

#### 1420547

https://www.phoenixcontact.com/us/products/1420547

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Sensor/actuator cable, 4-position halogen-free, Plug straight M8, coding: A, connected with unwired, on Socket straight M8, cable length: 5 m

### Your advantages

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

### Commercial data

Item number	1420547
Packing unit	1 pc
Minimum order quantity	250 рс
Note	Made to order (non-returnable)
Sales key	BF01
Product key	BF1BCA
GTIN	4063151679842
Weight per piece (including packing)	117.1 g
Weight per piece (excluding packing)	117.1 g
Customs tariff number	85444290
Country of origin	PL



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### Technical data

### **Product properties**

Product type	Sensor/actuator cable	
Number of positions	4	
Application	Standard	
No. of cable outlets	1	
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**

Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	48 V AC
	60 V DC
Nominal current I <sub>N</sub>	4 A
Protective circuit	unwired

### Mechanical properties

Status display present

I	Mechanical data	
	Insertion/withdrawal cycles	≥ 100
Się	gnaling	
	Status display	No

No

#### Connector

Connection 1	
Туре	Plug straight M8
Number of positions	4
Coding type	A



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Number of positions	4
Connection 2	
Туре	Socket straight M8
Number of positions	4
	4

### Cable/line

Cable length	5 m

PUR halogen-free black [PUR]

Dimensional drawing



Cable weight	23 kg/km
UL AWM Style	20549 / 10493 (80°C/300 V)
Number of positions	4
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	32x 0.10 mm
AWG signal line	24
Conductor cross section	4x 0.25 mm² (Signal line)
Wire diameter incl. insulation	1.17 mm ±0.02 mm (Signal line)
External cable diameter	3.95 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, white, blue, black
Thickness, insulation	≥ 0.21 mm (Core insulation)
	approx. 0.5 mm (Outer cable sheath)
Overall twist	4 wires, twisted
Max. conductor resistance	max. 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	20 mm
Smallest bending radius, movable installation	40 mm
Max. bending cycles	1000000
Halogen-free	in accordance with DIN VDE 0472 part 815



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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	Highly resistant to acids, alkaline solutions and solvents
	hydrolysis and microbe resistant
	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)

### Standards and regulations

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

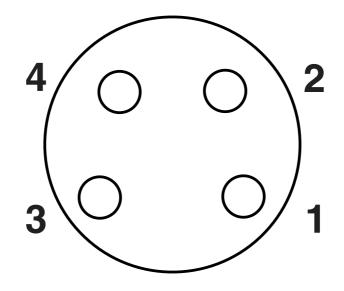


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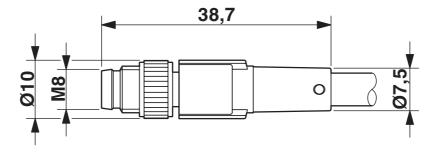
### Drawings

Schematic diagram



Pin assignment M8 socket, 4-pos., view female side

Dimensional drawing



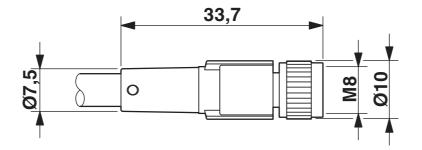
M8 x 1 male plug, straight version



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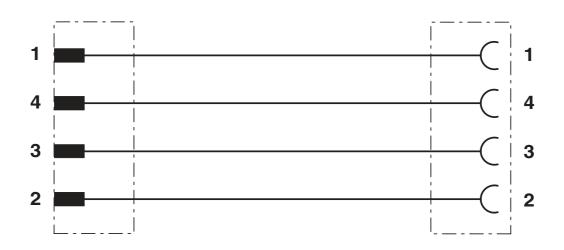
https://www.phoenixcontact.com/us/products/1420547

Dimensional drawing



Socket M8 x 1, straight

Circuit diagram

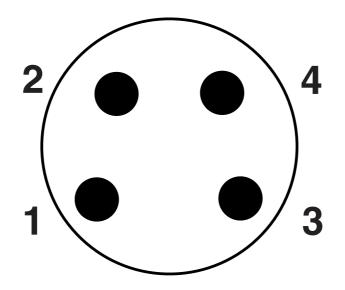




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Schematic diagram



Pin assignment M8 plug, 4-pos., view male side



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## Classifications

### ECLASS

ECLASS-11.0	27060311
ECLASS-12.0	27060311
ECLASS-13.0	27060311

### ETIM

	ETIM 8.0	EC001855		
UNSPSC				
	UNSPSC 21.0	26121600		



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## Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values



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### Accessories

PROT-M 8 FS-PA-CHAIN - Sealing cap

1430857 https://www.phoenixcontact.com/us/products/1430857

M8 sealing cap made of plastic with fixing band for sensor cables, for M8 plugs



#### PABA WH/23 - Insert label

1013779 https://www.phoenixcontact.com/us/products/1013779



Insert label, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: slide-on, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 20



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PABA YE/23 - Insert label

#### 1013782

https://www.phoenixcontact.com/us/products/1013782



Insert label, Strip, yellow, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: slide-on, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 20

### B-STIFT - Marker pen

1051993 https://www.phoenixcontact.com/us/products/1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5  $\rm mm$ 



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PROT-M 8 MS-PA-CHAIN - Screw plug

#### 1430860

https://www.phoenixcontact.com/us/products/1430860

M8 sealing cap made of plastic with fixing band for sensor cables, for M8 sockets



### TSD 02 SAC - Torque screwdriver

1208487 https://www.phoenixcontact.com/us/products/1208487



Torque screwdriver, with preset torque of 0.2 Nm and 4 mm hexagonal drive for M8 connectors



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SAC BIT M8-D10 - Tool

#### 1208461

https://www.phoenixcontact.com/us/products/1208461



Nut for assembling M8 connectors with longitudinal knurl and a knurl diameter of 10 mm, for 4 mm hexagonal drive

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