

## SAC-4P-M12MS/10,0-28X SH OD

Order No.: 1454147

<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=1454147>

Sensor/Actuator cable, 4-position, PE-X halogen-free, Black-gray RAL 7021, shielded, Plug, straightLink:M12, A - standard, on Free conductor end, Cable length: 10 m

### Commercial data

GTIN (EAN)	
Note	Made-to-order
sales group	D117
Pack	1 pcs.
Customs tariff	85444290
Catalog page information	Page 220 (PC-2011)

### Product notes

WEEE/RoHS-compliant since:  
03/04/2010



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### 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	≥ 100 MΩ
Length of cable	10 m
Ambient temperature (operation)	-40 °C ... 105 °C
	-40 °C ... 85 °C (On sudden changes in temperature (according to IEC 60512-11-4))

#### General characteristics

Standards/regulations	M12 connector IEC 61076-2-101
Coding	A - standard
Pollution degree	3
Degree of protection	IP65/IP68/IP69K
Insertion/withdrawal cycles	≥ 100
Torque	0.4 Nm (M12 connector)
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PP
Material of grip body	PP
Material, knurls	High-grade steel
Sealing material	FPM
Status display	No

#### Conductor data

Cable type	PE-X black
Cable type (abbreviation)	28X
Cable abbreviation	Li2X2X-C-VI-2X
Conductor cross section	0.5 mm <sup>2</sup>
AWG signal line	20
Conductor structure signal line	28x 0.15 mm
Core diameter including insulation	1.6 mm ±0.05 mm
Thickness, insulation	~ 0.3 mm (Core insulation)
	Approx. 0.7 mm (Outer cable sheath)
	~ 0.45 mm (Inner sheath)
External cable diameter	6.8 mm ±0.2 mm
Wire colors	Brown, white, blue, black
External sheath, color	Black-gray RAL 7021
Insulation resistance	≥ 100 MΩ*km (at 20°C)
Conductor resistance	max. 39 Ω/m (at 20°C)

Nominal voltage, conductor	≤ 300 V
Test voltage, conductor	≥ 3000 V
Overall twist	4 wires, twisted
Length of twist, overall twist	108.8 mm
Shielding	Braided copper wires
Optical shield covering	85 %
Outer sheath, material	PE-X
Material, inner sheath	PE-X
Material conductor insulation	PE-X
Conductor material	Bare Cu litz wires
Cable weight	74 kg/km
Smallest bending radius, fixed installation	34 mm
Smallest bending radius, movable installation	68 mm
Number of bending cycles	1000000
Bending radius	68 mm
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s <sup>2</sup>
Ambient temperature (operation)	-30 °C ... 105 °C (cable, fixed installation) -15 °C ... 105 °C (cable, flexible installation)
Flame resistance	According to DIN 60332-1-2 According to DIN EN 50266-2-5
Halogen-free	in accordance with DIN VDE 0472 part 815
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	UV resistant According to DIN VDE 0276-605

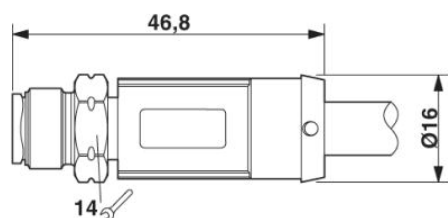
### Accessories

Item	Designation	Description
<b>General</b>		
1440041	SACC-M12FS-5CON-DM 5-8 SH VA	Sensor/actuator connector, socket, straight, 5-pos., M12 shielded, screw connection, high-grade steel knurl, cable screw connection 5 mm - 8.6 mm
<b>Tools</b>		
1212513	SAC BIT M12-W14	SAC nut, for assembling M12 connectors with hexagonal high-grade steel knurl, with 4 mm hexagonal drive

1208429	TSD 04 SAC	Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors
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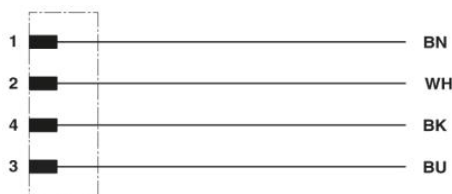
**Diagrams/Drawings**

Dimensioned drawing



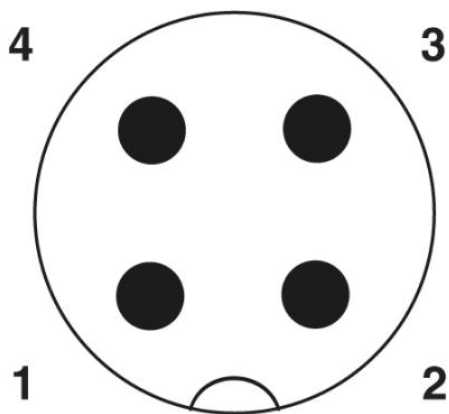
M12 x 1 male connector, straight

Circuit diagram



Contact assignment of the M12 plug

Schematic diagram



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

**Address**

PHOENIX CONTACT Inc., USA  
586 Fulling Mill Road  
Middletown, PA 17057, USA  
Phone (800) 888-7388  
Fax (717) 944-1625  
<http://www.phoenixcon.com>



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