

SAC-4P-M 8MR/0,3-PVC/M 8FR - Sensor/actuator cable

1415580
<https://www.phoenixcontact.com/us/products/1415580>

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Sensor/actuator cable, 4-position, PVC, black RAL 9005, Plug angled M8, coding: A, on Socket angled M8, coding: A, cable length: 0.3 m

Your advantages

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

Commercial data

Item number	1415580
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF01
Product key	BF1BCA
Catalog page	Page 196 (C-2-2019)
GTIN	4055626049502
Weight per piece (including packing)	18.8 g
Weight per piece (excluding packing)	17.244 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	4
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	HB
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	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	48 V AC
	60 V DC
Nominal current I_N	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

Type	Plug angled M8
Number of positions	4
Coding type	A

Connection 2

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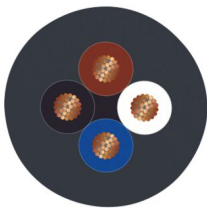
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Type	Socket angled M8
Number of positions	4
Coding type	A

Cable/line

Cable length	0.3 m
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PVC black [PVC]

Dimensional drawing	
Cable weight	33 kg/km
UL AWM Style	2464 / 1729 (80°C/300 V)
Number of positions	4
Shielded	no
Cable type	PVC black [PVC]
Conductor structure signal line	14x 0.15 mm
AWG signal line	24
Conductor cross section	4x 0.25 mm ² (Signal line)
Wire diameter incl. insulation	1.17 mm ±0.05 mm
External cable diameter	4.40 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, white, blue, black
Thickness, insulation	≥ 0.23 mm (Core insulation) ≥ 0.76 mm (Outer cable sheath)
Overall twist	4 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
Minimum bending radius, fixed installation	5 x D
Smallest bending radius, fixed installation	22 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)

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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

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

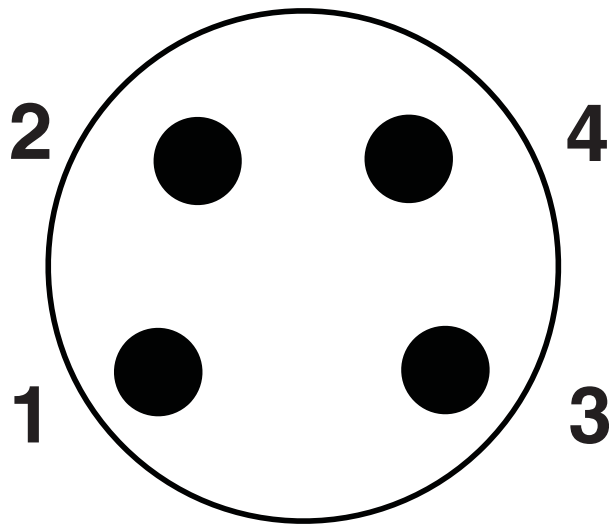
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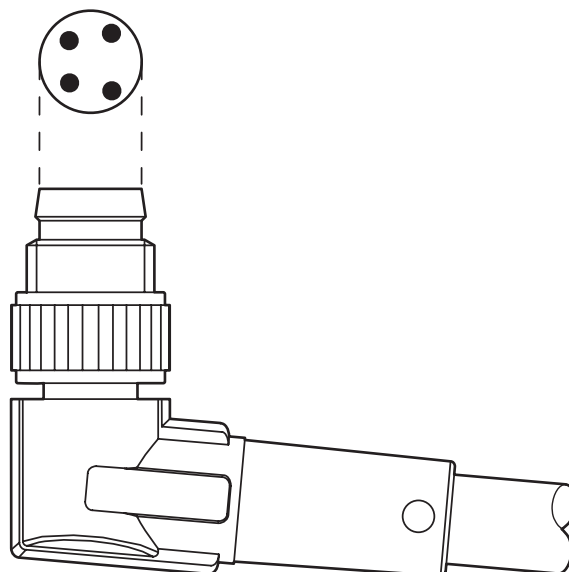
Drawings

