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Sensor/actuator flush-type plug, 8-pos., M12 SPEEDCON, rear/screw mounting with M16 thread, with 0.5 m TPE litz wire, 8 x 0.25 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
- ${\ensuremath{\,^{\scriptsize \Box}}}$ 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 533539
GTIN	4046356533539
Weight per Piece (excluding packing)	29.000 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)
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	2 A
Rated voltage	30 V
Rated surge voltage	0.8 kV
Number of positions	8
Insulation resistance	\geq 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	0.25 mm ²
AWG signal line	24
Conductor structure signal line	14x 0.15 mm
Core diameter including insulation	1.15 mm ±0.07 mm
Thickness, insulation	0.21 mm
Wire colors	Brown, blue, white, gray, pink, red, yellow, green
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	$\leq 80 \text{ m}\Omega/\text{m}$
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"

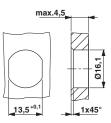
Drawings

Dimensional drawing



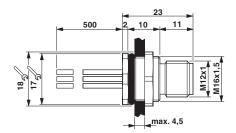
Housing cutout for M16 fastening thread, mounting panel with thread

Dimensional drawing



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

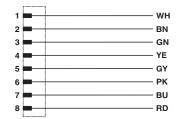


Pin assignment M12 plug, 8-pos., view plug side

M12 flush-type plug



Circuit diagram



Contact assignment of the M12 plug

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	17	http://database.ul.cor	n/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 118976
mm²/AWG/kcmil			26-20	
Nominal current IN			2 A	
Nominal voltage UN			30 V	

EAC	EAE
	LIIL

B.00767

cULus Recognized	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm E221474-201406
mm²/AWG/kcmil	24-22
Nominal current IN	2 A
Nominal voltage UN	30 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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