# 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!



## Contact us

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Flush-type connector, Universal, 8-position, Socket, Link: M12, A-coded, Front mounting, M16 x 1.5, Individual wires, Cable length: 0.5 m

The figure shows the 12-pos. product version

#### Why buy this product

- Easy-to-install, optimized XL housing contour with wrench size 19
- ☑ Tightening limitation for the O-ring gasket
- 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

#### RoHS

#### Key Commercial Data

Packing unit	1 STK
GTIN	4 046356 936125
GTIN	4046356936125

#### 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
Note	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



#### Technical data

#### General

	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 MΩ
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Signal type/category	Universal
Status display	No
Overvoltage category	Ш
Degree of pollution	3
Connection method	Individual wires
Insertion/withdrawal cycles	> 100
Torque	0.8 Nm 1.3 Nm (Installation-side)
Mounting type	Front mounting M16 x 1.5 Tightening limitation

#### 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	0.25 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 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)



#### Technical data

Standards/regulations

Cable

	-25 °C 85 °C (cable, flexible installation)
Standards and Regulations	
Standard designation	M12 connector

IEC 61076-2-101

#### Environmental Product Compliance

Flammability rating according to UL 94

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

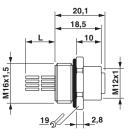
V0

#### Drawings

#### Schematic diagram



#### Dimensional drawing



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

#### M12 flush-type socket

#### Circuit diagram

L	
1 )	——— WH
2	BN
35	GN
4	YE
F I	
5 P	GY
6 D	——— РК
7 )	——— BU
8	RD
[]	

Contact assignment of the M12 socket

#### Approvals

Approvals

Approvals

EAC / cULus Recognized



#### Approvals

Ex Approvals

#### Approval details

EAC	EAC	B.01742	
cULus Recognized	http://database.ul.com/cg	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm E221474-20140616	
mm²/AWG/kcmil	24	-22	
Nominal current IN	2.	Α	
Nominal voltage UN	30	V	

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