

## Sensor/actuator cable - SAC-4P-M12MS/0,6-600/M12FS FB - 1404024

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Sensor/actuator cable, 4-position, PP-EPDM, gray RAL 7035, Plug straight M12, coding: A, on Socket straight M12, coding: A, cable length: 0.6 m, Hygienic design, with plastic knurl

### Your advantages

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Contamination can be detected quickly – thanks to the light color



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 677691
GTIN	4046356677691

### Technical data

#### Dimensions

Length of cable	0.6 m
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#### Ambient conditions

Ambient temperature (operation)	-40 °C ... 105 °C (Plug / socket)
	-40 °C ... 105 °C (Plug / socket)
Degree of protection	IP65
	IP67
	IP68
	IP69K

#### General

Rated current at 40°C	4 A
Rated voltage	250 V AC
	250 V DC
Number of positions	4

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## Technical data

### General

Insulation resistance	≥ 100 MΩ
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
	Material conformance FDA 21 CFR 177.2600
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

Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PP
Material of grip body	PP
Material, knurls	Polypropylene
Sealing material	FKM

### Standards and Regulations

Standards/specifications	M12 connector IEC 61076-2-101
	Material conformance FDA 21 CFR 177.2600

### Cable

Cable abbreviation	Li9Y9Y
Conductor cross section	4x 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
Overall twist	4 wires, twisted
Length of twist, overall twist	48 mm
Outer sheath thickness	approx. 0.8 mm
External cable diameter D	4.7 mm ±0.15 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Number of bending cycles	4000000
Minimum bending radius, drag chain applications	10 x D
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s <sup>2</sup>

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## Technical data

### Cable

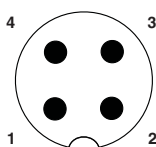
Torsion force	± 270 °/m
Torsion cycles	≥ 4000000
Torsional frequency	≤ 25 (Torsion cycles/min)
Cable weight	30 kg/km
External sheath, color	gray RAL 7035
Outer sheath, material	PP-EPDM
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 1 GΩ*km
Conductor resistance	approx. 58 MΩ/km
Nominal voltage, cable	≤ 300 V
Test voltage, cable	≥ 3000 V
Special properties	partly suitable for use with drag chain
Other resistance	Resistant to cold bending and cold impacts According to DIN EN 60811-1-4 (-40 °C)
Halogen-free	in accordance with DIN VDE 0472 part 815
Ambient temperature (operation)	-40 °C ... 105 °C (cable, fixed installation)
	-25 °C ... 105 °C (Cable, flexible installation)

### Environmental Product Compliance

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

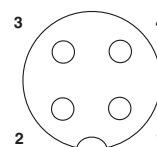
## Drawings

Schematic diagram



Pin assignment M12 plug, 4-pos., A-coded, view plug side

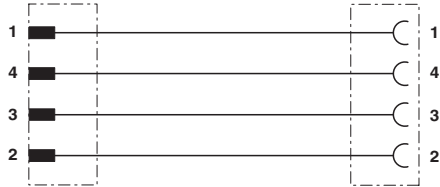
Schematic diagram



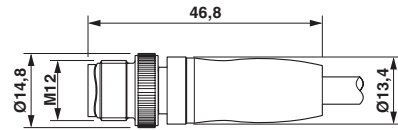
Pin assignment M12 socket, 4-pos., A-coded, view female side

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Circuit diagram



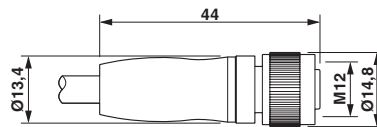
Dimensional drawing



Contact assignment of the M12 plug and the M12 socket

Plug, M12 x 1, straight, shielded

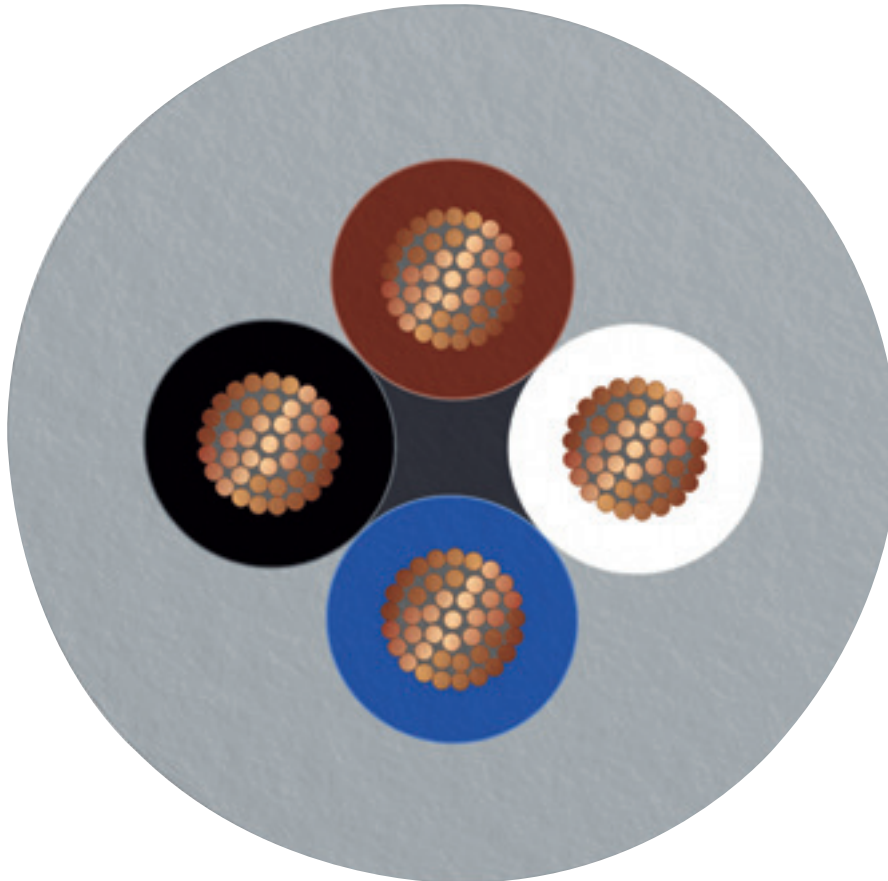
Dimensional drawing



M12 x 1 socket, straight

# Sensor/actuator cable - SAC-4P-M12MS/0,6-600/M12FS FB - 1404024

Cable cross section



## Classifications

### eCl@ss

eCl@ss 10.0.1	27060311
eCl@ss 11.0	27060311
eCl@ss 4.0	27060300
eCl@ss 4.1	27060300
eCl@ss 5.0	27061800
eCl@ss 5.1	27061800
eCl@ss 6.0	27279200
eCl@ss 7.0	27279218
eCl@ss 9.0	27060311

### ETIM

ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 6.0	EC001855

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## Classifications

### ETIM

ETIM 7.0	EC001855
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### UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	31251501
UNSPSC 19.0	31251501
UNSPSC 20.0	31251501
UNSPSC 21.0	31251501

## Approvals

### Approvals

Approvals

EAC-RoHS / EAC

Ex Approvals

### Approval details

EAC-RoHS		RU D- DE.HB35.B.00387
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EAC		RU C- DE.BL08.B.00286
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