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Sensor/actuator flush-type plug, 12-pos., M12 SPEEDCON, rear/screw mounting with Pg9 thread, with 0.5 m halogen-free TPE litz wire, 12 x 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)	28.6 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	
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 Pg9 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 mm²	
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	
Wire colors	Brown, blue, white, green, pink, yellow, black, gray, red, violet, gray/pired/blue	
Material conductor insulation	TPE	
Conductor material	Tin-plated Cu litz wires	
Insulation resistance	$\geq 20 \text{ M}\Omega^*\text{km}$	



## Technical data

### Cable

Conductor resistance	≤ 57.6 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

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

## 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	27440103

#### **ETIM**

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	31251501

# Approvals

## Approvals



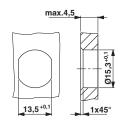
# Approvals

EAC / cULus Recognized / EAC			
	EAC / cULus Recognized / EAC		
Ex Approvals			
Approvals submitted			
Approval details			
EAC			
cULus Recognized			
mm²/AWG/kcmil	26		
Nominal current IN	1.5 A		
Nominal voltage UN	30 V		

# Drawings

EAC

# Dimensional drawing



#### Dimensional drawing



Housing cutout for Pg9 fastening thread, mounting panel with thread

Housing cutout for Pg9 fastening thread, mounting panel with feed-through hole (alternatively with surface as protection against rotation)

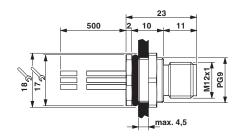


Schematic diagram



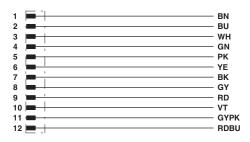
Pin assignment M12 male connector, 12-pos., male side view

Dimensional drawing



M12 flush-type connector

Circuit diagram



Contact assignment of the M12 plug

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