

## Excellent Integrated System Limited

Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

[Phoenix Contact](#)  
[1500981](#)

For any questions, you can email us directly:

[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)



Extract from the online catalog

## SAC-4P-M12MS/ 1,5-PUR/M12FR SH

Order No.: 1500981



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=1500981>

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

Commercial data	
GTIN (EAN)	4017918618179
Note	Made-to-order
sales group	D117
Pack	5 pcs.
Customs tariff	85444290
Weight/Piece	0.11277 KG
Catalog page information	Page 85 (PC-2009)

### Product notes

WEEE/RoHS-compliant since:  
03/02/2006



<http://www.download.phoenixcontact.com>  
Please note that the data given here has been taken from the online catalog. For comprehensive information and data, please refer to the user documentation. The General Terms and Conditions of Use apply to Internet downloads.

## Technical data

General data	
Rated current at 40°C	4 A
Rated voltage	250 V
Number of positions	4
Volume resistance	≤ 5 mΩ

SAC-4P-M12MS/ 1,5-PUR/M12FR SH Order No.: 1500981  
<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=1500981>

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 male connector IEC 61076-2-101
Coding	A - standard
Surge voltage category	II
Pollution degree	3
Degree of protection	IP65/IP67/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	No

**Conductor data**

Cable type	PUR halogen-free black shielded
Cable type (abbreviation)	PUR
Cable abbreviation	Li9Y-V1-C-V1-11Y
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. 1 mm (Outer cable sheath)
External cable diameter	5.90 mm
Wire colors	Brown, white, blue, black
External sheath, color	Black-gray RAL 7021
Insulation resistance	≥ 100 GΩ*km
Conductor resistance	max. 58 Ω/km
Nominal voltage, conductor	≤ 300 V
Test voltage, conductor	≥ 3000 V

SAC-4P-M12MS/ 1,5-PUR/M12FR SH Order No.: 1500981  
<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=1500981>

Overall twist	4 wires, twisted
Shielding	Tinned copper braided shield
Optical shield covering	85 %
Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Cable weight	47 kg/km
Smallest bending radius, fixed installation	29.5 mm
Smallest bending radius, movable installation	59 mm
Number of bending cycles	4000000
Bending radius	59 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	Highly resistant to acids, alkaline solutions and solvents
	hydrolysis and microbe resistant

**Certificates / Approvals**



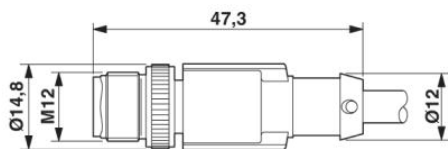
Certification

CUL Listed, GOST, UL Listed

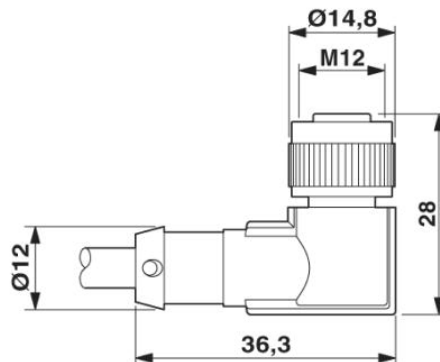
SAC-4P-M12MS/ 1,5-PUR/M12FR SH Order No.: 1500981  
<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=1500981>

**Diagrams/Drawings**

Dimensioned drawing

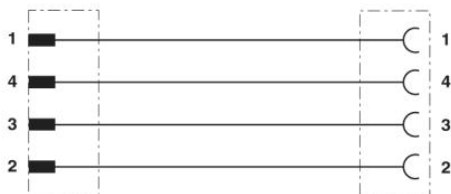


M12 x 1 male connector, straight, shielded



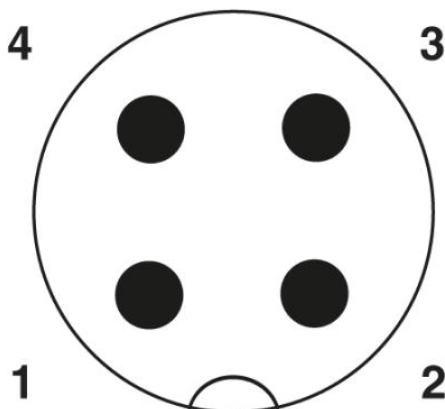
M12 x 1 female connector, angled, shielded

Circuit diagram

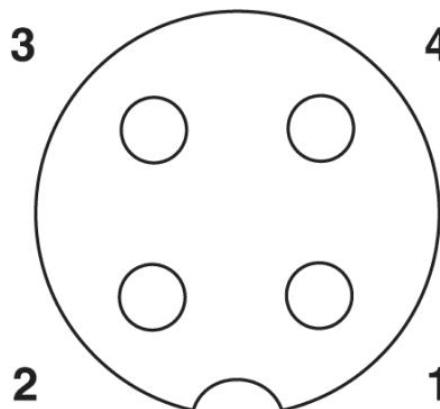


Contact assignment of the M12 plug and the M12 socket

Schematic diagram



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



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

SAC-4P-M12MS/ 1,5-PUR/M12FR SH Order No.: 1500981  
<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=1500981>

---

**Address**

PHOENIX CONTACT Inc., USA  
586 Fulling Mill Road  
Middletown, PA 17057, USA  
Phone (800) 888-7388  
Fax (717) 944-1625  
<http://www.phoenixcon.com>



© 2010 Phoenix Contact  
Technical modifications reserved;