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Sensor/Actuator cable, 4-position, PUR halogen-free, Black-gray RAL 7021, shielded, Free cable end, on Socket straight M12, A-coded, Cable length: 15 m



## Key commercial data

Packing unit	11
Minimum order quantity	50 1
Weight per Piece (excluding packing)	790.0 GRM
Custom tariff number	85444290
Country of origin	Poland

### Technical data

### **Dimensions**

Length of cable	15 m
Stripping length of the free conductor end	50 mm

#### Ambient conditions

Degree of protection	IP65
	IP67

#### General

Rated current at 40°C	4 A
Rated voltage	250 V
Number of positions	4
Contact resistance	$\leq 5 \text{ m}\Omega$
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Status display	No
Surge voltage category	II



## Technical data

### General

Pollution degree	3
Insertion/withdrawal cycles	≥ 100

### 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 shielded
Cable type (abbreviation)	PUR
Cable abbreviation	Li9Y-V1-C-V1-11Y
UL AWM style	20549 / 10493 (80°C/300 V)
Conductor cross section	4x 0.34 mm² (signal line)
AWG signal line	22
Conductor structure signal line	42x 0.10 mm
Core diameter including insulation	1.27 mm ±0.02 mm (signal line)
Thickness, insulation	≥ 0.21 mm (Core insulation)
	approx. 1 mm (Outer cable sheath)
Wire colors	brown, white, blue, black
Overall twist	4 wires, twisted
Shielding	Tinned copper braided shield
Optical shield covering	85 %
External sheath, color	Black-gray RAL 7021
External cable diameter D	5.9 mm ± 0.2 mm
Smallest bending radius, fixed installation	29.5 mm
Smallest bending radius, movable installation	59 mm
Number of bending cycles	2000000
Bending radius	59 mm
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s²
Cable weight	46 kg/km
Outer sheath, material	PUR



## Technical data

### Cable

PP
Bare Cu litz wires
$\geq$ 100 G $\Omega$ *km (at 20 °C)
max. 58 Ω/km (at 20 °C)
≤ 80 pF (Conductor-Conductor)
≤ 135 pF (Wire/shield)
$\geq$ 62 $\Omega$ (f = 10 MHz)
approx. 0.75 mH (f = 1 kHz)
≤ 300 V
≥ 3000 V
Flexible cable conduit capable
Silicone-free
Free of substances which would hinder coating with paint or varnish
Low adhesion surface
In accordance with UL FT-2
in accordance with DIN VDE 0472 part 815
in accordance with DIN EN 50267-2-1
in accordance with DIN EN 60811-2-1
Highly resistant to acids, alkaline solutions and solvents
hydrolysis and microbe resistant
Resistant to salt water
partly UV-resistant in accordance with DIN EN ISO 4892-2-A
abrasion-resistant
-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	27061801



## Classifications

### **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 / cULus Listed

Ex Approvals

Approvals submitted

## Approval details

UL Listed (II)	
Nominal current IN	4 A
Nominal voltage UN	300 V



## Approvals

cUL Listed **	
Nominal current IN	4 A
Nominal voltage UN	300 V

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cULus Listed **	

# Drawings

### Schematic diagram



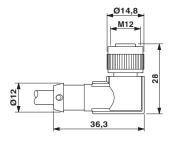
Pin assignment M12 socket, 4-pos., A-coded, view female side

### Cable cross section



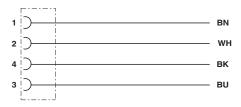
PUR halogen-free black shielded [PUR]

Dimensioned drawing



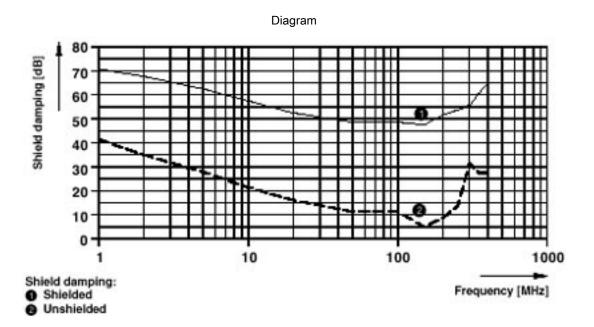
M12 x 1 socket, angled, shielded

Circuit diagram



Contact assignment of the M12 socket





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