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Sensor/Actuator flush-type plug, 8-pos., M12-SPEEDCON, A-coded, front/screw mounting with M16 thread, can be positioned, 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
- If 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 STK
GTIN	4 046356 021333
GTIN	4046356021333
Weight per Piece (excluding packing)	29.600 g
Custom tariff number	85444290
Country of origin	Germany

## Technical data

#### Dimensions

Length of cable	0.5 m
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	$\geq$ 100 M $\Omega$
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
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	Front mounting M16 x 1.5 With locking nut

#### Material

Flammability rating according to UL 94	V0
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PA 66
Material of grip body	Zinc die-cast, nickel-plated
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	NBR

## Cable

Cable type	TPE litz wire
Conductor cross section	0.25 mm <sup>2</sup>
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 (Core insulation)
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	$\geq 20 \ M\Omega^* km$
Conductor resistance	$\leq 80 \text{ m}\Omega/\text{m}$
Nominal voltage, cable	300 V
Test voltage, cable	2000 V AC
Ambient temperature (operation)	-40 °C 85 °C (cable, fixed installation)

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## Technical data

Cable

	-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	VO

### **Environmental Product Compliance**

China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

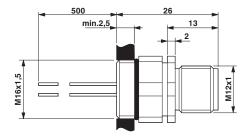
## Drawings

### Dimensional drawing



Housing cutout for M16 fastening thread, mounting panel with thread

#### Dimensional drawing



M12 flush-type plug, can be positioned

### Schematic diagram



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

#### Circuit diagram

l	
1	—— WH
2	—— BN
3 💻	— GN
4	YE
5 💻	GY
6	— РК
7	BU
8	
	ΠD

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	27143423
eCl@ss 7.0	27449001
eCl@ss 8.0	27440103



## Classifications

## eCl@ss

	eCl@ss 9.0	27440102
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## ETIM

ETIM 2.0	EC001297
ETIM 3.0	EC002061
ETIM 4.0	EC002062
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

cULus Recognized / UL Recognized / EAC

#### Ex Approvals

Γ

## Approval details

cULus Recognized	c <b>AL</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	<b>71</b>	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm F		FILE E 118976
mm²/AWG/kcmil			26-20	



## Approvals

Nominal current IN	2 A
Nominal voltage UN	30 V

EAC	EAC
2,10	FMI
	LIIL

B.00767

## 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

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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