


**SAC-3P-M12MS/3,0-PUR/M 8FR**

Order No.: 1668865

<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=1668865>

Sensor/Actuator cable, 3-position, PUR halogen-free, Black-gray RAL 7021, Plug, straightLink:M12, A-coded, on Socket, angled M8, Cable length: 3 m

Commercial data	
GTIN (EAN)	
sales group	D130
Pack	1 pcs.
Customs tariff	85444290
Catalog page information	Page 122 (PC-2011)

## Product notes

WEEE/RoHS-compliant since:  
06/01/2005

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Technical data	
<b>General data</b>	
Rated current at 40°C	4 A
Rated voltage	60 V
Number of positions	3
Volume resistance	≤ 5 mΩ

Insulation resistance	≥ 100 MΩ
Length of cable	3 m
Ambient temperature (operation)	-25 °C ... 90 °C (Male connector / female connector)

#### General characteristics

Standards/regulations	M12 connector IEC 61076-2-101 M8 connector IEC 61076-2-104
Coding	A - standard
Surge voltage category	II
Pollution degree	3
Degree of protection	IP65/IP68/IP69K
Insertion/withdrawal cycles	≥ 100
Torque	0.4 Nm (M12 connector) 0.2 Nm (M8 plug-in connectors)
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material of grip body	TPU, hardly inflammable, self-extinguishing
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	NBR
Status display	No

#### Conductor data

Cable type	PUR halogen-free black
Cable type (abbreviation)	PUR
Cable abbreviation	Li9Y11Y-HF
UL AWM Style	20549
Conductor cross section	0.25 mm <sup>2</sup> (signal line)
AWG signal line	24
Conductor structure signal line	32 x 0.10 mm
Core diameter including insulation	1.17 mm ±0.02 mm (signal line)
Thickness, insulation	≥ 0.38 mm (Core insulation) Approx. 0.9 mm
External cable diameter	4.4 mm ±0.15 mm
Wire colors	Brown, blue, black
External sheath, color	Black-gray RAL 7021

Insulation resistance	≥ 100 GΩ*km (at 20°C)
Conductor resistance	≤ 78 Ω/km (at 20°C)
Nominal voltage, conductor	≤ 300 V
Test voltage, conductor	≥ 3000 V
Overall twist	3 wires, twisted
Length of twist, overall twist	40 mm
Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Cable weight	24 kg/km
Smallest bending radius, fixed installation	22 mm
Smallest bending radius, movable installation	44 mm
Number of bending cycles	4000000
Bending radius	44 mm
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s <sup>2</sup>
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation) -25 °C ... 80 °C (cable, flexible installation)
Special properties	Flexible cable conduit capable Silicone-free Free of substances which would hinder coating with paint or varnish
Flame resistance	in accordance with DIN UL-Style 20549
Halogen-free	in accordance with DIN VDE 0472 part 815
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

#### Certificates / Approvals

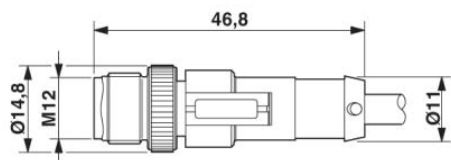


Certification

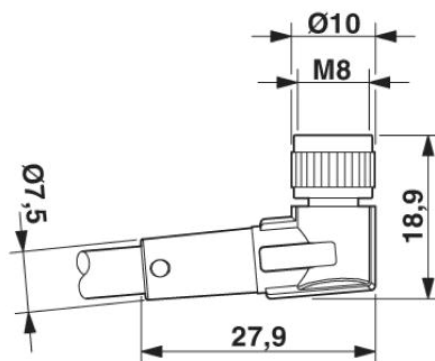
CUL Listed, GOST, UL Listed

**Diagrams/Drawings**

Dimensioned drawing

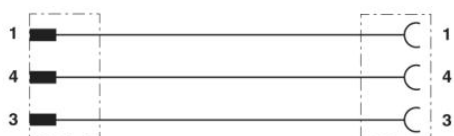


M12 x 1 male connector, straight



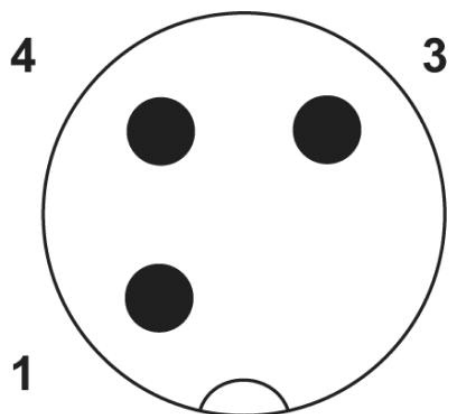
Socket M8 x 1, angled

Circuit diagram

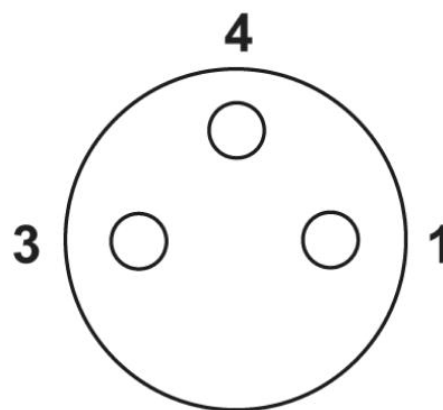


Contact assignment of M12 plugs / M8 sockets

Schematic diagram

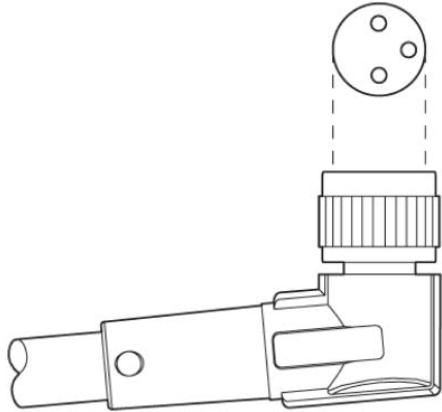


Pin assignment M12 plug, 3-pos., A-coded, view male side



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

Layout of connector pin assignments



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