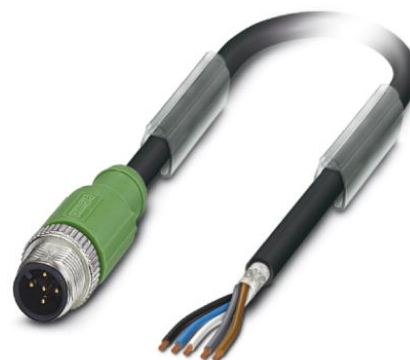


SAC-5P-M12MS/ 5,0-PUR SH

Order No.: 1682731

<http://eshop.phoenixcontact.net/phoenix/treeViewClick.do?UID=1682731>

Sensor-/Aktor-Kabel, 5-polig, PUR halogenfrei, schwarzgrau
RAL 7021, geschirmt, Stecker gerade M12, A-kodiert, auf freies
Leitungsende, Kabellänge: 5 m

Commercial data

EAN	 4 017918 169053
Pack	1 pcs.
Customs tariff	85444290
Catalog page information	Page 141 (PC-2011)

Product notes

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



[http://
www.download.phoenixcontact.com](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	5
Volume resistance	≤ 5 mΩ

Insulation resistance	$\geq 100 \text{ M}\Omega$
Length of cable	5 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
Status display	No

Conductor data

Cable type	PUR halogen-free black shielded
Cable type (abbreviation)	PUR
Cable abbreviation	LIF9YC11Y
UL AWM Style	20549
Conductor cross section	5x 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 $\pm$ 0.02 mm (signal line)
External cable diameter	5.9 mm $\pm$ 0.2 mm
Wire colors	Brown, white, blue, black, gray
External sheath, color	Black RAL 9005
Insulation resistance	70 G Ω *km (at 20 °C)
Conductor resistance	max. 57 Ω /km (at 20 °C)
Nominal voltage, conductor	300 V (at 20 °C)
Test voltage Core/Core	3000 V (at 20 °C)

Overall twist	5 wires around filler to the core
Shielding	Tinned copper braided shield
Optical shield covering	85 %
Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Smallest bending radius, fixed installation	29.5 mm
Smallest bending radius, movable installation	59 mm (Up to +60°C)
Number of bending cycles	4000000
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
Flame resistance	In accordance with UL FT-2
Halogen-free	in accordance with DIN VDE 0472 part 815
Other resistance	hydrolysis and microbe resistant
	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, 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

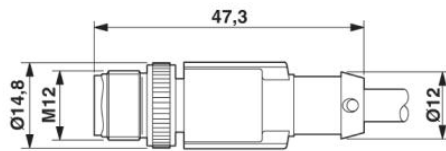
1430873	PROT-M12 FS-PA-CHAIN	M12 sealing cap made of plastic with fixing band, for sensor cables, for free M12 sockets
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Tools

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

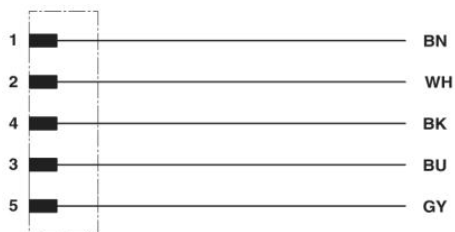
Diagrams/Drawings

Dimensioned drawing



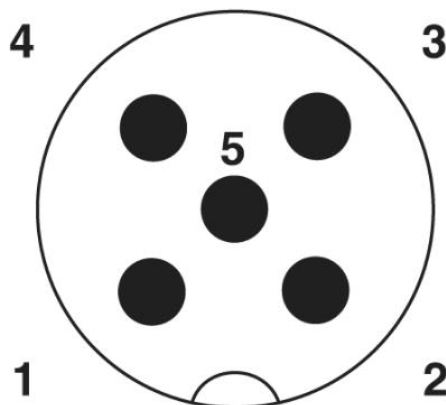
M12 x 1 male connector, straight, shielded

Circuit diagram



Contact assignment of the M12 plug

Schematic diagram



Pin assignment M12 male connector, 5-pos., A-coded, male side



PUR halogen-free black shielded [PUR]

Connection data incl. use groups





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