


**SAC-4P-M12MS/1,5-PUR/M12FR-3L**

Order No.: 1668535

<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=1668535>

Sensor/Actuator cable, 4-position, PUR, halogen-free, Black-gray RAL 7021, Plug, straight M12, A-coded, on Socket, angled M12, A-coded, Cable length: 1.5 m

Commercial data	
GTIN (EAN)	 4 017918 136208
sales group	D111
Pack	1 pcs.
Customs tariff	85444290
Catalog page information	Page 82 (PC-2009)

## Product notes

WEEE/RoHS-compliant since:  
12/04/2006

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Technical data	
<b>General data</b>	
Rated current at 40°C	4 A
Rated voltage	24 V
Number of positions	4
Volume resistance	≤ 5 mΩ

Insulation resistance	≥ 100 MΩ
Length of cable	1.5 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
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	3 LEDs

#### Conductor data

Cable type	PUR halogen-free black
Cable type (abbreviation)	PUR
Cable abbreviation	Li9Y11Y-HF
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)
	≥ 0.8 mm (Outer cable sheath)
External cable diameter	4.7 mm ±0.15 mm
Wire colors	Black, brown, blue, white
External sheath, color	Black-gray RAL 7021
Insulation resistance	≥ 100 MΩ*km
Conductor resistance	≤ 58 Ω/km (at 20°C)
Nominal voltage, conductor	≤ 300 V
Test voltage, conductor	≥ 3000 V

Overall twist	4 wires, twisted
Length of twist, overall twist	49.5 mm
Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Cable weight	30 kg/km
Smallest bending radius, fixed installation	23.5 mm
Smallest bending radius, movable installation	47 mm
Number of bending cycles	4000000
Bending radius	47 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 in accordance with FT1 as per UL 758
Halogen-free	in accordance with DIN VDE 0472 part 815 in accordance with DIN EN 50267-2-1
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

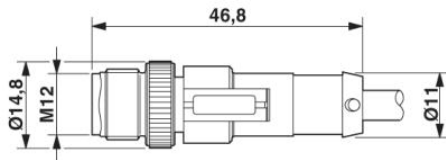


Certification

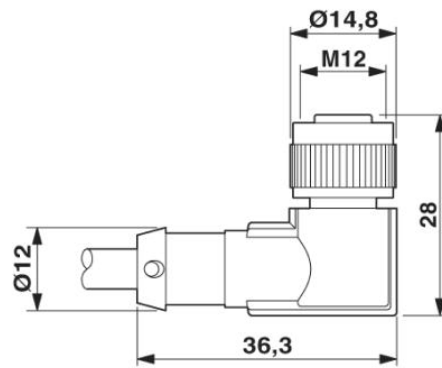
CUL Listed, GOST, UL Listed

**Diagrams/Drawings**

Dimensioned drawing

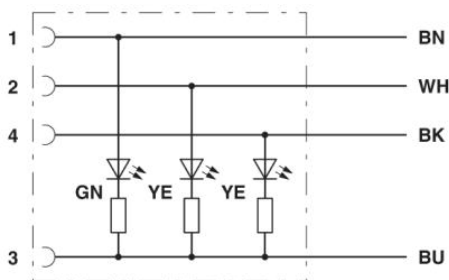


M12 x 1 male connector, straight



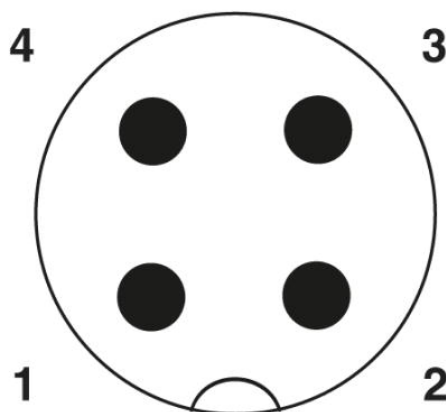
Socket M12 x 1, angled, with LED

Circuit diagram

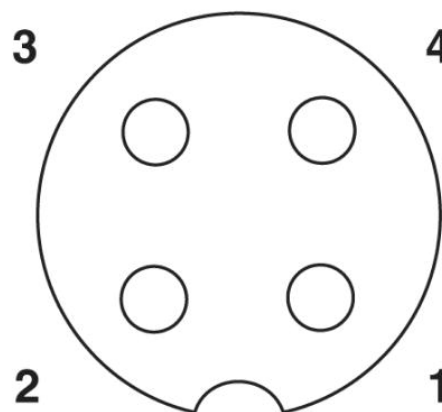


Contact assignment of the M12 plug and the M12 socket

Schematic diagram



Pin assignment M12 plug, 4-pos., A-coded, view plug side



Pin assignment M12 socket, 4-pos., A-coded, view female side

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