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Sensor/actuator cable, 8-position, PE-X/PE-X halogen-free, black-gray RAL 7021, shielded, Plug straight M12, A-coded, on Socket straight M12, A-coded, cable length: 2 m, for outdoor applications, with high-grade steel knud

Your advantages

- ☑ Easy and safe: 100% electrically tested plug-in components
- Robust throughout: resistant to oil, UV, and ozone, withstands temperatures from -40°C to +105°C
- 🗹 Reliable signal transmission 360° shielding in environments with electromagnetic interference



Key Commercial Data

Packing unit	1 pc
GTIN	4 046356 774031
GTIN	4046356774031

Technical data

Dimensions

Length of cable	2 m

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/IP68/IP69K

General

Rated current at 40°C	2 A
Rated voltage	30 V AC
	30 V DC



Technical data

General

Number of positions	8
Insulation resistance	\geq 100 M Ω
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Status display	No
Protective circuit/component	unwired
Degree of pollution	3
Insertion/withdrawal cycles	≥ 100
Torque	0.4 Nm (M12 connector)

Material

Flammability rating according to UL 94	V0
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PP
Material of grip body	PP
Material, knurls	Stainless steel
Sealing material	FPM

Standards and Regulations

Standard designation	M12 connector
Standards/regulations	IEC 61076-2-101
Flammability rating according to UL 94	V0

Cable

Cable type	PE-X black
Cable type (abbreviation)	28X
Cable abbreviation	Li2X2X-C-V1-2X
Conductor cross section	8x 0.25 mm²
AWG signal line	24
Conductor structure signal line	32x 0.10 mm
Core diameter including insulation	1.17 mm ±0.02 mm
Thickness, insulation	approx. 0.25 mm (Core insulation)
Wire colors	white, brown, green, yellow, gray, pink, blue, red
Overall twist	8 wires around filler to the core
Length of twist, overall twist	67 mm
Shielding	Braided copper wires
Optical shield covering	85 %
External sheath, color	black-gray RAL 7021
Inner sheath thickness	approx. 0.5 mm
Outer sheath thickness	approx. 0.7 mm



Technical data

Cable

External cable diameter D	7.25 mm ±0,3 mm	
Minimum bending radius, fixed installation	5 x D	
Minimum bending radius, flexible installation	10 x D	
Number of bending cycles	1000000	
Minimum bending radius, drag chain applications	10 x D	
Traversing path	10 m	
Traversing rate	3 m/s	
Acceleration	10 m/s²	
Cable weight	81 kg/km	
Outer sheath, material	PE-X	
Material, inner sheath	PE-X	
Material, filler	PP yarn	
Material conductor insulation	PE-X	
Conductor material	Bare Cu litz wires	
Insulation resistance	\geq 100 M Ω *km (at 20 °C)	
Conductor resistance	≤ 78 Ω/km (at 20 °C)	
Working capacitance	approx. 80 pF (core-core)	
	approx. 125 pF (core-shield)	
Nominal voltage, cable	≤ 300 V AC	
Test voltage, cable	≥ 3000 V AC (Spark test)	
Test voltage Core/Shield	≥ 1000 V AC (for 10 s)	
Special properties	Inductance approx. 0.48 mH/km	
	Irradiated	
Flame resistance	According to DIN EN 60332-1-2	
	according to DIN EN 50266-2-5	
Halogen-free	in accordance with DIN VDE 0472 part 815	
	in accordance with DIN EN 50267-2-1	
Resistance to oil	According to DIN EN 60811-2-1, 168 h at 100°C	
	According to DIN EN 50306	
Other resistance	Resistance to fuels according to IEC 60811, 168 h at 70°C	
	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)	
	20 °C ±5 °C (cable, drag chain applications)	

Environmental Product Compliance

	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50



Technical data

Environmental Product Compliance

		For details about hazardous substances go to t Category "Manufacturer's declaration"	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"	
Approvals				
Approvals				
Approvals				
DNV GL / EAC				
Ex Approvals				
Approval details				
DNV GL	TUV 200	https://approvalfinder.dnvgl.com/	TAE00002K4	
EAC	EAC		RU C- DE.BL08.B.00286	

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PHOENIX CONTACT GmbH & Co. KG Flachsmarktstr. 8 32825 Blomberg Germany

Tel. +49 5235 300 Fax +49 5235 3 41200

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