6 m Ω /m |
| Nominal voltage, cable | 300 V |



Technical data

Cable

| 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



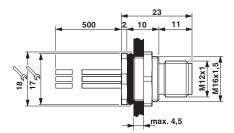


Dimensional drawing

Housing cutout for M16 fastening thread, mounting panel with thread

Housing cutout for M16 fastening thread, mounting panel with feedthrough hole (alternatively with area as anti-rotation protection for panel thicknesses > 2 mm up to max. 4.5 mm)

Dimensional drawing



Schematic diagram

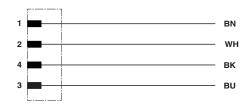


Pin assignment of M12 male connector, 4-pos., A-coded, view of connector side

M12 flush-type plug



Circuit diagram



Contact assignment of the M12 plug and the M12 socket

Classifications

eCl@ss

| eCl@ss 4.0 | 27140815 |
|------------|----------|
| eCl@ss 4.1 | 27140815 |
| eCl@ss 5.0 | 27143423 |
| eCl@ss 5.1 | 27143423 |
| eCl@ss 6.0 | 27279220 |
| eCl@ss 7.0 | 27440103 |
| eCl@ss 8.0 | 27440103 |
| eCl@ss 9.0 | 27440102 |

ETIM

| ETIM 2.0 | EC001297 |
|----------|----------|
| ETIM 3.0 | EC002061 |
| 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 / EAC / cULus Recognized



Approvals

Ex Approvals

Approval details

| UL Recognized | F1 | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 118976 | | |
|--------------------|-----------|---|-------|--|
| | | | | |
| mm²/AWG/kcmil | | | 26-20 | |
| Nominal current IN | | | 4 A | |
| Nominal voltage UN | | | 250 V | |
| | | | • | |

| EAC |
|-----|
|-----|

B.00767

| cULus Recognized | http://database.ul.con | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm E221474-201406 | |
|--------------------|------------------------|--|--|
| | | | |
| mm²/AWG/kcmil | | 22-20 | |
| Nominal current IN | | 4 A | |
| Nominal voltage UN | | 250 V | |

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



Accessories

Seal

Flat gasket - SACC-M16-SEAL CLM - 1430394



M16 flat gasket, for rear mounting of M12 flush-type connectors with M16 fastening thread

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