

SAC-4P- 5,0-28X/M12FS SH OD

Order No.: 1454163

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Sensor/Actuator cable, 4-position, PE-X halogen-free, Black-gray
RAL 7021, shielded, Free conductor end, on Socket, straight M12, A -
standard, Cable length: 5 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	$\geq 100 \text{ M}\Omega$
Length of cable	5 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 ²
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	$\geq 100 \text{ M}\Omega \cdot \text{km}$ (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 ²
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

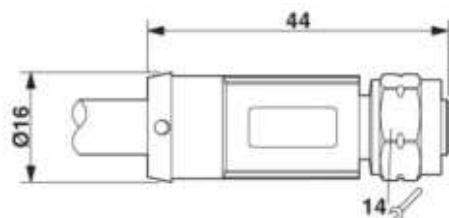
Accessories

Item	Designation	Description
General		
1440025	SACC-M12MS-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
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
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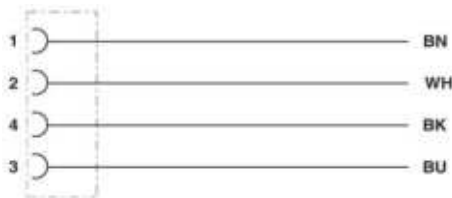
Diagrams/Drawings

Dimensioned drawing



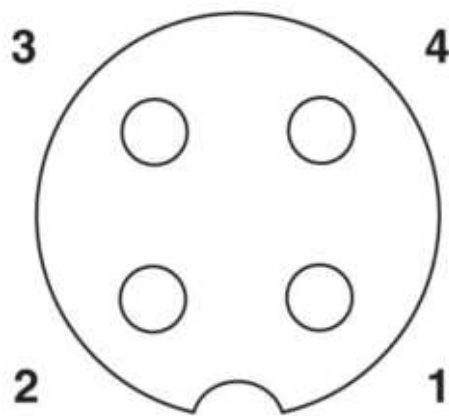
M12 x 1 female connector, straight

Circuit diagram



Contact assignment of the M12 socket

Schematic diagram



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

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