

## Sensor/Actuator cable - SAC-3P-M12MR/ 5,0-800 - 1456912

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Sensor/Actuator cable, 3-position, PUR halogen-free, welding sputter-resistant, highly flexible, Gray RAL 7001, Plug angled M12, A-coded, on free cable end, Cable length: 5 m, for robots and drag chains

### Product Features

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Flexible: cable supports a high degree of torsion and bending
- ✓ Reliable solution for the body shop as cable is resistant to welding sparks



### Key commercial data

Packing unit	1 pc
Custom tariff number	85444290
Country of origin	Poland

### Technical data

#### Dimensions

Length of cable	5 m
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#### Ambient conditions

Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
Degree of protection	IP65
	IP67
	IP68

#### General

Rated current at 40°C	4 A
Rated voltage	250 V
Number of positions	3
Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ

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## Technical data

### General

Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Status display	No
Protective circuit/component	Unwired
Surge voltage category	II
Pollution degree	3
Insertion/withdrawal cycles	≥ 100
Torque	0.4 Nm (M12 connector)

### Material

Inflammability class 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

### Cable

Note	Due to the extremely robust outer sheath, this cable should only be stripped in 5 cm increments.
Cable type	Gray, highly flexible PUR
Cable type (abbreviation)	800
Cable abbreviation	Li12Y11Y-HF
Conductor cross section	3x 0.34 mm <sup>2</sup> (signal line)
AWG signal line	22
Conductor structure signal line	42x 0.10 mm
Core diameter including insulation	1.3 mm ±0.05 mm (signal line)
Wire colors	brown, blue, black
Overall twist	3 wires, twisted
External sheath, color	Gray RAL 7001
External cable diameter D	4.5 mm ±0.2 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	5 x D
Number of bending cycles	15000000
Bending radius	50 mm
Traversing path	0.9 m
Traversing rate	5 m/s
Acceleration	30 m/s <sup>2</sup>
Torsion force	± 360 °/m

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### Technical data

#### Cable

Outer sheath, material	PUR
Material conductor insulation	PES
Conductor material	Bare Cu litz wires
Insulation resistance	$\geq 20 \text{ M}\Omega \cdot \text{km}$
Conductor resistance	approx. $53 \text{ }\Omega/\text{km}$
Nominal voltage, cable	300 V
Test voltage, cable	2000 V
Special properties	Sheath resistant to welding beads, can be recycled, matt, without adhesion, wear-resistant, flame resistant and self-extinguishing
	Free from silicone and cadmium
	Free of substances which would hinder coating with paint or varnish
Flame resistance	DIN VDE 0472 part 804, test type B
	IEC 60332-1
	In accordance with UL FT-2
Halogen-free	The cable is halogen-free
Resistance to oil	According to VDE 0250 Part 407
Other resistance	Highly resistant to acids, alkaline solutions and solvents
Ambient temperature (operation)	-40 °C ... 90 °C (cable, fixed installation)
	-30 °C ... 90 °C (cable, flexible installation)
	to 120 °C (for 3000 h)

### 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	27279218
eCl@ss 7.0	27279218
eCl@ss 8.0	27279218

#### ETIM

ETIM 4.0	EC001855
ETIM 5.0	EC001855

#### UNSPSC

UNSPSC 6.01	31251501
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### Classifications

#### UNSPSC

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

### Approvals

#### Approvals


Approvals

GOST

Ex Approvals

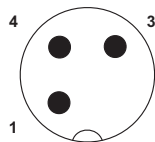
Approvals submitted

#### Approval details

GOST 
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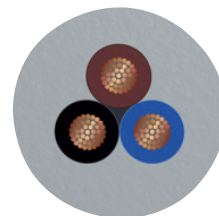
### Drawings

Schematic diagram



Pin assignment M12 plug, 3-pos., A-coded, view male side

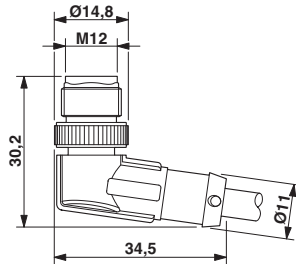
Cable cross section



Gray, highly flexible PUR [800]

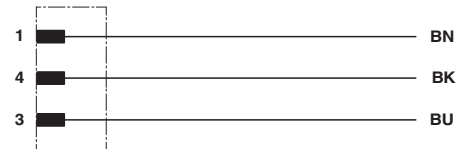
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Dimensioned drawing



M12 x 1 male plug, angled

Circuit diagram



Contact assignment of the M12 plug