

## Sensor/actuator cable - SAC-5P- 3,0-PUR/M12FR SH - 1682977

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Sensor/actuator cable, 5-position, PUR halogen-free, black-gray RAL 7021, shielded, free cable end, on Socket angled M12, A-coded, cable length: 3 m

### Why buy this product

- Easy and safe: 100% electrically tested plug-in components
- Our standard: robust halogen-free PUR cable
- Reliable signal transmission – 360° shielding in environments with electromagnetic interference

### Key Commercial Data

Packing unit	1 STK
GTIN	 4 017918 169251
GTIN	4017918169251
Sales Key	02

### Technical data

#### Dimensions

Length of cable	3 m
Stripping length of the free conductor end	50 mm

#### Ambient conditions

Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
Degree of protection	IP65
	IP67

#### General

Rated current at 40°C	4 A
Rated voltage	48 V AC
	60 V DC
Number of positions	5

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## Technical data

### General

Insulation resistance	≥ 100 MΩ
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Status display	No
Protective circuit/component	Unwired
Overvoltage category	II
Degree of pollution	3
Insertion/withdrawal cycles	≥ 100
Torque	0.4 Nm (M12 connector)

### Material

Flammability rating according to UL 94	HB
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

### Standards and Regulations

Standard designation	M12 connector
Standards/regulations	IEC 61076-2-101
Flammability rating according to UL 94	HB

### Cable

Cable type	PUR halogen-free black
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)
Wire colors	Brown, white, blue, black, gray
Overall twist	5 wires around filler to the core
Shielding	Tinned copper braided shield
Optical shield covering	80 %
External sheath, color	black RAL 9005
External cable diameter D	5.25 mm ±0.2 mm
Smallest bending radius, fixed installation	26 mm
Smallest bending radius, movable installation	52 mm (up to +60°C)
Number of bending cycles	10000000

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## Technical data

### Cable

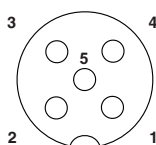
Bending radius	52 mm
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s <sup>2</sup>
Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Insulation resistance	70 GΩ*km (at 20 °C)
Conductor resistance	max. 57 Ω/km (at 20 °C)
Nominal voltage, cable	300 V (at 20 °C)
Test voltage Core/Core	3000 V (at 20 °C)
Special properties	Flexible cable conduit capable
Flame resistance	in accordance with UL 758/1581 FT2 DIN EN 60332-2-2 (20 s)
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 partly UV-resistant in accordance with DIN EN ISO 4892-2-A
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation) -25 °C ... 80 °C (cable, flexible installation)

### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

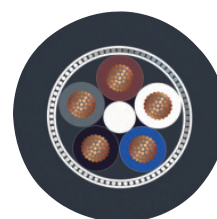
## Drawings

Schematic diagram



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

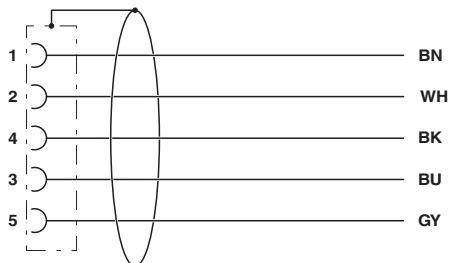
Cable cross section



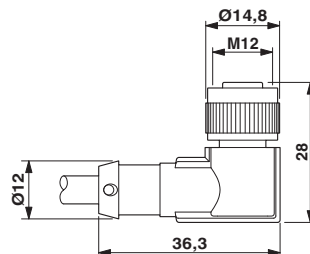
PUR halogen-free black [PUR]

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Circuit diagram



Dimensional drawing



Contact assignment of the M12 socket

M12 x 1 socket, angled, shielded

## Approvals

### Approvals

Approvals

UL Listed / cUL Listed / EAC / cULus Listed

Ex Approvals

### Approval details

UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 221474
Nominal voltage UN		125 V	
Nominal current IN		4 A	

cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 221474
Nominal voltage UN		125 V	
Nominal current IN		4 A	

EAC		EAC-Zulassung
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### Approvals

cULus Listed



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