

1504822

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Sensor/actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket straight M8, coding: A, cable length: 2 m

### Commercial data

Item number	1504822
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF01
Product key	BF1BBA
GTIN	4017918845506
Weight per piece (including packing)	42 g
Weight per piece (excluding packing)	39 g
Customs tariff number	85444290
Country of origin	DE



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## Technical data

#### Product properties

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

#### Material specifications

Flammability rating according to UL 94	НВ
Seal material	NBR
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

### Mechanical properties

Mechanical	data
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Insertion/withdrawal cycles	≥ 100

#### 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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Smallest bending radius, fixed installation

Max. bending cycles

Smallest bending radius, movable installation

Туре	free cable end
Connection 2	
Туре	Socket straight M8
Number of positions	3
Coding type	A
3.77	
able/line	
Cable length	2 m
PUR halogen-free black [PUR]	
Dimensional drawing	
Cable weight	18 kg/km
UL AWM Style	20549 / 10493 (80°C/300 V)
Number of positions	3
Shielded	no
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
External cable diameter	3.60 mm ±0.15 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)
Thickness, outer sheath	approx. 0.50 mm
Overall twist	3 wires, twisted
Length of twist, overall twist	40 mm
Max. conductor resistance	≤ 78 Ω/km (at 20 °C)
Insulation resistance	≥ 100 GΩ*km (at 20 °C)
Nominal voltage, cable	≤ 300 V
Test voltage	≥ 3000 V

18 mm

36 mm 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	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)
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
	IP68
Ambient temperature (operation)	-25 °C 90 °C (Plug / socket)

## Standards and regulations

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

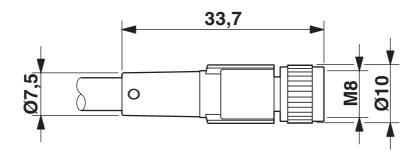


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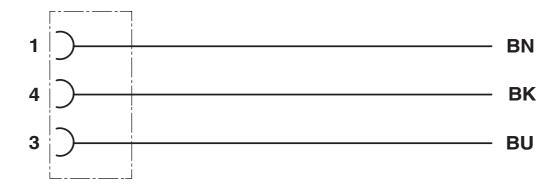
## Drawings

### Dimensional drawing



Socket M8 x 1, straight

### Circuit diagram

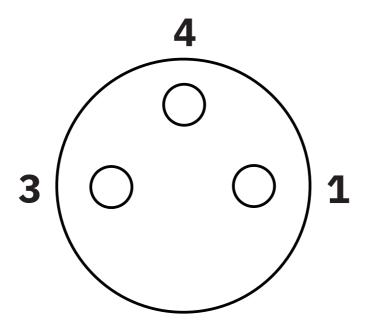




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## Schematic diagram



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



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## **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1504822

<u> </u>	<b>UL Listed</b> Approval ID: FILE E 221474				
		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	-	-

•	<b>cUL Listed</b> Approval ID: FILE E 22147	4			
		Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		60 V	4 A	-	-

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

cULus Listed



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## Classifications

UNSPSC 21.0

#### **ECLASS**

	ECLASS-11.0	27060311	
	ECLASS-12.0	27060311	
	ECLASS-13.0	27060311	
ETIM			
	ETIM 8.0	EC001855	

26121600



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## Environmental product compliance

#### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
China RoHS	
Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%

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