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Sensor/Actuator cable, 8-position, PE-X halogen-free, black-gray RAL 7021, free cable end, on Socket straight M12, A-coded, Cable length: 10 m, for outdoor applications, With high-grade steel knurl

### Why buy this product

- ☑ 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 773942
Weight per Piece (excluding packing)	628.8 g
Custom tariff number	85444290
Country of origin	Poland
Note	Made to Order (non-returnable)

### Technical data

## Dimensions

Length of cable	10 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
	IP67
	IP68
	IP69K

### General

Rated current at 40°C	2 A



## Technical data

## General

Rated voltage	30 V
Number of positions	8
Contact resistance	$\leq 5~\text{m}\Omega$
Insulation resistance	$\geq$ 100 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	8x 0.25 mm <sup>2</sup>
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
External sheath, color	black-gray RAL 7021
Outer sheath thickness	approx. 1.3 mm
External cable diameter D	6.8 mm ±0.2 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Number of bending cycles	2000000
Minimum bending radius, drag chain applications	10 x D
Traversing path	10 m
Traversing rate	3 m/s



## Technical data

## Cable

Acceleration	10 m/s <sup>2</sup>
Cable weight	65 kg/km
Outer sheath, material	PE-X
Material, filler	PP yarn
Material conductor insulation	PE-X
Conductor material	Bare Cu litz wires
Insulation resistance	$\geq$ 100 M $\Omega$ *km (at 20 °C)
Conductor resistance	$\leq$ 78 $\Omega$ /km (at 20 °C)
Nominal voltage, cable	≤ 300 V AC
Test voltage, cable	≥ 3000 V AC (Spark test)
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)

## 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	27279218
eCl@ss 7.0	27279218
eCI@ss 8.0	27279218

### **ETIM**

ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC001855

### **UNSPSC**

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501



### Classifications

### **UNSPSC**

UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	31251501

## Approvals

Approvals

Approvals

GL

Ex Approvals

Approvals submitted

Approval details

GL

### Accessories

Accessories

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

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



### Accessories

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



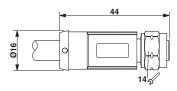
Pin assignment M12 socket, 8-pos., A-coded, view female side

#### Cable cross section



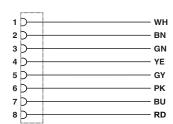
PE-X black [28X]

Dimensioned drawing



M12 x 1 socket, straight

Circuit diagram



Contact assignment of the M12 socket

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