


**SAC-3P-M12MR/3,0-PUR/M12FR B**

Order No.: 1668661

<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=1668661>

Sensor/Actuator cable, 3-position, PUR halogen-free, Black-gray RAL 7021, Plug, angledLink:M12, A-coded, on Socket, angled M12, A-coded, PIN 2+4 bridged, Cable length: 3 m

Commercial data	
GTIN (EAN)	 4 017918 137021
Note	Made-to-order
sales group	D110
Pack	1 pcs.
Customs tariff	85444290
Catalog page information	Page 122 (PC-2011)

## Product notes

WEEE/RoHS-compliant since:  
08/01/2005



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## Technical data

## General data

Rated current at 40°C	4 A
Rated voltage	250 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
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)
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
UL AWM Style	20549
Conductor cross section	0.34 mm <sup>2</sup>
AWG signal line	22
Conductor structure signal line	42x 0.10 mm
Core diameter including insulation	1.27 mm ±0.02 mm
Thickness, insulation	≥ 0.21 mm (Core insulation) Approx. 0.8 mm (Outer cable sheath)
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	max. 58 Ω/km (at 20°C)

Nominal voltage, conductor	≤ 300 V
Test voltage, conductor	≥ 3000 V
Overall twist	3 wires, twisted
Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Cable weight	26 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) -5 °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	Highly resistant to acids, alkaline solutions and solvents hydrolysis and microbe resistant

#### Certificates / Approvals

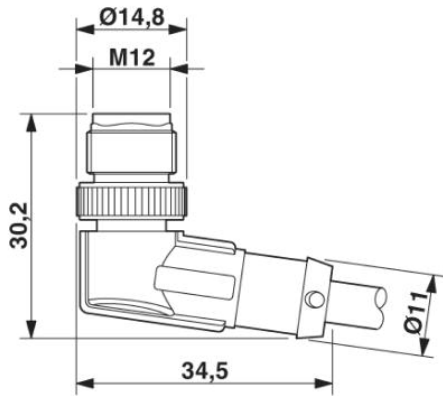


Certification

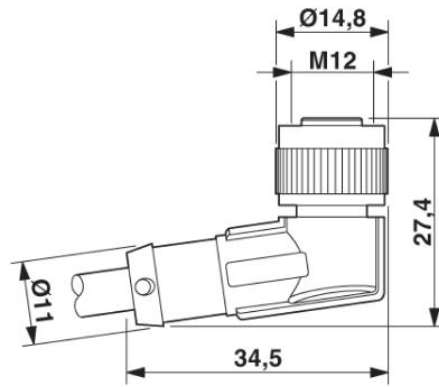
CUL Listed, GOST, UL Listed

**Diagrams/Drawings**

Dimensioned drawing

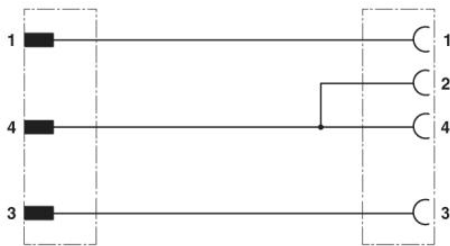


M12 x 1 male connector, angled



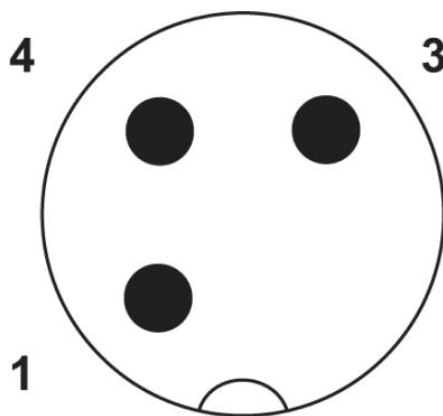
M12 x 1 female connector, angled

Circuit diagram

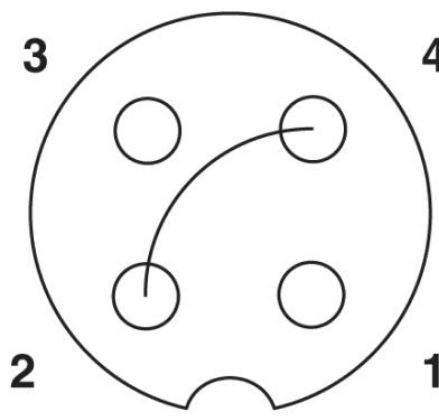


Contact assignment of M12 connectors / sockets bridged

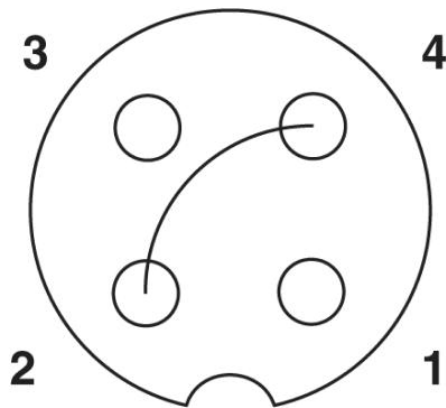
Schematic diagram



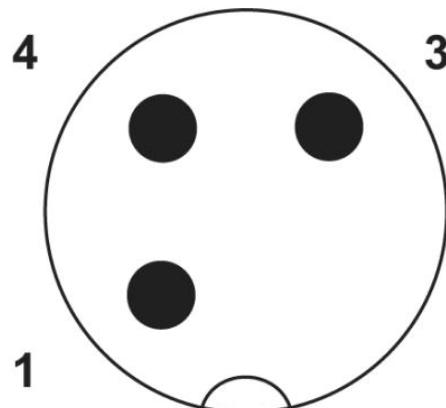
Pin assignment M12 plug, 3-pos., A-coded, view male side



Pin assignment M12 socket, 3-pos., PIN 2+4 bridged, A-coded, view female side



Pin assignment M12 socket, 3-pos., PIN  
2+4 bridged, A-coded, view female side



Pin assignment M12, 3-pos.

**Address**

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