

1671069

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Sensor/actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket angled M8, coding: A, with 2 LEDs, cable length:  $1.5\ m$ 

### Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- · Convenient: increased machine availability thanks to quick and easy diagnostics

#### Commercial data

Item number	1671069
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF01
Product key	AF1BBA
GTIN	4017918134914
Weight per piece (including packing)	32 g
Weight per piece (excluding packing)	31.8 g
Customs tariff number	85444290
Country of origin	PL



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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>	24 V DC
Nominal current I <sub>N</sub>	4 A

### Mechanical properties

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Insertion/withdrawal cycles	≥ 100
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### Signaling

Status display	2 LEDs
Status display present	yes

#### Connection data

#### Conductor connection

Tightening torque	0.2 Nm (M8 connectors)

## Connector

#### Connection 1

Туре	free cable end



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#### Connection 2

Туре	Socket angled M8
Number of positions	3
Coding type	A

#### Cable/line

Cable length 1.5 m	
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#### 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
Dynamic load capacity (bending)	Max. bending cycles: 10000000, Bending radius: 44 mm, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10



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	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
	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) (male connector/female connector)	-25 °C 90 °C (Plug / socket)

## Standards and regulations

### M8

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

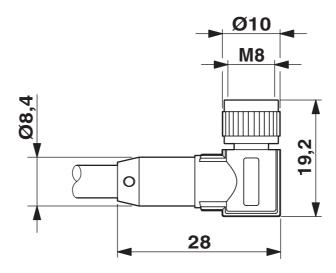


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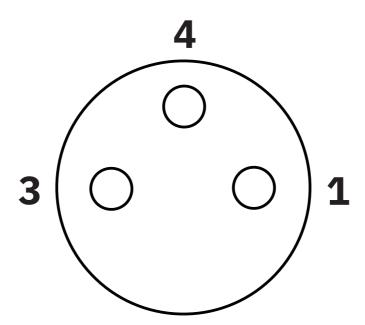
# Drawings

Dimensional drawing



Socket M8 x 1, angled, with LED

Schematic diagram

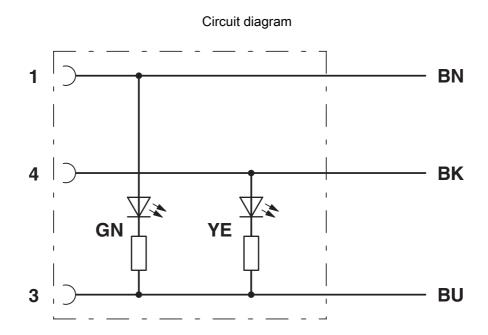


Pin assignment M8 socket, 3-pos., view female side



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Contact assignment of M8/M12 socket with two LEDs



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# **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1671069

UL Listed 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>
keine				
	24 V	4 A	-	-

cUL Listed Approval ID: FILE E 221	CUL Listed Approval ID: FILE E 221474			
	Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
keine				
	24 V	4 A	-	-

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



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# Classifications

### **ECLASS**

	ECLASS-13.0	27060311		
	ECLASS-15.0	27060311		
ETIM				
	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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