


SAC-4P- 3,0-PUR/M12FS SH

Order No.: 1682854

<http://eshop.phoenixcontact.net/phoenix/treeViewClick.do?UID=1682854>

Sensor-/Aktor-Kabel, 4-polig, PUR halogenfrei, schwarzgrau RAL 7021, geschirmt, freies Leitungsende, auf Buchse gerade M12, A-kodiert, Kabellänge: 3 m

Commercial data	
EAN	 4 017918 169169
Pack	1 pcs.
Customs tariff	85444290
Catalog page information	Page 135 (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	250 V
Number of positions	4
Volume resistance	≤ 5 mΩ

Insulation resistance	≥ 100 MΩ
Length of cable	3 m
Stripping length of the free conductor end	50 mm
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/IP67/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 shielded
Cable type (abbreviation)	PUR
Cable abbreviation	Li9Y-V1-C-V1-11Y
UL AWM Style	20549
Conductor cross section	4x 0.34 mm ² (signal line)
AWG signal line	22
Conductor structure signal line	42x 0.10 mm
Core diameter including insulation	1.27 mm ±0.02 mm (signal line)
Thickness, insulation	≥ 0.21 mm (Core insulation)
	Approx. 1 mm (Outer cable sheath)
External cable diameter	5.9 mm ± 0.2 mm
Wire colors	brown, white, 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	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	46 kg/km
Smallest bending radius, fixed installation	29.5 mm
Smallest bending radius, movable installation	59 mm
Number of bending cycles	2000000
Bending radius	59 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 UL FT-2
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 Resistant to salt water partly UV-resistant in accordance with DIN EN ISO 4892-2-A

Certificates / Approvals

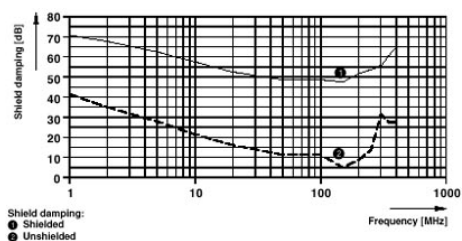
Certification CUL Listed, GOST, UL Listed

Accessories		
Item	Designation	Description
Fuse		
1558991	SAC-M12-EXCLIP-F	Fuse clip for the socket 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, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm
1013151	PABA WH/15	Insert label, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm
1013698	PABA YE/15	Insert label, yellow, Unlabeled, Can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm
1013850	PATG 2/23	Conductor marker carrier, transparent, Unlabeled, Mounting type: Slide on, Cable diameter: 2-4 mm, Lettering field: 4 x 23 mm
1013863	PATG 3/23	Conductor marker carrier, transparent, Unlabeled, Mounting type: Slide on, Cable diameter: 4-7 mm, Lettering field: 4 x 23 mm
0808011	PATG 4/23	Conductor marker carrier, transparent, Unlabeled, Mounting type: Slide on, Cable diameter: 6-10 mm, Lettering field: 4 x 23 mm
Protection and sealing elements		
1430899	PROT-M12 MS-PA-CHAIN	M12 sealing cap with fixing band, for sensor cables, for free M12 sockets
Tools		
1212207	CUTFOX-S VDE	Diagonal cutter for copper and aluminum conductors, VDE-tested
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
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

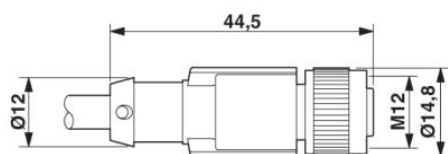
1212150	WIREFOX 10	Stripping tool, for cables and conductors from 0.02 - 10 mm ² , self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 mm ² stranded/1.5 mm ² solid, replaceable stripping blade
1212623	WIREFOX SAC	Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from Ø of 4.4 to 7 mm, any stripping length

Diagrams/Drawings

Diagram

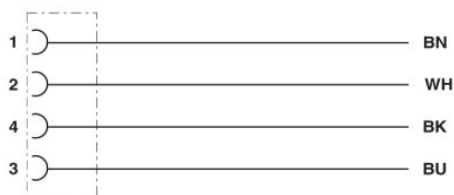


Dimensioned drawing



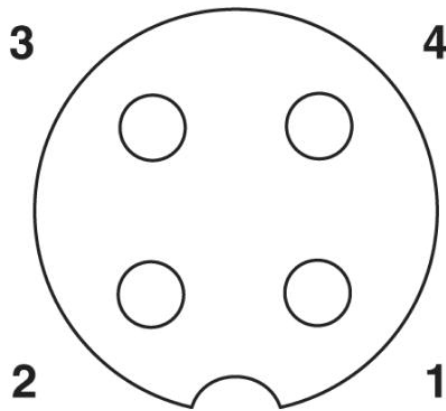
M12 x 1 female connector, straight, shielded

Circuit diagram

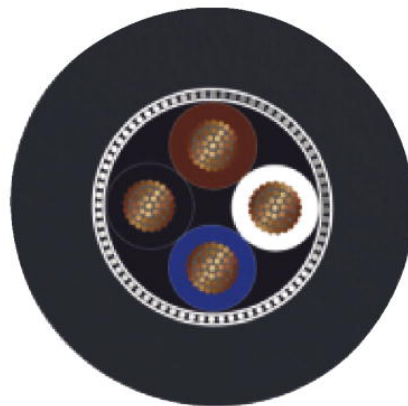


Contact assignment of the M12 socket

Schematic diagram



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



PUR halogen-free black shielded [PUR]

Connection data incl. use groups





Address

PHOENIX CONTACT GmbH & Co. KG
Flachmarktstr. 8
32825 Blomberg, Germany
Phone +49 5235 3 00
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>



© 2012 Phoenix Contact
Technical modifications reserved;