Schematic diagram



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

Schematic diagram



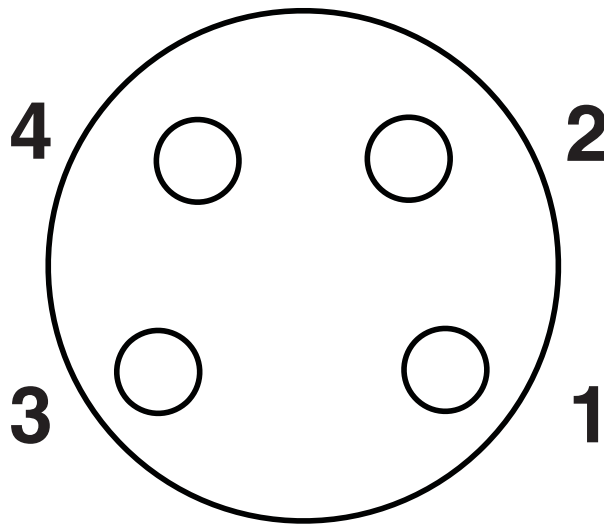
Layout of connector pin assignments

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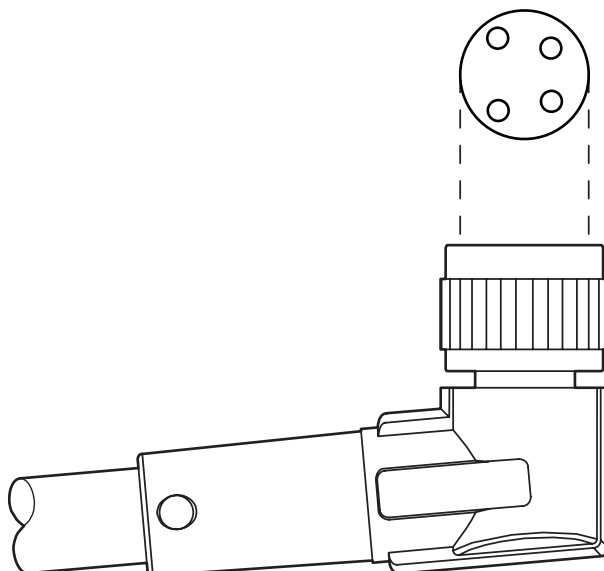
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Schematic diagram



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

Schematic diagram



Layout of connector pin assignments

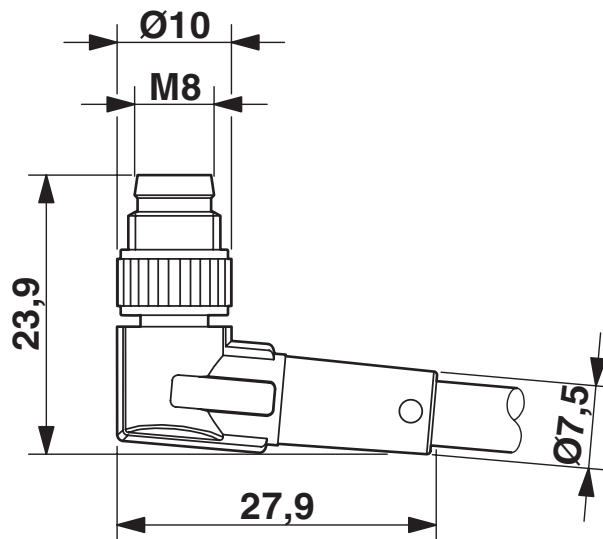
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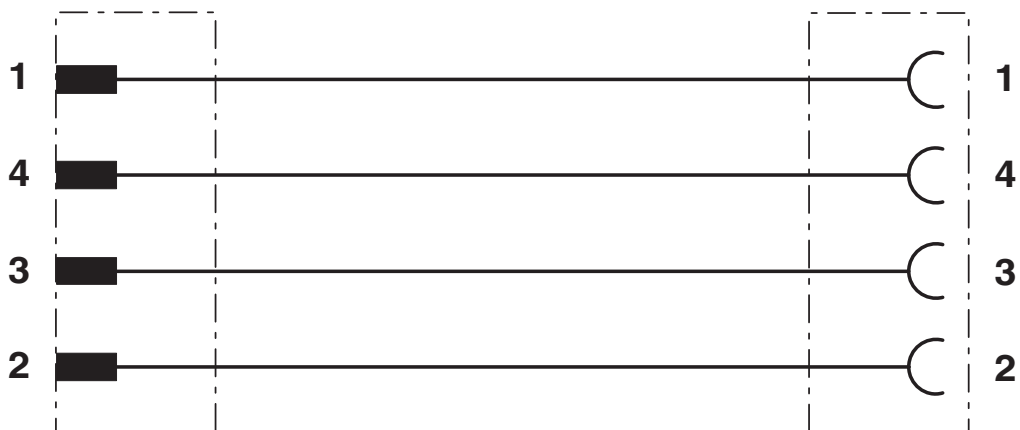
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Dimensional drawing



M8 x 1 male plug, angled version

Circuit diagram



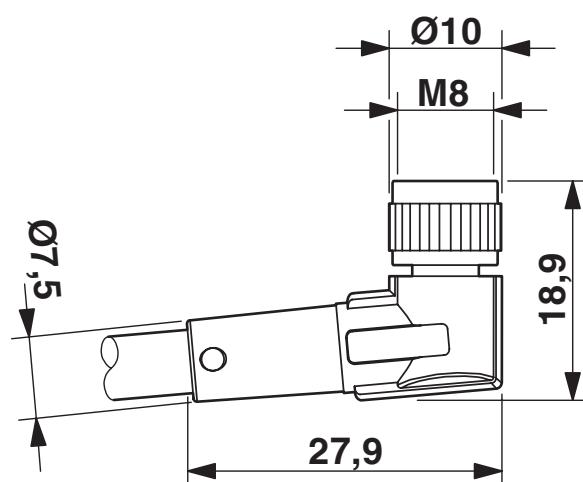
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Dimensional drawing



Socket M8 x 1, angled

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1415580>

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

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

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

ECLASS

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

ETIM

ETIM 9.0	EC001855
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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	0.226 kg CO2e

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Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com