



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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## SAC-4P-M12MR/ 3,0-800

Order No.: 1457131



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=1457131>

Sensor/Actuator cable, 4-position, PUR halogen-free, welding sputter-resistant, highly flexible, Gray RAL 7001, Plug, angled M12, A-coded, on Free conductor end, Cable length: 3 m

### Commercial data

GTIN (EAN)	4 046356 593496
Note	Made-to-order
sales group	D111
Pack	1 pcs.
Customs tariff	85444290

### Product notes

WEEE/RoHS-compliant since:  
07/06/2010



<http://www.download.phoenixcontact.com>  
Please note that the data given here has been taken from the online catalog. For comprehensive information and data, please refer to the user documentation. The General Terms and Conditions of Use apply to Internet downloads.

### Technical data

#### General data

Rated current at 40°C	4 A
Rated voltage	250 V
Number of positions	4
Volume resistance	≤ 5 mΩ

Insulation resistance	$\geq 10 \text{ M}\Omega$
Length of cable	3 m
Ambient temperature (operation)	-25 °C ... 90 °C (Male connector / female connector)

#### General characteristics

Standards/regulations	M12 connector IEC 61076-2-101
Coding	A - standard
Surge voltage category	II
Pollution degree	3
Degree of protection	IP65/IP68/IP69K
Insertion/withdrawal cycles	$\geq 100$
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material of grip body	TPU, hardly inflammable, self-extinguishing
Material, knurls	Zinc die-cast, (nickel-plated)
Status display	No

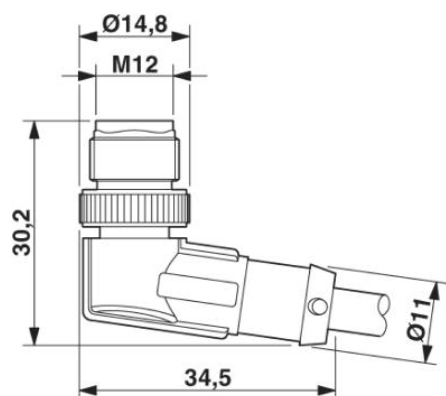
#### Conductor data

Cable type	PUR halogen-free, highly flexible, resistant to welding beads, gray
Cable type (abbreviation)	800
Cable abbreviation	Li12YYTPE-HF
Conductor cross section	0.34 mm <sup>2</sup>
AWG signal line	22
Conductor structure signal line	42x 0.10 mm
Core diameter including insulation	1.3 mm $\pm 0.05$ mm
External cable diameter	4.8 mm $\pm 0.2$ mm
Wire colors	Black, brown, blue, white
External sheath, color	Gray RAL 7001
Insulation resistance	$\geq 20 \text{ M}\Omega \cdot \text{km}$
Conductor resistance	Approx. 53 $\Omega/\text{km}$
Nominal voltage, conductor	300 V
Test voltage, conductor	2000 V
Overall twist	4 wires, twisted
Outer sheath, material	PUR
Material conductor insulation	PES

Conductor material	Bare Cu litz wires
Smallest bending radius, fixed installation	24 mm
Smallest bending radius, movable installation	50 mm
Number of bending cycles	15000000
Bending radius	50 mm
Traversing path	0.9 m
Traversing rate	5 m/s
Acceleration	30 m/s <sup>2</sup>
Torsion force	± 360 °/m
Ambient temperature (operation)	-40 °C ... 90 °C (cable, fixed installation) -30 °C ... 90 °C (cable, flexible installation)
Special properties	Sheath resistant to welding beads, can be recycled, matt, without adhesion, wear-resistant, flame resistant and self-extinguishing Free from silicone and cadmium Free of substances which would hinder coating with paint or varnish
Flame resistance	DIN VDE 0472 part 804, test type B IEC 60332-1 in accordance with FT1 as per UL 758
Halogen-free	The cable is halogen-free
Resistance to oil	Excellent oil-resistance (as per DIN VDE 0250 T.407)
Other resistance	Highly resistant to acids, alkaline solutions and solvents

## Diagrams/Drawings

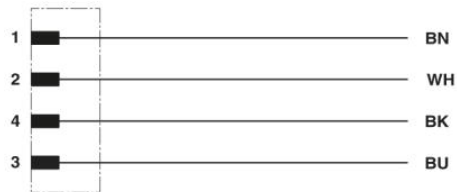
### Dimensioned drawing



M12 x 1 male connector, angled

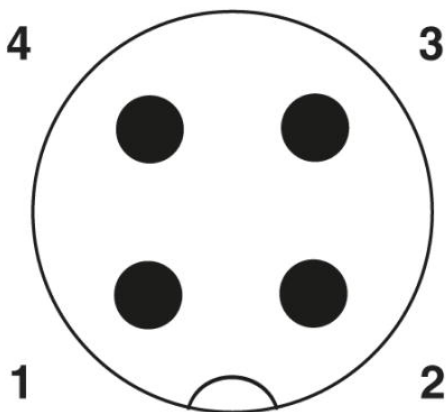


#### Circuit diagram



Contact assignment of the M12 plug

#### Schematic diagram



Pin assignment M12 plug, 4-pos., A-coded, view plug side

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