


# SAC-5P-10,0-PUR/M12FS SH

Order No.: 1500758



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Sensor-/Aktor-Kabel, 5-polig, PUR halogenfrei, schwarzgrau RAL 7021, geschirmt, freies Leitungsende, auf Buchse gerade M12, A-kodiert, Kabellänge: 10 m

Commercial data	
EAN	 4 017918 610791
Pack	1 pcs.
Customs tariff	85444290
Catalog page information	Page 141 (PC-2011)

#### Product notes

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



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Technical data	
<b>General data</b>	
Rated current at 40°C	4 A
Rated voltage	60 V
Number of positions	5
Volume resistance	≤ 5 mΩ

Insulation resistance	≥ 100 MΩ
Length of cable	10 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	LIF9YC11Y
UL AWM Style	20549
Conductor cross section	5x 0.34 mm <sup>2</sup> (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)
External cable diameter	5.9 mm ± 0.2 mm
Wire colors	Brown, white, blue, black, gray
External sheath, color	Black RAL 9005
Insulation resistance	70 GΩ*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 <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
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
<b>Fuse</b>		
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
<b>Marking</b>		
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

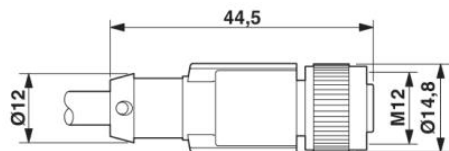
1430899	PROT-M12 MS-PA-CHAIN	M12 sealing cap with fixing band, for sensor cables, for free M12 sockets
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#### Tools

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 <sup>2</sup> , self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 mm <sup>2</sup> stranded/1.5 mm <sup>2</sup> 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

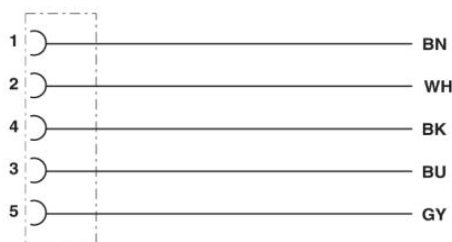
## Diagrams/Drawings

### Dimensioned drawing



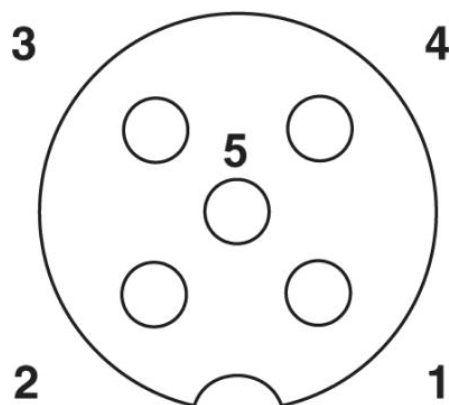
M12 x 1 female connector, straight, shielded

### Circuit diagram



Contact assignment of the M12 socket

### Schematic diagram



Pin assignment M12 socket, 5-pos., A-coded, socket side view



PUR halogen-free black shielded [PUR]

Connection data incl. use groups

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