


SAC-3P-M12MR/3,0-PUR/M 8FR

Order No.: 1668946



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=1668946>

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

Commercial data	
GTIN (EAN)	
Note	Made-to-order
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



<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	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	IP65/67
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	3x 0.25 mm ² (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 (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	$\geq 100 \text{ G}\Omega \cdot \text{km}$ (at 20°C)
Conductor resistance	$\leq 78 \text{ }\Omega/\text{km}$ (at 20°C)
Nominal voltage, conductor	$\leq 300 \text{ V}$
Test voltage, conductor	$\geq 3000 \text{ V}$
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 ²
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 partly UV-resistant in accordance with DIN EN ISO 4892-2-A

Certificates / Approvals



Certification

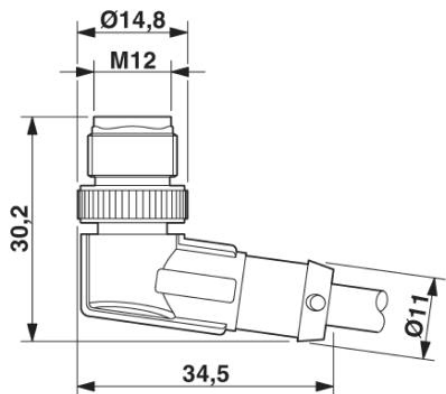
CUL Listed, GOST, UL Listed

Accessories		
Item	Designation	Description
Fuse		
1558988	SAC-M12-EXCLIP-M	Fuse clip for the pin side of various M12 sensor/actuator connectors prevents plug-in connections being interrupted without using a tool
Marking		
1051993	B-STIFT	Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm
1013944	PABA RD/15	Insert label, red, Unlabeled, Can be labeled with: Plotter, Mounting type: Thread on, Lettering field: 15 mm
1013151	PABA WH/15	Insert label, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Thread on, Lettering field: 15 mm
1013698	PABA YE/15	Insert label, yellow, Unlabeled, Can be labeled with: Plotter, Mounting type: Thread on, Lettering field: 15 mm
1013122	PATO 2/15	Conductor marker carrier, transparent, Unlabeled, Mounting type: Clip on, Cable diameter: 2.8-5 mm, Lettering field: 4 x 15 mm
1013135	PATO 3/15	Conductor marker carrier, transparent, Unlabeled, Mounting type: Clip on, Cable diameter: 5-8 mm, Lettering field: 4 x 15 mm
1013148	PATO 4/15	Conductor marker carrier, transparent, Unlabeled, Mounting type: Clip on, Cable diameter: 8-10 mm, Lettering field: 4 x 15 mm
Protection and sealing elements		
1430860	PROT-M 8 MS-PA-CHAIN	M8 sealing cap made of plastic with fixing band for sensor cables, for M8 sockets
1430873	PROT-M12 FS-PA-CHAIN	M12 sealing cap made of plastic with fixing band, for sensor cables, for free M12 sockets
Tools		
1208432	SAC BIT M12-D15	Nut for assembling sensor/actuator cables with M12 connector and for M12 connectors with QUICKON fast connection technology, for 4 mm hexagonal drive
1208461	SAC BIT M8-D10	Nut for assembling sensor/actuator cables with M8 connector and for M8 connectors with QUICKON fast connection technology, for 4 mm hexagonal drive
1208487	TSD 02 SAC	Torque screwdriver, with preset torque of 0.2 Nm and 4 mm hexagonal drive for M8 connectors
1208429	TSD 04 SAC	Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

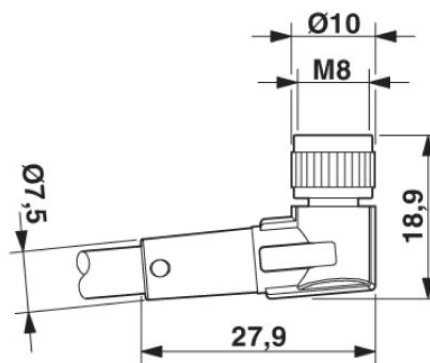
1212224	TSD-M 1,2NM	Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm
1212600	TSD-M SAC-BIT ADAPTER	Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

Diagrams/Drawings

Dimensioned drawing

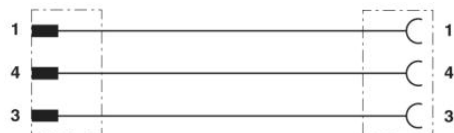


M12 x 1 male connector, angled



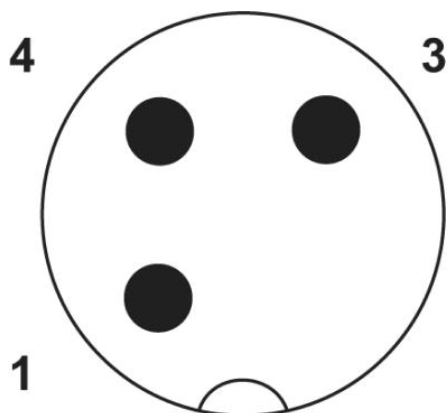
Socket M8 x 1, angled

Circuit diagram

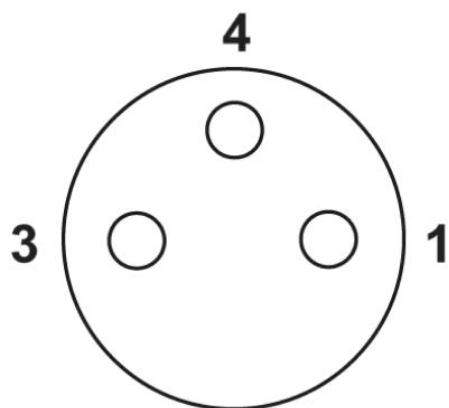


Contact assignment of M12 plugs / M8 sockets

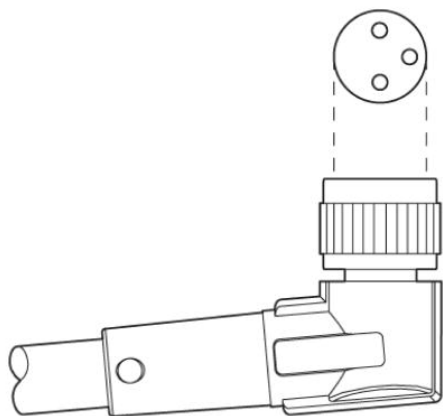
Schematic diagram



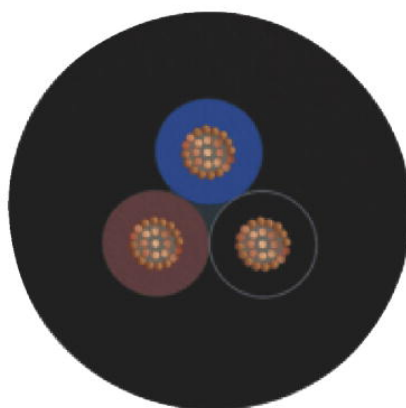
Pin assignment M12 plug, 3-pos., A-coded, view male side



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



Layout of connector pin assignments



PUR halogen-free black [PUR]

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>



© 2012 Phoenix Contact
Technical modifications reserved;