

1500237

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

### Your advantages

• Easy and safe: 100 % electrically tested plug-in components

#### Commercial data

Item number	1500237
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF01
Product key	BF1BBA
GTIN	4017918584795
Weight per piece (including packing)	45.5 g
Weight per piece (excluding packing)	35.76 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

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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Туре	Plug straight M8
Number of positions	3
Coding type	A
Connection 2	
Connection 2 Type	Socket straight M8

#### Cable/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
Smallest bending radius, fixed installation	18 mm
Smallest bending radius, movable installation	36 mm



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Max. bending cycles	10000000
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

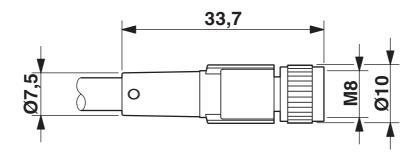


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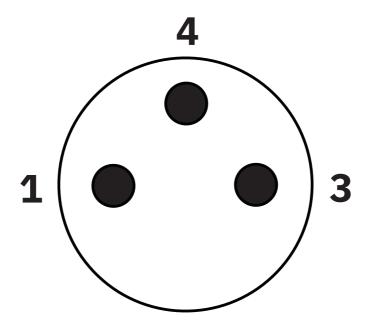
## Drawings

### Dimensional drawing



Socket M8 x 1, straight

Schematic diagram



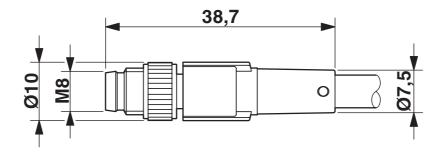
Pin assignment M8 plug, 3-pos., view male side



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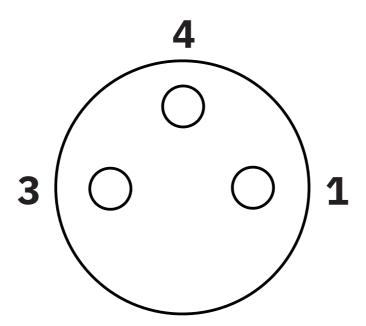
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### Dimensional drawing



M8 x 1 male plug, straight version

### Schematic diagram



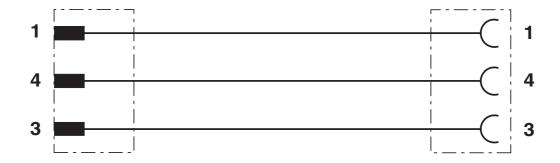
Pin assignment M8 socket, 3-pos., view female side



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### Circuit diagram





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### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1500237

<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	1			
		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	
LIIL	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	
UNSPSC		

26121600



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## Environmental product compliance

#### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c)
China RoHS	
Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.
EU REACH SVHC	
REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	a68cda68-1747-44d1-8bef-2a37deb2feb1
EF3.0 Climate Change	
CO2e kg	0.193 kg CO2e

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