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Sensor/actuator flush-type plug, 8-pos., M12 SPEEDCON, rear/screw mounting with M12 thread, with 0.5 m TPE litz wire,  $8 \times 0.25 \text{ mm}^2$ 

#### 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
- Standard pin assignments for signal 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 161978
GTIN	4046356161978
Weight per Piece (excluding packing)	22.500 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

#### 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	



## Technical data

### General

	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	≥ 100 MΩ
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
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 M12 x 1 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	NBR

### Cable

Cable type	TPE litz wire
Conductor cross section	0.25 mm²
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, green, yellow, red
Material conductor insulation	TPE
Conductor material	Tin-plated Cu litz wires
Standards/specifications	M12 connector IEC 61076-2-101
Insulation resistance	≥ 20 MΩ*km
Conductor resistance	$\leq$ 80 m $\Omega$ /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)

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### Technical data

### 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"

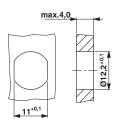
## **Drawings**

#### Dimensional drawing



Housing cutout for M12 fastening thread, mounting panel with thread

#### Dimensional drawing



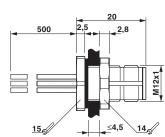
Housing cutout for M12 fastening thread, mounting panel with feed-through hole (alternative with surface as protection against rotation)

#### Schematic diagram



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

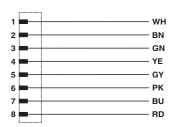
### Dimensional drawing



M12 flush-type connector



#### Circuit diagram



Contact assignment of the M12 plug and the M12 socket

### Classifications

### eCl@ss

eCl@ss 4.0	27250313
eCl@ss 4.1	27250313
eCl@ss 5.0	27143423
eCl@ss 5.1	27143423
eCl@ss 6.0	27143423
eCl@ss 7.0	27449001
eCl@ss 8.0	27440103
eCl@ss 9.0	27440102

#### **ETIM**

ETIM 3.0	EC002061
ETIM 4.0	EC002062
ETIM 5.0	EC002061
ETIM 6.0	EC002061

### **UNSPSC**

UNSPSC 6.01	31261501
UNSPSC 7.0901	31261501
UNSPSC 11	31261501
UNSPSC 12.01	31261501
UNSPSC 13.2	39121413

## Approvals

#### Approvals

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cULus Recognized / UL Recognized / EAC



## Approvals

Ex Approvals

#### Approval details

cULus Recognized <b>CFU</b> US	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm E221474-20140616	
mm²/AWG/kcmil		24-22
Nominal current IN		2 A
Nominal voltage UN		30 V

UL Recognized	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.	http://database.ul.com/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 <b>ERI</b>	B.00767
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### Accessories

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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

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