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Sensor/Actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket angled M8, with 2 LEDs, Cable length: 3 m

#### **Product Features**

- Easy and safe: 100% electrically tested plug-in components
- ☑ Convenient: increased machine availability thanks to quick and easy diagnostics.



## Key commercial data

Packing unit	1 pc
GTIN	4 017918 134921
Weight per Piece (excluding packing)	77.9 GRM
Custom tariff number	85444290
Country of origin	Poland

## Technical data

#### **Dimensions**

Length of cable	3 m
Stripping length of the free conductor end	50 mm

#### Ambient conditions

Ambient temperature (operation)	-25 °C 90 °C (Plug / socket)
Degree of protection	IP65
	IP67
	IP68

#### General



# Technical data

#### General

Rated current at 40°C	4 A
Rated voltage	24 V
Number of positions	3
Contact resistance	$\leq 5 \text{ m}\Omega$
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Standards/regulations	M8 connector IEC 61076-2-104
Status display	2 LEDs
Protective circuit/component	Unwired
Surge voltage category	II
Pollution degree	3
Insertion/withdrawal cycles	≥ 100
Torque	0.2 Nm (M8 connectors)

## Material

Inflammability class according to UL 94	НВ
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material of grip body	TPU, hardly inflammable, self-extinguishing
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	NBR

## Cable

Cable type	PUR halogen-free black
Cable type (abbreviation)	PUR
Cable abbreviation	Li9Y11Y-HF
UL AWM style	20549
Conductor cross section	3x 0.25 mm² (signal line)
AWG signal line	24
Conductor structure signal line	32x 0.10 mm
Core diameter including insulation	1.17 mm ±0.02 mm (signal line)
Thickness, insulation	≥ 0.38 mm (Core insulation)
	approx. 0.9 mm (Outer cable sheath)
Wire colors	brown, blue, black
Overall twist	3 wires, twisted
Length of twist, overall twist	40 mm
External sheath, color	black-gray RAL 7021



# Technical data

## Cable

External cable diameter D	4.4 mm ±0.15 mm
Smallest bending radius, fixed installation	22 mm
Smallest bending radius, movable installation	44 mm
Number of bending cycles	4000000
Bending radius	44 mm
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s²
Cable weight	24 kg/km
Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 100 GΩ*km (at 20 °C)
Conductor resistance	$\leq$ 78 $\Omega$ /km (at 20 °C)
Nominal voltage, cable	≤ 300 V
Test voltage, cable	≥ 3000 V
Special properties	Flexible cable conduit capable
	Silicone-free
	Free of substances which would hinder coating with paint or varnish
Flame resistance	in accordance with DIN UL-Style 20549
Halogen-free	in accordance with DIN VDE 0472 part 815
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	hydrolysis and microbe resistant
	Highly resistant to acids, alkaline solutions and solvents
	Resistant to salt water
	partly UV-resistant in accordance with DIN EN ISO 4892-2-A
Ambient temperature (operation)	-40 °C 80 °C (cable, fixed installation)
	-25 °C 80 °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



# Classifications

## eCl@ss

eCl@ss 7.0	27061801
eCl@ss 8.0	27061801

## **ETIM**

ETIM 2.0	EC000830
ETIM 3.0	EC001855
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

Approvals

UL Listed / cUL Listed / GOST / cULus Listed

Ex Approvals

Approvals submitted

## Approval details

UL Listed (PL)	
Nominal current IN	4 A
Nominal voltage UN	24 V



# Approvals

cUL Listed **			
Nominal current IN	4 A		
Nominal voltage UN	24 V		

GOST 🕑		

cULus Listed "U"	

# **Drawings**

#### Schematic diagram



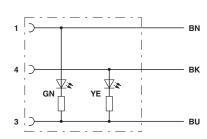
Pin assignment M8 socket, 3-pos., view female side

#### Cable cross section



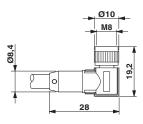
PUR halogen-free black [PUR]

Circuit diagram



Contact assignment of M8 socket with 2 LEDs

Dimensioned drawing



Socket M8 x 1, angled, with LED



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