

Sensor/Actuator cable - SAC-4P-M12MS/ 2,0-28X OD - 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

Why buy this product

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Corrosion protection for all exposed metal parts, thanks to the use of stainless steel type 1.4404
- ✓ Robust throughout: resistant to oil, UV, and ozone, withstands temperatures from -40°C to +105°C



Key commercial data

Packing unit	1 pc
GTIN	 4 046356 568654
Weight per Piece (excluding packing)	101.7 g
Custom tariff number	85444290
Country of origin	Poland

Technical data

Dimensions

Length of cable	2 m
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Ambient conditions

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

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Technical data

General

Number of positions	4
Contact resistance	$\leq 5 \text{ m}\Omega$
Insulation resistance	$\geq 100 \text{ M}\Omega$
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 ² (signal line)
AWG signal line	20
Conductor structure signal line	28x 0.15 mm
Core diameter including insulation	1.6 mm \pm 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 \pm 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 ²

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Technical data

Cable

Cable weight	44 kg/km
Outer sheath, material	PE-X
Material conductor insulation	PE-X
Conductor material	Bare Cu litz wires
Insulation resistance	$\geq 100 \text{ M}\Omega \cdot \text{km}$ (at 20 °C)
Conductor resistance	$\leq 39 \text{ }\Omega/\text{km}$ (at 20 °C)
Nominal voltage, cable	$\leq 300 \text{ V AC}$
Test voltage, cable	$\geq 3000 \text{ V AC}$
Flame resistance	According to DIN 60332-1-2
	According to DIN EN 50266-2-5
	according to IEC 60332-3-25 (bunched fire test)
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)

Classifications

eCl@ss

eCl@ss 4.0	27060306
eCl@ss 4.1	27060306
eCl@ss 5.0	27061801
eCl@ss 5.1	27061801
eCl@ss 6.0	27061801
eCl@ss 7.0	27061801
eCl@ss 8.0	27279218

ETIM

ETIM 4.0	EC001855
ETIM 5.0	EC001855

UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	31251501

Approvals

Approvals

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Approvals

Approvals

GL / EAC

Ex Approvals

Approvals submitted

Approval details

GL

EAC

Accessories

Accessories

Circular connector (cable-side)

Sensor/actuator connector - SACC-M12FS-4QO-0,75-VA - 1440782



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

Screwdriver tools

Adapter insert - TSD-M SAC-BIT ADAPTER - 1212600



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

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Accessories

Adapter - SAC BIT M12-W14 - 1212513



SAC nut, for assembling M12 connectors with hexagonal high-grade steel knurl, with 4 mm hexagonal drive

Torque tool

Torque screwdriver - TSD 04 SAC - 1208429



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

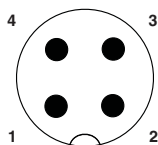
Torque screwdriver - TSD-M 1,2NM - 1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

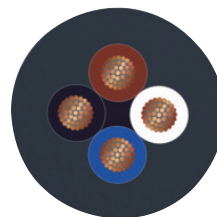
Drawings

Schematic diagram



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

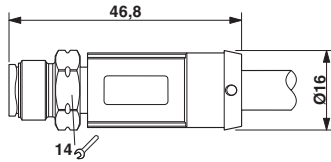
Cable cross section



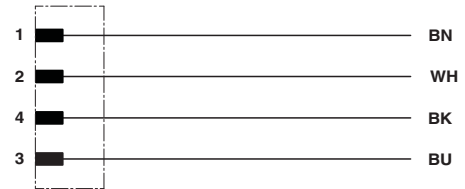
PE-X black [28X]

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Dimensioned drawing



Circuit diagram



M12 x 1 plug, straight

Contact assignment of the M12 plugs