

1521614

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Sensor/actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, shielded (Braided copper wires), Plug straight M8, coding: A, on free cable end, cable length: 1.5 m

## Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Reliable signal transmission 360° shielding in environments with electromagnetic interference

#### Commercial data

Item number	1521614
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF01
Product key	BF1BIA
Catalog page	Page 193 (C-2-2019)
GTIN	4017918968649
Weight per piece (including packing)	49.275 g
Weight per piece (excluding packing)	49.275 g
Customs tariff number	85444290
Country of origin	PL



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## Technical data

### Product properties

Product type	Sensor/actuator cable	
Number of positions	3	
Application	Standard	
No. of cable outlets	1	
Shielded	yes	
Coding	A	
Insulation characteristics		
Overvoltage category	II	
Degree of pollution	3	

### Material specifications

Flammability rating according to UL 94	НВ	
Material of grip body	TPU, hardly inflammable, self-extinguishing	
Contact material	CuSn	
Contact surface material	Ni/Au	
Contact carrier material	TPU GF	
Material for screw connection	Zinc die-cast, nickel-plated	

## Electrical properties

Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	48 V AC
	60 V DC
Nominal current I <sub>N</sub>	4 A
Protective circuit	unwired

## Mechanical properties

### Mechanical data

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## Signaling

Status display	No
Status display present	No

### Connection data

### Conductor connection

Tightening torque	0.2 Nm (M8 connectors)	

### Connector

### Connection 1



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Туре	Plug straight M8
Number of positions	3
Coding type	A
County type	
Connection 2	
Туре	free cable end
Cable/line	
Cable length	1.5 m
PUR halogen-free black [PUR]	
Dimensional drawing	
Cable weight	26 kg/km
UL AWM Style	20549
Number of positions	3
Shielded	yes
Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	32x 0.10 mm
AWG signal line	24
Conductor cross section	3x 0.25 mm² (Signal line)
Wire diameter incl. insulation	1.17 mm ±0.02 mm (Signal line)
External cable diameter	4.35 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	black-gray RAL 7021
Conductor material	Bare Cu litz wires
Material wire insulation	PP
Single wire, color	brown, blue, black
Thickness, insulation	≥ 0.21 mm (Core insulation)
	≥ 0.50 mm (Outer cable sheath)
Overall twist	3 wires, twisted
Optical shield covering	80 %
Max. conductor resistance	max. 79 Ω/km
Insulation resistance	≥ 100 GΩ*km
Nominal voltage, cable	300 V
Test voltage	3000 V
Smallest bending radius, fixed installation	22 mm
Smallest bending radius, movable installation	44 mm
Max. bending cycles	10000000



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Halogen-free	in accordance with DIN VDE 0472 part 815	
Flame resistance	in accordance with UL 758/1581 FT2	
	DIN EN 60332-2-2 (20 s)	
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)	
Special properties	Flexible cable conduit capable	
	Silicone-free	
	Free of substances which would hinder coating with paint or varnish	
Ambient temperature (operation)	-40 °C 80 °C (cable, fixed installation)	
	-25 °C 80 °C (Cable, flexible installation)	

## Environmental and real-life conditions

#### Ambient conditions

Degree of protection	IP65
	IP67
Ambient temperature (operation)	-25 °C 90 °C (Plug / socket)
	-25 °C 80 °C (cable, fixed installation)
	-5 °C 80 °C (Cable, flexible installation)

## Standards and regulations

#### M8

Standard designation	M8 connector
Standards/specifications	IEC 61076-2-104

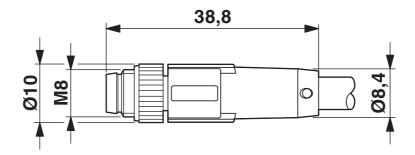


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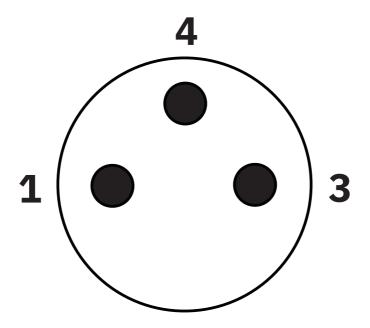
## **Drawings**

## Dimensional drawing



Plug M8 x 1, straight, shielded

## Schematic diagram



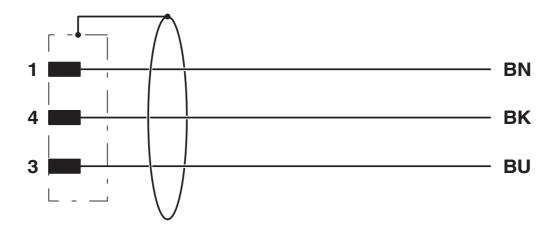
Pin assignment M8 plug, 3-pos., view male side



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## Circuit diagram





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## **Approvals**

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<u> </u>	<b>UL Listed</b> Approval ID: FILE E 221474				
		Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		60 V	4 A	-	-

• <u>®</u>	<b>cUL Listed</b> Approval ID: FILE E 221474	ı			
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		60 V	4 A	-	-

EAC	EAC-RoHS Approval ID: RU D-DE.HB35.B.00387	

cULus Listed



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## Classifications

### **ECLASS**

	ECLASS-11.0	27060311	
	ECLASS-12.0	27060311	
	ECLASS-13.0	27060311	
ETIM			
	ETIM 9.0	EC001855	
	ETIM 9.0	EC001000	
UNSPSC			
	UNSPSC 21.0	26121600	



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## Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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