

1404193

https://www.phoenixcontact.com/us/products/1404193

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Sensor/actuator cable, 8-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket angled M8, coding: A, cable length:  $5\ m$ 

### Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- · Save space with high-pos. connectors

### Commercial data

Item number	1404193
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF01
Product key	BF1BGA
Catalog page	Page 207 (C-2-2019)
GTIN	4046356681155
Weight per piece (including packing)	163 g
Weight per piece (excluding packing)	159 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	8
No. of cable outlets	1
Shielded	no
Coding	A
Insulation characteristics	
Degree of pollution	3

### Material specifications

Flammability rating according to UL 94	НВ
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>	30 V AC
	30 V DC
Nominal current I <sub>N</sub>	1.5 A

### Mechanical properties

### Mechanical data

Insertion/withdrawal cycles	≥ 100
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### Signaling

Status display	No
Status display present	No

### 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	8
Coding type	A

### Cable/line

### PUR halogen-free black [PUR]

Dimensional drawing



Cable weight	31.4 kg/km
JL AWM Style	20549
umber of positions	8
hielded	no
able type	PUR halogen-free black [PUR]
onductor structure signal line	18x 0.10 mm
WG signal line	26
onductor cross section	8x 0.14 mm² (Signal line)
Vire diameter incl. insulation	1 mm ±0.02 mm (Signal line)
External cable diameter	5.10 mm ±0.15 mm
Outer sheath, material	PUR
external sheath, color	black-gray RAL 7021
onductor material	Bare Cu litz wires
laterial, filler	PE
laterial wire insulation	PP
ingle wire, color	white, brown, green, yellow, gray, pink, blue, red
hickness, insulation	≥ 0.21 mm (Signal line)
	≥ 0.38 mm (Outer cable sheath)
overall twist	8 wires around filler to the core
ength of twist, overall twist	58 mm
lax. conductor resistance	139 Ω/km (at 20 °C)
sulation resistance	1 GΩ*km (at 20 °C)
ominal voltage, cable	≤ 300 V AC
est voltage	≥ 3000 V AC (Spark test)
inimum bending radius, fixed installation	5 x D
linimum bending radius, flexible installation	10 x D
Smallest bending radius, fixed installation	25.5 mm



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Smallest bending radius, movable installation	51 mm
Max. bending cycles	4000000
Halogen-free	in accordance with DIN VDE 0472 part 815
	in accordance with DIN EN 50267-2-1
Flame resistance	according to UL 758/1581 (horizontal)
	in accordance with UL 758/1581 FT2
Resistance to oil	According to DIN EN 60811-2-1, 168 h at 100°C
Other resistance	hydrolysis and microbe resistant
	Resistant to salt water
	Low adhesion
	abrasion-resistant
	partly UV-resistant (in accordance with DIN EN ISO 4892-2-A)
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 85 °C (Plug / socket)

### Standards and regulations

### M8

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

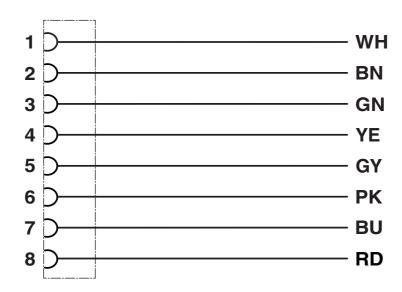


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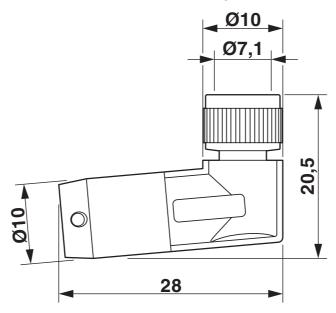
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## Drawings

### Circuit diagram



### Dimensional drawing

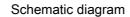


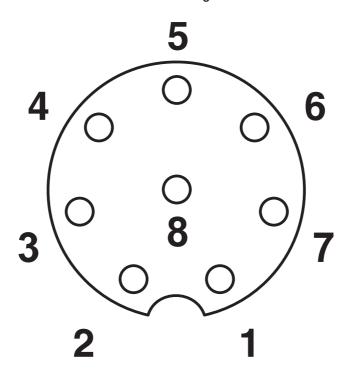
Socket M8 x 1, angled



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Connector pin assignment of M8 socket, 8-pos., view of socket side



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### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1404193

<u> </u>	<b>UL Listed</b> 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>
		30 V	1.5 A	-	-

•	<b>cUL Listed</b> Approval ID: FILE E 221474	ı			
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		30 V	1.5 A	-	-

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 9.0	EC001855
UNSPSC	

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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### Accessories

### WP-CTA POM 13,0 BK - Protective hose adapter

1422884

https://www.phoenixcontact.com/us/products/1422884



Protective hose adapter, for corrugated hoses with a nominal size of 13 (10  $\times$  13), corrugated in parallel

### WP-PA HF 13,0 BK - Protective hose

3240681

https://www.phoenixcontact.com/us/products/3240681



Protective hose, material: PA 6, UV-resistant: yes, flexible, degree of protection: IP68, color: black, flammability rating in acc. with UL 94: V0, inner diameter: 10 mm, Total length: 50 m



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### WP-PA HF-HB 13,0 BK - Protective hose

3240839

https://www.phoenixcontact.com/us/products/3240839



Protective hose, material: PA 6, UV-resistant: yes, flexible, degree of protection: IP68, color: black, flammability rating in acc. with UL 94: HB, inner diameter: 10 mm, Total length: 50 m

### 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





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### 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

### 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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### 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 mm

### CUTFOX-S VDE - Diagonal cutter

1212207

https://www.phoenixcontact.com/us/products/1212207



Diagonal cutter for hard (piano wire) and soft wires, VDE 1000 V AC/1500 V DC tested



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### WIREFOX SAC-1 - Stripping tool

1212757

https://www.phoenixcontact.com/us/products/1212757



Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from  $\emptyset$  of 3.2 to 4.4 mm, any stripping length

### WIREFOX SAC - Stripping tool

1212623

https://www.phoenixcontact.com/us/products/1212623



Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from  $\emptyset$  of 4.4 to 7 mm, any stripping length



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### WIREFOX 10 - Stripping tool

1212150

https://www.phoenixcontact.com/us/products/1212150



Stripping tool, for cables and conductors from 0.02 - 10  $\text{mm}^2$ , self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10  $\text{mm}^2$  stranded/1.5  $\text{mm}^2$  solid, replaceable stripping blade

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