

1560691

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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: 10 m

### Commercial data

Item number	1560691
Packing unit	5 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Product key	AF1BBA
GTIN	4046356280747
Weight per piece (including packing)	201.4 g
Weight per piece (excluding packing)	193.72 g
Country of origin	PL



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### Technical data

#### Product properties

Product type	Sensor/actuator cable
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

### Signaling

Status display	no
Status display present	no

#### Connector

#### Connection 1

Туре	free cable end
Connection 2	
Туре	Socket straight M8
Number of positions	3
Coding type	A

### Cable/line

Cable length	10 m
PUR halogen-free black [PUR]	



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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
Dynamic load capacity (bending)	Max. bending cycles: 10000000, Bending radius: 44 mm, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s²
Dynamic load capacity (torsion)	Torsion: ±180 °/m, Torsion cycles: ≥2000000, Torsional frequency: 35 cycles/min.
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



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	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)
	-40 °C 80 °C (cable, fixed installation)
	-5 °C 80 °C (Cable, flexible installation)

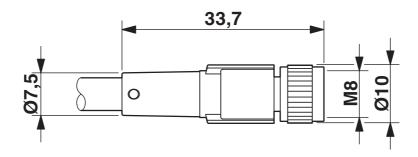


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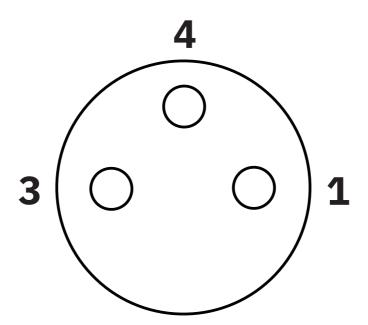
## Drawings

### Dimensional drawing



Socket M8 x 1, straight

Schematic diagram



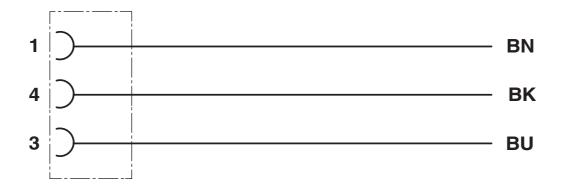
Pin assignment M8 socket, 3-pos., view female side



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### Circuit diagram



Contact assignment of M8 socket



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### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1560691

UL Lis Approva	t <b>ed</b> I 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>
keine				
	60 V	4 A	-	-

	<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>
keine					
		60 V	4 A	-	-

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



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## Classifications

#### **ECLASS**

	ECLASS-13.0	27060311		
	ECLASS-15.0	27060311		
ETIM				
LIN				
	ETIM 9.0	EC001855		
UNSPSC				
	UNSPSC 21.0	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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