

## Sensor/Actuator cable - SAC-5P-M12MS/1,0-PUR/M12FR SH5 - 1401031

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Sensor/Actuator cable, 5-position, PUR halogen-free, black-gray RAL 7021, shielded, Plug straight M12, A-coded, on Socket angled M12, A-coded, Cable length: 1 m



### Key Commercial Data

Packing unit	1 STK
Minimum order quantity	25 STK
Custom tariff number	85444290
Country of origin	Poland

### Technical data

#### Dimensions

Length of cable	1 m
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#### Ambient conditions

Degree of protection	IP65
	IP67

#### General

Rated current at 40°C	4 A
Rated voltage	60 V
Number of positions	5
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Status display	No
Overvoltage category	II
Degree of pollution	3

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## Technical data

### General

Insertion/withdrawal cycles	≥ 100
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### 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

Flammability rating according to UL 94	HB
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### Cable

Cable type	PUR halogen-free black
Cable type (abbreviation)	PUR
Cable abbreviation	Li9Y11Y
UL AWM style	20549 / 10493 (80°C/300 V)
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)
Thickness, insulation	≥ 0.21 mm
Wire colors	brown, white, blue, black, green-yellow
Overall twist	5 wires around filler to the core
External sheath, color	black-gray RAL 7021
Outer sheath thickness	approx. 0.7 mm
External cable diameter D	5 mm ±0.15 mm
Smallest bending radius, fixed installation	25 mm
Smallest bending radius, movable installation	50 mm
Number of bending cycles	4000000
Bending radius	50 mm
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s <sup>2</sup>
Cable weight	35 kg/km
Outer sheath, material	PUR
Material conductor insulation	PP

# Sensor/Actuator cable - SAC-5P-M12MS/1,0-PUR/M12FR SH5 - 1401031

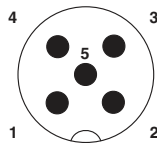
## Technical data

### Cable

Conductor material	Bare Cu litz wires
Insulation resistance	$\geq 16 \text{ G}\Omega \cdot \text{km}$ (at 20 °C)
Conductor resistance	max. 58 $\Omega/\text{km}$ (at 20 °C)
Nominal voltage, cable	300 V
Test voltage, cable	3000 V
Special properties	Flexible cable conduit capable
	Silicone-free
	Free of substances which would hinder coating with paint or varnish
	Flexible
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	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
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-25 °C ... 80 °C (cable, flexible installation)

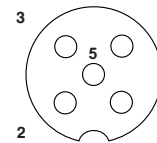
## Drawings

Schematic diagram



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

Schematic diagram



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

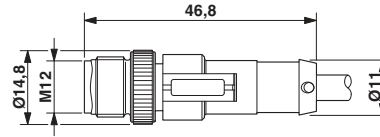
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Cable cross section



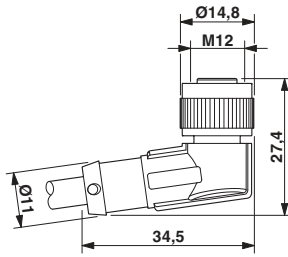
PUR halogen-free black [PUR]

Dimensional drawing



M12 x 1 plug, straight

Dimensional drawing



M12 x 1 socket, angled

Circuit diagram



Contact assignment of the M12 plug and the M12 socket

## Classifications

eCl@ss

eCl@ss 4.0	27060306
eCl@ss 4.1	27060306
eCl@ss 5.0	27061801
eCl@ss 5.1	27061801
eCl@ss 6.0	27061801
eCl@ss 7.0	27061801
eCl@ss 8.0	27279218
eCl@ss 9.0	27060311

ETIM

ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC001855

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### Classifications

#### UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	31251501