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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



Key Commercial Data

Packing unit	1 STK
GTIN	4 046356 529181
GTIN	4046356529181
Weight per Piece (excluding packing)	40.000 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)



Technical data

Ambient conditions

Degree of protection	IP67
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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
Rated voltage	30 V
Rated surge voltage	0.8 kV
Number of positions	8
Insulation resistance	$\geq 100~\text{M}\Omega$
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Status display	No
Overvoltage category	II II
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 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



Technical data

Cable

Conductor material	Tin-plated Cu litz wires
Standards/specifications	M12 connector IEC 61076-2-101
Insulation resistance	≥ 20 MΩ*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

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

Dimensional drawing



Schematic diagram

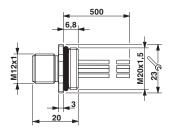


Housing cutout for M20 fastening thread, mounting panel with thread

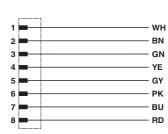
Pin assignment M12 plug, 8-pos., A-coded, view plug side



Dimensional drawing



Circuit diagram



M12 flush-type plug

Contact assignment of the M12 plug and the M12 socket

Classifications

eCl@ss

eCl@ss 4.0	27140815
eCl@ss 4.1	27140815
eCl@ss 5.0	27143423
eCl@ss 5.1	27143400
eCl@ss 6.0	27279200
eCl@ss 7.0	27440103
eCl@ss 8.0	27440103
eCl@ss 9.0	27440102

ETIM

ETIM 2.0	EC001297
ETIM 3.0	EC002061
ETIM 4.0	EC002061
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	Approvals	
	cULus Recognized / UL Recognized / EAC	
Ex Approvals	Ex Approvals	

Approval details

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	

UL Recognized	<i>7</i> .1	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 118976		FILE E 118976
Nominal voltage UN			30 V	
Nominal current IN			2 A	
mm²/AWG/kcmil			24	

EAC	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



Accessories

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

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