

1415890

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Sensor/actuator cable, 3-position, PVC, black RAL 9005, Plug straight M8, coding: A, on Socket angled M8, coding: A, cable length: 3 m

### Your advantages

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

#### Commercial data

Item number	1415890
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF01
Product key	AF1BBA
Catalog page	Page 190 (C-2-2019)
GTIN	4055626054599
Weight per piece (including packing)	84.4 g
Weight per piece (excluding packing)	73.586 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
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### Signaling

Status display	no
Status display present	no

#### Connector

#### Connection 1

Туре	Plug straight M8
Number of positions	3
Coding type	A

#### Connection 2



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Туре	Socket angled M8
Number of positions	3
Coding type	A

#### Cable/line

Cable length	3 m

### PVC black [PVC]

Dimensional drawing



Cable weight	29 kg/km
Number of positions	3
Shielded	no
Cable type	PVC black [PVC]
Conductor structure signal line	14x 0.15 mm
AWG signal line	24
Conductor cross section	3x 0.25 mm² (Signal line)
Wire diameter incl. insulation	1.17 mm ±0.05 mm
External cable diameter	4.20 mm ±0.15 mm
Outer sheath, material	PVC
External sheath, color	black RAL 9005
Conductor material	Bare Cu litz wires
Material wire insulation	PVC
Single wire, color	brown, blue, black
Thickness, insulation	≥ 0.23 mm (Core insulation)
Thickness, outer sheath	≥ 0.76 mm
Overall twist	3 wires, twisted
Max. conductor resistance	max. 79 Ω/km (at 20 °C)
Insulation resistance	≥ 100 MΩ*km (at 20 °C)
Nominal voltage, cable	≥ 300 V
Test voltage	≤ 3000 V
Smallest bending radius, fixed installation	13 mm
Flame resistance	As per UL-Style 2464
Resistance to oil	EN 60811-2-1
Ambient temperature (operation)	-25 °C 80 °C (cable, fixed installation)
	-10 °C 80 °C (Cable, flexible installation)

Environmental and real-life conditions



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#### Ambient conditions

Degree of protection	IP65
	IP67
	IP68
Ambient temperature (operation)	-25 °C 90 °C (Plug / socket)

### Standards and regulations

#### M8

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

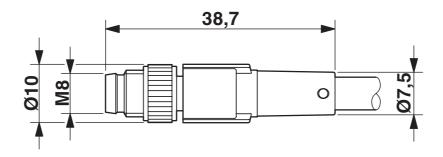


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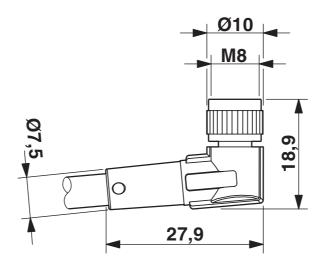
### Drawings

### Dimensional drawing



M8 x 1 male plug, straight version

### Dimensional drawing



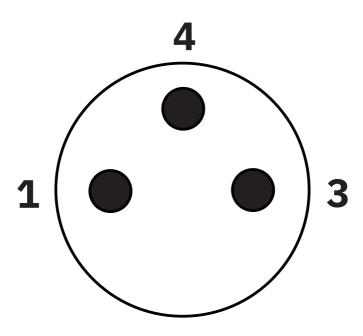
Socket M8 x 1, angled



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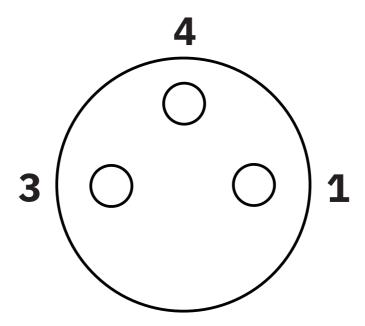
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### Schematic diagram



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

Schematic diagram

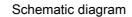


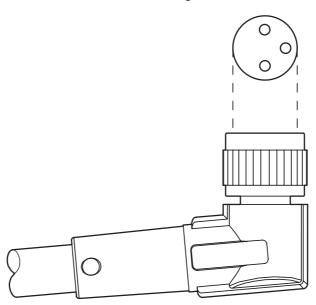
Pin assignment M8 socket, 3-pos., view female side



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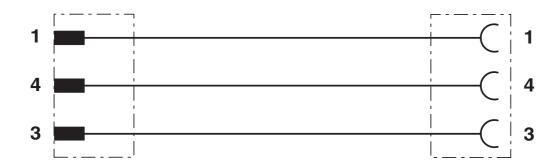
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Layout of connector pin assignments

Circuit diagram



Contact assignment of M8 plugs/sockets



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### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1415890

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>
		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	-	-

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



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### Classifications

	ECLASS-13.0	27060311		
ΕΊ	ГІМ			
	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%
EF3.0 Climate Change	
CO2e kg	0.705 kg CO2e

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