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Sensor/actuator flush-type plug, 12-pos., M12 SPEEDCON, rear/screw mounting with M16 thread, with 0.5 m TPE litz wire, 12×0.14 mm²

Product Features

- 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 pc
Weight per Piece (excluding packing)	30.0 g
Custom tariff number	85444290
Country of origin	Germany

Technical data

Dimensions

Length of cable	0.5 m
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Ambient conditions

Ambient temperature (operation)	-25 °C 85 °C (Plug / socket)
	-40 °C 85 °C (without mechanical actuation)
Degree of protection	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	1.5 A
Rated voltage	30 V
Rated surge voltage	0.8 kV
Number of positions	12
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Signal type/category	Universal
Status display	No
Overvoltage category	II
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	0.14 mm ²
AWG signal line	26
Conductor structure signal line	7x 0.16 mm
Core diameter including insulation	1.1 mm ±0.05 mm
Thickness, insulation	0.21 mm (Core insulation)
Wire colors	Brown, blue, white, green, pink, yellow, black, gray, red, violet, gray/pink, red/blue
Material conductor insulation	TPE
Conductor material	Tin-plated Cu litz wires



Technical data

Cable

Insulation resistance	\geq 20 MΩ*km
Conductor resistance	\leq 57.6 m Ω /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

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

ETIM

ETIM 2.0	EC001297
ETIM 3.0	EC002061
ETIM 4.0	EC002061
ETIM 5.0	EC002061

UNSPSC

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

Approvals

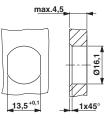
Approvals



Approvals	
Approvals	
EAC / EAC	
Ex Approvals	
Approvals submitted	
Approval details	
EAC	
EAC	
Drawings	
Dimensional drawing	Dimensional drawing



Housing cutout for M16 fastening thread, mounting panel with thread



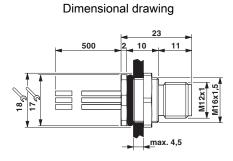
Housing cutout for M16 fastening thread, mounting panel with feed-through hole (alternatively with area as anti-rotation protection for panel thicknesses > 2 mm up to max. 4.5 mm)



Schematic diagram

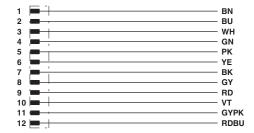


Pin assignment M12 male connector, 12-pos., male side view



M12 flush-type plug

Circuit diagram



Contact assignment of the M12 plug

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