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Sensor/actuator flush-type plug, 8-pos., M12, A-coded, front/screw mounting with M20 x 1.5 thread, with 0.5 m TPE litz wire, 8 x 0.25 mm², high-grade steel version

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
- Mall 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

RoHS

Key Commercial Data

Packing unit	1 STK
GTIN	4 046356 529181
GTIN	4046356529181

Technical data

Dimensions

Length of cable	0.5 m		
Ambient conditions			
Ambient temperature (operation)	-25 °C 85 °C (Plug / socket)		
	-40 °C 85 °C (without mechanical actuation)		
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 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 Ω
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Status display	No
Overvoltage category	П
Degree of pollution	3
Connection method	Individual wires
Insertion/withdrawal cycles	> 100
Torque	3 Nm 4 Nm (Installation-side)
Mounting type	Front mounting M20 x 1,5

Material

Flammability rating according to UL 94	V0
Contact material	CuZn
Contact surface material	Au
Contact carrier material	PA 6.6
Material, knurls	Stainless steel
Sealing material	NBR

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, 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 MΩ*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)
	-25 °C 85 °C (cable, flexible installation)

Standards and Regulations

Standard designation	M12 connector
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Technical data

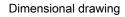
Standards and Regulations

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"

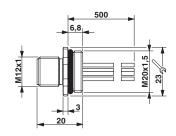
Drawings





Housing cutout for M20 fastening thread, mounting panel with thread

Dimensional drawing



M12 flush-type plug

Approvals

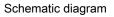
Approvals

Approvals

cULus Recognized / UL Recognized / EAC

Ex Approvals

Approval details





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

Circuit diagram

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1	-	WI	н
2	— —	BN	1
3	_	GI	N
4	_	YE	
5		GY	(
6		Pk	
7		BL	
8		BC	
0		nL	'

Contact assignment of the M12 plug and the M12 socket



Approvals

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cULus Recognized	c FL 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

http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm		FILE E 118976
	30 V	
	2 A	
	24	
	nttp://database.ul.com	30 V 2 A

EAC	В.00767
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