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Sensor/Actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, Plug straight M8, on Socket angled M12, A-coded, Cable length: 5 m



## **Key Commercial Data**

Packing unit	1 pc
Minimum order quantity	25 pc
Weight per Piece (excluding packing)	140.0 g
Custom tariff number	85444290
Country of origin	Germany

#### Technical data

#### **Dimensions**

Length of cable	5 m
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#### Ambient conditions

Degree of protection	IP65
	IP67
	IP68

#### General

Rated current at 40°C	4 A
Rated voltage	60 V
Number of positions	3
Insulation resistance	$\geq$ 100 M $\Omega$
Coding	A - standard
Status display	No
Overvoltage category	II
Pollution degree	3



# Technical data

#### General

Insertion/withdrawal cycles	≥ 100
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#### Material

Flammability rating 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)
Wire colors	brown, blue, black
Overall twist	3 wires, twisted
Length of twist, overall twist	40 mm
External sheath, color	black-gray RAL 7021
Outer sheath thickness	approx. 0.9 mm
External cable diameter D	4.4 mm ±0.15 mm
Smallest bending radius, fixed installation	22 mm
Smallest bending radius, movable installation	44 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
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



## Technical data

#### Cable

Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 100 GΩ*km (at 20 °C)
Conductor resistance	≤ 78 Ω/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
eCl@ss 7.0	27061801
eCl@ss 8.0	27279218

#### **ETIM**

ETIM 2.0	EC000830
ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC001855

### **UNSPSC**

UNSPSC 6.01	31251501



### Classifications

#### **UNSPSC**

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

# Approvals

Approvals	orovals
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Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals

Approvals submitted

#### Approval details

UL Listed (h)	
Nominal current IN	4 A
Nominal voltage UN	125 V

cUL Listed •	
Nominal current IN	4 A
Nominal voltage UN	125 V

cULus Listed • • • • • • • • • • • • • • • • • • •		



# **Drawings**

Schematic diagram



Pin assignment M8 plug, 3-pos., view male side

Schematic diagram

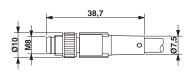


Pin assignment M12 socket, 3-pos., A-coded, view female side

Cable cross section



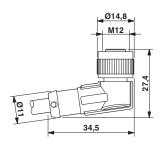
Dimensional drawing



PUR halogen-free black [PUR]

M8 x 1 male plug, straight version

Dimensional drawing



Circuit diagram



Contact assignment of M8 plugs / M12 sockets

M12 x 1 socket, angled

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