


## SAC-4P-M12MS/ 2,0-28X OD

Order No.: 1454040



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Sensor/Actuator cable, 4-position, PE-X halogen-free, black-gray RAL 7021, Plug straight M12, A-coded, on free cable end, Cable length: 2 m, For outdoor applications, With high-grade steel knurl

Commercial data	
EAN	 4 046356 568654
sales group	D111
Pack	1 Pcs.
Customs tariff	85444290
Gross weight in pieces	0.1017 KG
Net weight per piece	0.1017 KG
Catalog page information	Page 153 (C-4-2013)

### Product notes

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



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Technical data	
<b>Dimensions</b>	
Length of cable	2 m
<b>Ambient conditions</b>	
Ambient temperature (operation)	-40 °C ... 105 °C (Plug / socket)
	-40 °C ... 85 °C (On sudden changes in temperature (according to IEC 60512-11-4))

Degree of protection	IP65
	IP67
	IP68
	IP69K

**General**

Rated current at 40°C	4 A
Rated voltage	250 V
Number of positions	4
Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Status display	No
Protective circuit/component	Unwired
Pollution degree	3
Insertion/withdrawal cycles	≥ 100
Torque	0.4 Nm (M12 connector)

**Material**

Inflammability class according to UL 94	V0
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

**Cable**

Cable type	PE-X black
Cable type (abbreviation)	28X
Cable abbreviation	Li2X2X
Conductor cross section	4x 0.5 mm <sup>2</sup> (signal line)
AWG signal line	20
Conductor structure signal line	28x 0.15 mm
Core diameter including insulation	1.6 mm ±0.05 mm (signal line)

Thickness, insulation	approx. 0.3 mm (Core insulation)
	approx. 0.6 mm (Outer cable sheath)
Wire colors	brown, white, blue, black
Overall twist	4 wires, twisted
Length of twist, overall twist	61.6 mm
External sheath, color	black-gray RAL 7021
External cable diameter D	5.2 mm ±0.2 mm
Smallest bending radius, fixed installation	26 mm
Smallest bending radius, movable installation	52 mm
Number of bending cycles	2000000
Bending radius	52 mm
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s <sup>2</sup>
Cable weight	44 kg/km
Outer sheath, material	PE-X
Material conductor insulation	PE-X
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 100 MΩ*km (at 20 °C)
Conductor resistance	≤ 39 Ω/km (at 20 °C)
Nominal voltage, cable	≤ 300 V AC
Test voltage, cable	≥ 3000 V AC
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
Ambient temperature (operation)	-40 °C ... 105 °C (cable, fixed installation)
	-15 °C ... 105 °C (cable, flexible installation)

#### Certificates / Approvals



Certification

GOST, GL

Certifications applied for:

Certification Ex:

### Accessories

Item	Designation	Description
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#### General

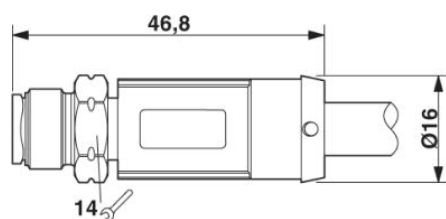
1440782	SACC-M12FS-4QO-0,75-VA	Sensor/actuator connector, Universal, 4-position, Plug straight M12, A-coded, Insulation displacement connection, Knurl material: High-grade steel, External cable diameter 4 mm ... 8 mm
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#### Tools

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
1212224	TSD-M 1,2NM	Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm
1212600	TSD-M SAC-BIT ADAPTER	Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

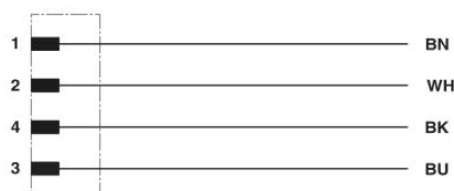
### Drawings

Dimensioned drawing



M12 x 1 plug, straight

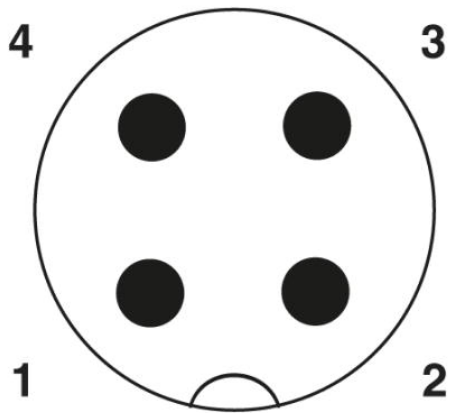
Circuit diagram



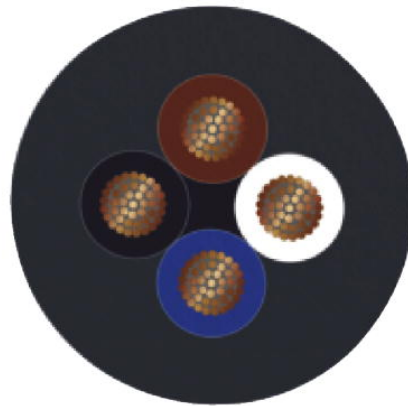
Contact assignment of the M12 plugs

Schematic diagram

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



PE-X black [28X]

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