

# Sensor/Actuator cable - SAC-3P-M12MS/2,0-PVC/M12FS B-L - 1431937

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Sensor/Actuator cable, 3-position, PVC, Black RAL 9005, Plug straight M12, A-coded, on Socket straight M12, A-coded, Cable length: 2 m

## Why buy this product

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Our PVC cable for average mechanical strain



## Key commercial data

Packing unit	1
GTIN	 4 046356 506540
Custom tariff number	85444290

## Technical data

### Dimensions

Length of cable	2 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
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101

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## Technical data

### General

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

Cable type	PVC black
Cable type (abbreviation)	PVC
Cable abbreviation	LiYY
UL AWM style	2464 / 1729 (80°C/300 V)
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	1.45 mm ±0.02 mm
Thickness, insulation	≥ 0.23 mm (Core insulation)
Wire colors	brown, blue, black
Overall twist	3 wires, twisted
External sheath, color	Black RAL 9005
Outer sheath thickness	≥ 0.76 mm
External cable diameter D	5.2 mm ±0.2 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Cable weight	40 kg/km
Outer sheath, material	PVC
Material conductor insulation	PVC
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 100 MΩ*km (at 20 °C)
Conductor resistance	max. 58 Ω/km (at 20 °C)
Nominal voltage, cable	≤ 300 V
Test voltage, cable	≥ 2500 V
Flame resistance	As per UL-Style 2464
Resistance to oil	According to DIN EN 60811-2-1, 168 h at 90°C

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## Technical data

### Cable

Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-25 °C ... 80 °C (cable, flexible installation)

## 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

### ETIM

ETIM 4.0	EC001855
ETIM 5.0	EC001855

### UNSPSC

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

## Approvals

### Approvals

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#### Approvals

UL Listed / cUL Listed / cULus Listed

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#### Ex Approvals

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#### Approvals submitted

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### Approval details

# Sensor/Actuator cable - SAC-3P-M12MS/2,0-PVC/M12FS B-L - 1431937

## Approvals

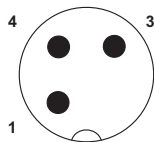
UL Listed	
Nominal current I <sub>N</sub>	4 A
Nominal voltage U <sub>N</sub>	300 V

cUL Listed	
Nominal current I <sub>N</sub>	4 A
Nominal voltage U <sub>N</sub>	300 V

cULus Listed	
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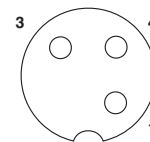
## Drawings

Schematic diagram



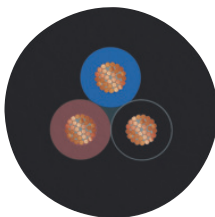
Pin assignment M12 plug, 3-pos., A-coded, view male side

Schematic diagram



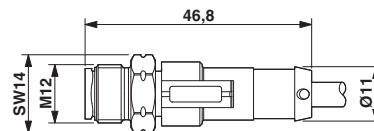
Pin assignment M12 socket, 3-pos., A-coded, view female side

Cable cross section



PVC black [PVC]

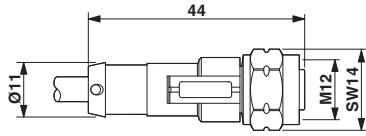
Dimensioned drawing



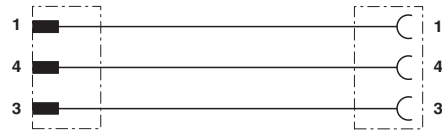
M12 x 1 plug, straight

# Sensor/Actuator cable - SAC-3P-M12MS/2,0-PVC/M12FS B-L - 1431937

Dimensioned drawing



Circuit diagram



M12 x 1 socket, straight

Contact assignment of the M12 connector and the M12 socket