

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)



Sensor/actuator flush-type plug, 8-pos., M12 SPEEDCON, rear/screw mounting with M16 thread, with 0.5 m TPE litz wire,  $8 \times 0.25 \text{ mm}^2$ 

#### Your advantages

- ☑ Pre-assembled with litz wires for immediate use
- 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



#### **Key Commercial Data**

Packing unit	1 pc
GTIN	4 046356 533539
GTIN	4046356533539

#### Technical data

#### **Dimensions**

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

#### Ambient conditions

Ambient temperature (operation)	-25 °C 85 °C (Plug / socket)
Degree of protection	IP65/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	2 A



### Technical data

#### General

Rated voltage	30 V
Rated surge voltage	0.8 kV
Number of positions	8
Insulation resistance	$\geq$ 100 M $\Omega$
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 6.6
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	FKM

#### 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, red, yellow, green
Material conductor insulation	TPE
Conductor material	Tin-plated Cu litz wires
Standards/specifications	M12 connector IEC 61076-2-101
Insulation resistance	$\geq 20 \text{ M}\Omega^*\text{km}$
Conductor resistance	≤ 80 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



### Technical data

#### Standards and Regulations

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

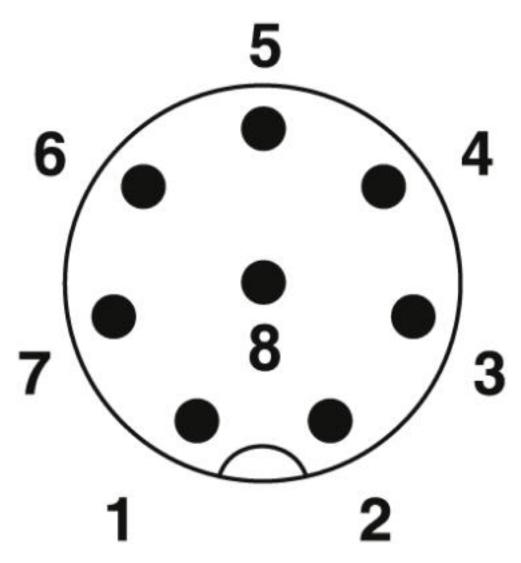
#### **Environmental Product Compliance**

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

### Drawings



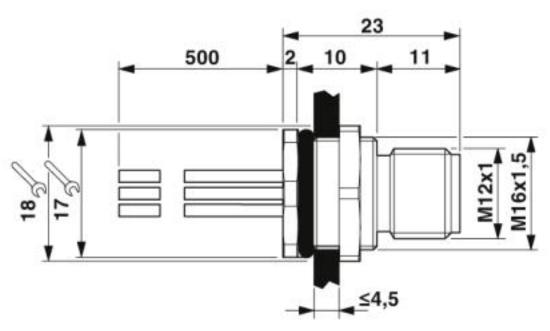
Schematic diagram



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

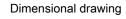


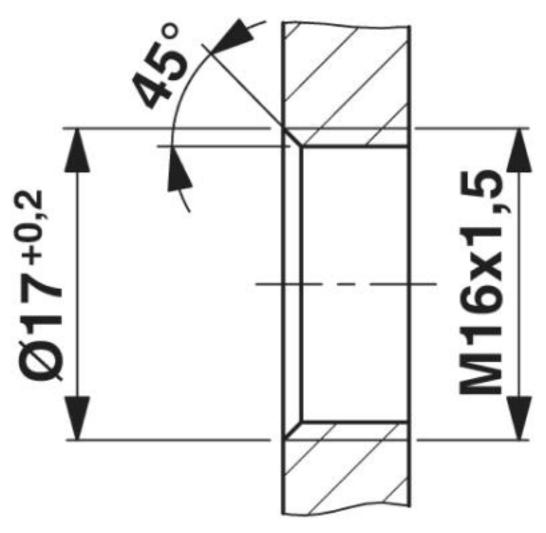
#### Dimensional drawing



M12 flush-type plug

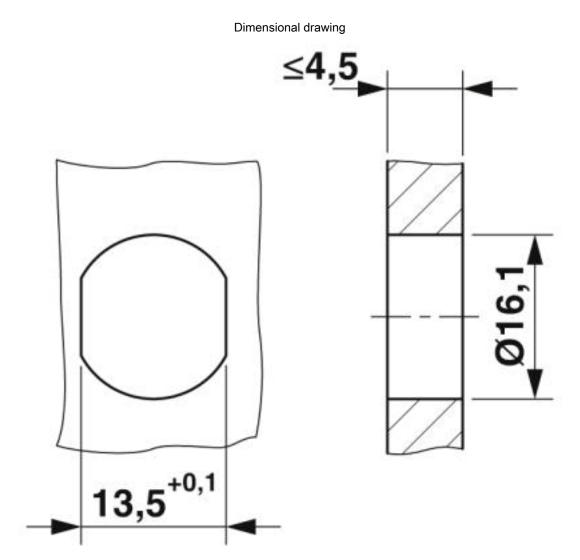






Housing cutout for M16 fastening thread, mounting panel with thread

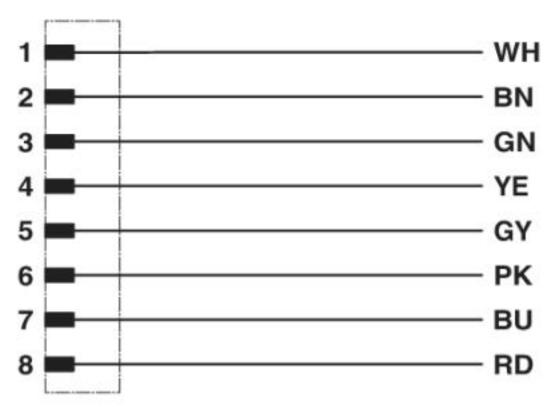




Housing cutout for M16 fastening thread, mounting panel with feed-through hole (alternatively with area as anti-rotation protection for panel thicknesses > 2 mm up to max. 4.5 mm)



Circuit diagram



Contact assignment of the M12 plug

### Approvals

Approvals

Approvals

UL Recognized / EAC / cULus Recognized

Ex Approvals

#### Approval details

UL Recognized	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FII	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 118976	
Nominal voltage UN	30 V		
Nominal current IN	2 A		
mm²/AWG/kcmil	24		



### Approvals

EAC	B.00767
-----	---------

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

Phoenix Contact 2019 © - all rights reserved http://www.phoenixcontact.com

PHOENIX CONTACT GmbH & Co. KG Flachsmarktstr. 8 32825 Blomberg Germany

Tel. +49 5235 300 Fax +49 5235 3 41200

http://www.phoenixcontact.com