imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Sensor/actuator flush-type plug, 8-pos., M12 SPEEDCON, rear/screw mounting with M12 thread, with 0.5 m TPE litz wire, 8 x 0.25 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
- Standard pin assignments for signal 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 161978
GTIN	4046356161978

Technical data

Dimensions

Length of cable	0.5 m
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Ambient conditions

Ambient temperature (operation)	-25 °C 85 °C (Plug / socket)	
Degree of protection	IP67	

General

	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 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 M12 x 1 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 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	> 20 MO*km	

Insulation resistance $\geq 20 \text{ M}\Omega^* \text{km}$		
Conductor resistance	\leq 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		

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

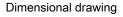
REACh SVHC	Lead 7439-92-1	
China RoHS Environmentally Friendly Use Period = 50		
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"	

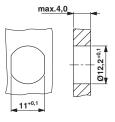
Drawings

Dimensional drawing



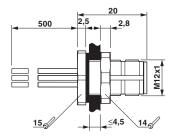
Housing cutout for M12 fastening thread, mounting panel with thread





Housing cutout for M12 fastening thread, mounting panel with feedthrough hole (alternative with surface as protection against rotation)

Dimensional drawing



Schematic diagram



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

M12 flush-type connector



Circuit diagram

	r	1
1	-	WH
2	-	BN
3	_	GN
4	_	YE
5	_	GY
6	_	РК
7	_	BU
8	_	RD

Contact assignment of the M12 plug and the M12 socket

Approvals

Approvals

Approvals

cULus Recognized / UL Recognized / EAC

Ex Approvals

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Approval details

cULus Recognized	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	http://database.ul.com/cgi-bin/XYV/template/LISEXT/11	FRAME/index.htm FILE E 118976
Nominal voltage UN	30 V	
Nominal current IN	2 A	
mm²/AWG/kcmil	24	

EAC	EAC	B.00767

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