

1458703

https://www.phoenixcontact.com/us/products/1458703

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Sensor/actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, Plug straight M8, coding: A, on Socket angled M8 and Socket angled M8, cable length: 0.3 m

Commercial data

Item number	1458703
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	BF1BOA
Catalog page	Page 248 (C-2-2019)
GTIN	4046356638050
Weight per piece (including packing)	26.8 g
Weight per piece (excluding packing)	26.8 g
Country of origin	PL



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Technical data

Product properties

Product type	Distributor with cable		
Application	Standard		
Number of positions	3		
No. of cable outlets	2		
Shielded	no		
Coding	A		
Insulation characteristics			
Overvoltage category	II II		
Degree of pollution	3		

Connection data

Tightening torque	0.2 Nm (M8 knurl)
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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_N	48 V AC
	60 V DC
Nominal current I _N	4 A

Signaling

Status display	No
Status display present	No

Connector

Connection 1

Туре	Plug straight M8
Coding type	A
Connection 2	
Туре	Socket angled M8

Connection 3



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Type	Socket angled M8			
Туре	Socket arrigied ivio			
able/line				
Cable length	0.3 m			
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			
Max. bending cycles	10000000			
Bending radius	44 mm			
Traversing path	10 m			
Traversing rate	3 m/s			
Acceleration	10 m/s²			



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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)	-25 °C 90 °C (Plug / socket)

Standards and regulations

M8

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

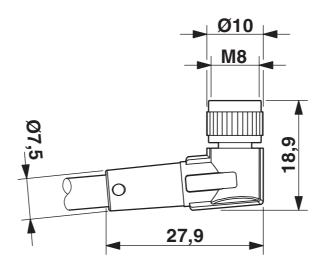


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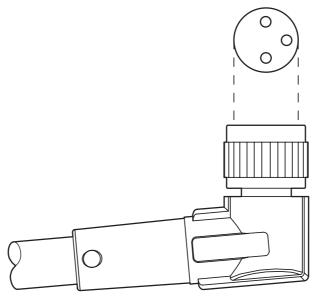
Drawings

Dimensional drawing



Socket M8 x 1, angled

Schematic diagram



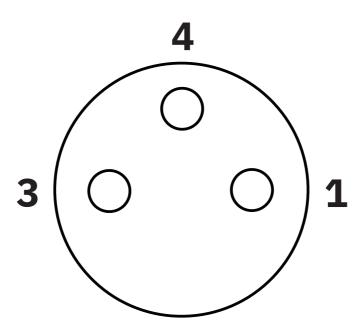
Alignment of the connector pin assignment



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Schematic diagram



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

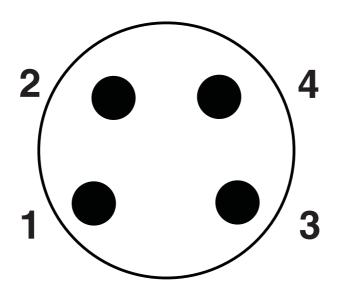
Circuit diagram C 4 S1 S1 C 4 S2 C 3



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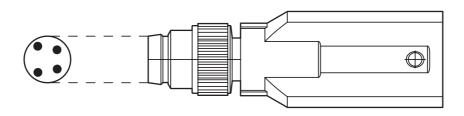
https://www.phoenixcontact.com/us/products/1458703

Schematic diagram



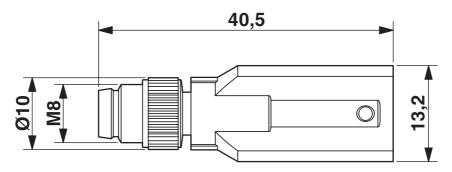
Pin assignment M8 plug, 4-pos., view male side

Schematic diagram



Alignment of the connector pin assignment

Dimensional drawing



Plug M8 x 1, Y-distributor



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1458703

D	UL Listed Approval ID: FILE E 221474				
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		60 V	4 A	-	-

•	cUL Listed Approval ID: FILE E 221474	1			
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		60 V	4 A	-	-

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

cULus Listed



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Classifications

ECLASS

UNSPSC 21.0

ECLASS-11.0	27060313				
ECLASS-12.0	27060313				
ECLASS-13.0	27060313				
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

PROT-M8 - Screw plug

1682540

https://www.phoenixcontact.com/us/products/1682540



An M8 screw plug for the unoccupied M8 sockets of the sensor/actuator cable, boxes and flush-type connectors

PABA WH/15 - Insert label

1013151

https://www.phoenixcontact.com/us/products/1013151



Insert label, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: slide-on, cable diameter range: $0.6 \dots 50$ mm, lettering field size: 15×4 mm, Number of individual labels: 20



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PABA YE/15 - Insert label

1013698

https://www.phoenixcontact.com/us/products/1013698



Insert label, Strip, yellow, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: slide-on, cable diameter range: $0.6 \dots 50$ mm, lettering field size: 15×4 mm, Number of individual labels: 20

PABA RD/15 - Insert label

1013944

https://www.phoenixcontact.com/us/products/1013944



Insert label, Strip, red, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: slide-on, cable diameter range: $0.6 \dots 50$ mm, lettering field size: 15×4 mm, Number of individual labels: 20



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PABA WH/15 CUS - Cable marker

0824444

https://www.phoenixcontact.com/us/products/0824444



Cable marker, can be ordered: Strip, white, labeled according to customer specifications, mounting type: thread on, cable diameter range: 0.6 ... 50 mm, lettering field size: 15×4 mm

PABA YE/15 CUS - Cable marker

0824447

https://www.phoenixcontact.com/us/products/0824447



Cable marker, can be ordered: Strip, yellow, labeled according to customer specifications, mounting type: thread on, cable diameter range: 0.6 ... 50 mm, lettering field size: 15×4 mm



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PABA RD/15 CUS - Cable marker

0824442

https://www.phoenixcontact.com/us/products/0824442



Cable marker, can be ordered: Strip, red, labeled according to customer specifications, mounting type: thread on, cable diameter range: 0.6 ... 50 mm, lettering field size: 15×4 mm

PABA BU/15 CUS - Cable marker

0824441

https://www.phoenixcontact.com/us/products/0824441



Cable marker, can be ordered: Strip, blue, labeled according to customer specifications, mounting type: thread on, cable diameter range: 0.6 \dots 50 mm, lettering field size: 15 x 4 mm



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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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