# 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

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)



Sensor/actuator cable, 12-position, PUR halogen-free, black RAL 9005, Plug straight M12 SPEEDCON, A-coded, on free cable end, cable length: 3 m

#### Why buy this product

- Easy and safe: 100% electrically tested plug-in components
- Save time, thanks to installation with SPEEDCON fast locking system
- Our standard: robust halogen-free PUR cable
- Save space with high-pos. connectors



#### Key Commercial Data

Packing unit	1 STK
GTIN	4 046356 456364
GTIN	4046356456364

#### Technical data

#### Dimensions

Length of cable	3 m
Stripping length of the free conductor end	35 mm

#### Ambient conditions

Ambient temperature (operation)	-25 °C 85 °C (Plug / socket)
Degree of protection	IP65
	IP67
	IP68

#### General

Rated current at 40°C	1.5 A
Rated voltage	30 V AC
	30 V DC



#### Technical data

Outer sheath, material

Conductor material

Material conductor insulation

#### General

Ocheral	
Number of positions	12
Insulation resistance	$\geq$ 100 M $\Omega$
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Status display	No
Protective circuit/component	Unwired
Overvoltage category	
Degree of pollution	3
Torque	0.4 Nm (M12 connector)
Material	
Flammability rating according to UL 94	V0
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Material of grip body	TPU, hardly inflammable, self-extinguishing
Material, knurls	Zinc die-cast, nickel-plated
Standards and Regulations	
Standard designation	M12 connector
Standards/regulations	IEC 61076-2-101
Resistance to oil	DIN VDE 0472 Part 803, test type B
Other resistance	Hydrolysis and microbe resistant as per VDE 0282 section 10
Flammability rating according to UL 94	V0
Cable	
Conductor cross section	12x 0.14 mm² (Signal line)
AWG signal line	26
Conductor structure signal line	18x 0.10 mm
Core diameter including insulation	1 mm ±0.05 mm (Signal line)
Wire colors	white, brown, green, yellow, gray, pink, blue, red, black, violet, gray/pink red/blue
Overall twist	12 wires twisted in layers
External sheath, color	black RAL 9005
External cable diameter D	7.2 mm
Number of bending cycles	400000
Bending radius	54 mm
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s <sup>2</sup>

PUR PP

Tin-plated Cu litz wires



#### Technical data

#### Cable

Conductor resistance	142 Ω/km
Special properties	Low adhesion surface
Flame resistance	in acc. to UL VW1
	DIN EN 60332-1-2
Halogen-free	in accordance with DIN EN 50267-2-1
Resistance to oil	DIN VDE 0472 Part 803, test type B
Other resistance	Hydrolysis and microbe resistant as per VDE 0282 section 10
	partly UV-resistant in accordance with DIN EN ISO 4892-2-A
Ambient temperature (operation)	-40 °C 80 °C (cable, fixed installation)
	-5 °C 80 °C (cable, flexible installation)

#### **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

#### Schematic diagram



Pin assignment M12 male connector, 12-pos., male side view

Cable cross section



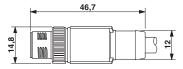
PUR halogen-free black [PUR]

Schematic diagram



Pin assignment M12, 12-pos., female side view

Dimensional drawing



M12 SPEEDCON plug, straight



#### Circuit diagram

1	—— BN
2	—— BU
3 🗰	WH
4 ,	GN
5 💻	—— РК
6	YE
7	—— вк
8	GY
• <u> </u>	
9 🔤	RD
10 💻	—— VT
11 🖛 🗸	——— GYPK
12	
' <b>* 🚍</b> _	RDBO

Contact assignment of the M12 plug

Approvals

Approvals

Approvals

EAC

Ex Approvals

Approval details

EAC

Phoenix Contact 2018 © - all rights reserved http://www.phoenixcontact.com

EHC

PHOENIX CONTACT GmbH & Co. KG Flachsmarktstr. 8 32825 Blomberg Germany Tel. +49 5235 300 Fax +49 5235 3 41200 http://www.phoenixcontact.com EAC-Zulassung