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Especialistas en Automatización

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## Sensor/Actuator cable - SAC-4P-M12MR/3,0-PVC/M12FR - 1415645

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Sensor/Actuator cable, 4-position, PVC, black RAL 9005, Plug angled M12, A-coded, on Socket angled M12, A-coded, Cable length: 3 m

### Why buy this product

- Easy and safe: 100% electrically tested plug-in components

### Key Commercial Data

Packing unit	1 STK
GTIN	 4 055626 050133

### Technical data

#### Dimensions

Length of cable	3 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	4
Insulation resistance	≥ 10 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

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## Technical data

### 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	PVC black
Cable type (abbreviation)	PVC
Cable abbreviation	LiYY
UL AWM style	2464 / 1729 (80°C/300 V)
Conductor cross section	4x 0.34 mm <sup>2</sup> (Signal line)
AWG signal line	22
Conductor structure signal line	19x 0.15 mm
Core diameter including insulation	1.26 mm ±0.05 mm
Thickness, insulation	≥ 0.23 mm (Core insulation)
Wire colors	brown, white, blue, black
Overall twist	4 wires, twisted
External sheath, color	black RAL 9005
Outer sheath thickness	≥ 0.76 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
Cable weight	40 kg/km
Outer sheath, material	PVC
Material conductor insulation	PVC
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 200 MΩ*km (at 20 °C)
Conductor resistance	max. 57 Ω/km (at 20 °C)
Nominal voltage, cable	≤ 300 V
Test voltage, cable	≥ 3000 V
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-25 °C ... 80 °C (cable, flexible installation)

# Sensor/Actuator cable - SAC-4P-M12MR/3,0-PVC/M12FR - 1415645

## Classifications

### eCl@ss

eCl@ss 5.1	27061801
eCl@ss 6.0	27061801
eCl@ss 8.0	27279218

### ETIM

ETIM 5.0	EC001855
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## 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

UL Listed	
Nominal current IN	4 A
Nominal voltage UN	125 V

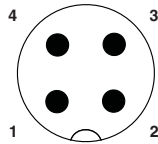
cUL Listed	
Nominal current IN	4 A
Nominal voltage UN	125 V

cULus Listed	
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## Drawings

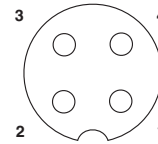
# Sensor/Actuator cable - SAC-4P-M12MR/3,0-PVC/M12FR - 1415645

Schematic diagram



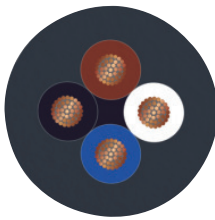
Pin assignment M12 plug, 4-pos., A-coded, view plug side

Schematic diagram



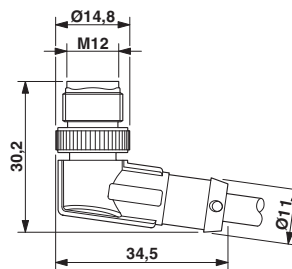
Pin assignment M12 socket, 4-pos., A-coded, view female side

Cable cross section



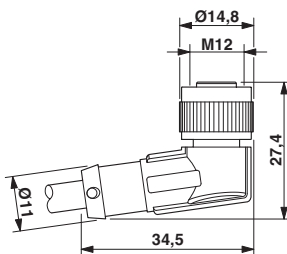
PVC black [PVC]

Dimensional drawing



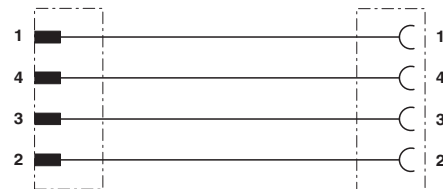
M12 x 1 male plug, angled

Dimensional drawing



M12 x 1 socket, angled

Circuit diagram



Contact assignment of the M12 plug and the M12 socket

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