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



### **Key Commercial Data**

Packing unit	5 pc
Minimum order quantity	50 pc
GTIN	4 017918 954505
GTIN	4017918954505
Weight per Piece (excluding packing)	93.740 g
Custom tariff number	85444290
Country of origin	Poland
Note	Made to Order (non-returnable)

#### Technical data

#### **Dimensions**

Length of cable	3 m
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#### Ambient conditions

Degree of protection	IP65
	IP67
	IP68

### General

Rated current at 40°C	4 A
Rated voltage	48 V AC
	60 V DC
Number of positions	3
Insulation resistance	$\geq$ 100 M $\Omega$
Coding	A - standard
Status display	No
Overvoltage category	II
Degree of pollution	3

Material



### Technical data

### 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

### Standards and Regulations

Flammability rating according to UL 94	НВ
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#### Cable

Cable type	PUR halogen-free black
Cable type (abbreviation)	PUR
Cable abbreviation	Li9Y11Y-HF
UL AWM style	20549 / 10493 (80°C/300 V)
Conductor cross section	4x 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	≥ 0.21 mm (Core insulation)
	approx. 0.5 mm (Outer cable sheath)
Wire colors	brown, white, blue, black
Overall twist	4 wires, twisted
External sheath, color	black-gray RAL 7021
External cable diameter D	3.95 mm ±0.15 mm
Smallest bending radius, fixed installation	20 mm
Smallest bending radius, movable installation	40 mm
Number of bending cycles	10000000
Bending radius	44 mm
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	5 m/s <sup>2</sup>
Cable weight	23 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	max. 78 Ω/km (at 20 °C)
Nominal voltage, cable	≤ 300 V
Test voltage, cable	≥ 3000 V
Special properties	Flexible cable conduit capable



### Technical data

### Cable

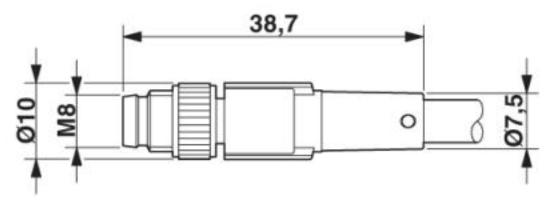
	Silicone-free
	Free of substances which would hinder coating with paint or varnish
Flame resistance	in accordance with UL 758/1581 FT2
	DIN EN 60332-2-2 (20 s)
Halogen-free	in accordance with DIN VDE 0472 part 815
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	Highly resistant to acids, alkaline solutions and solvents
	hydrolysis and microbe resistant
	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)

### **Environmental Product Compliance**

	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

### Drawings

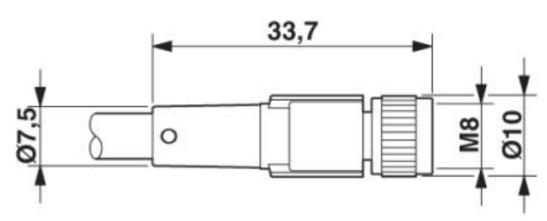
### Dimensional drawing



M8 x 1 male plug, straight version

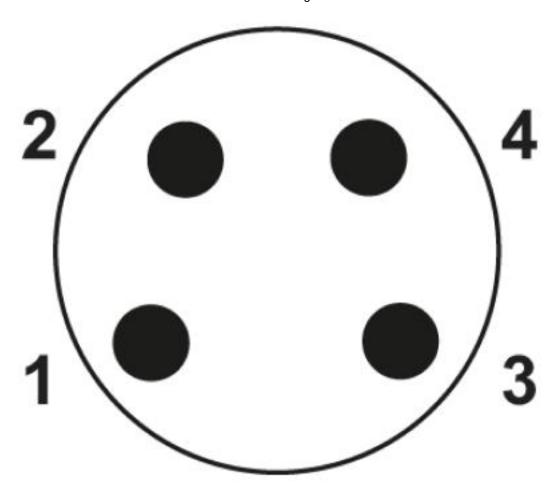


Dimensional drawing



Socket M8 x 1, straight

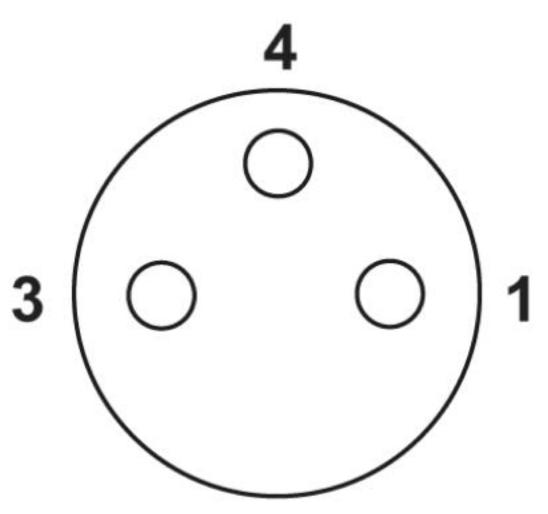
Schematic diagram



Pin assignment M8 plug, 4-pos., view male side



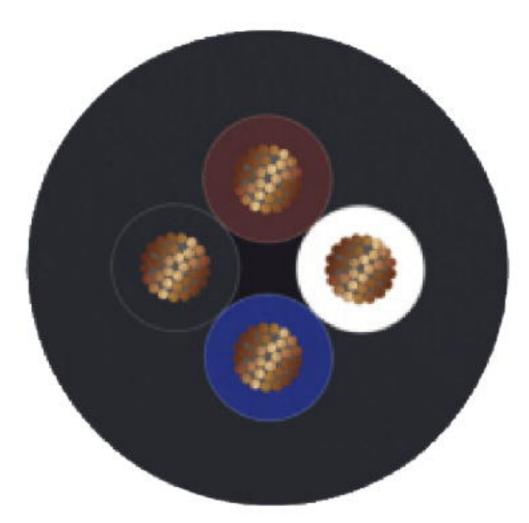
Schematic diagram



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



Cable cross section



PUR halogen-free black [PUR]

### Classifications

### eCl@ss

eCl@ss 4.0	27060300
eCl@ss 4.1	27060300
eCl@ss 5.0	27061800
eCl@ss 5.1	27061800
eCl@ss 6.0	27279200
eCl@ss 7.0	27279218
eCl@ss 8.0	27279218
eCl@ss 9.0	27060311



### Classifications

### **ETIM**

ETIM 2.0	EC000830
ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC001855
ETIM 6.0	EC001855
ETIM 7.0	EC001855

#### UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	31251501
UNSPSC 19.0	31251501
UNSPSC 20.0	31251501
UNSPSC 21.0	31251501

### **Approvals**

### Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals

### Approval details

UL Listed	UL	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 22147		FILE E 221474
Nominal voltage UN		-	30 V	
Nominal current IN			4 A	

cUL Listed	C UL	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 22147-		FILE E 221474
Nominal voltage UN			30 V	



### Approvals

Nominal current IN 4 A		
Nominal current N	I NOMINAL CUITEM IN	4 A

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