

## Sensor/Actuator cable - SAC-5P-M12MS/1,5-PVC/M12FR-3L - 1415705

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Sensor/Actuator cable, 5-position, PVC, Black RAL 9005, Plug straight M12, A-coded, on Socket angled M12, A-coded, with 3 LEDs, Cable length: 1.5 m

### Product Features

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Convenient: increased machine availability thanks to quick and easy diagnostics
- ✓



### Key commercial data

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

### Technical data

#### Dimensions

Length of cable	1.5 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	24 V
Number of positions	5
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	3 LEDs
Protective circuit/component	Unwired
Surge voltage category	II
Pollution degree	3
Insertion/withdrawal cycles	≥ 100

### 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
Sealing material	NBR

### Cable

Cable type	PVC black
Cable type (abbreviation)	PVC
Cable abbreviation	LiYY
UL AWM style	2464 / 1729 (80°C/300 V)
Conductor cross section	5x 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, green-yellow
Overall twist	5 wires around filler to the core
External sheath, color	Black RAL 9005
Outer sheath thickness	≥ 0.76 mm
External cable diameter D	5 mm ±0.15 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Cable weight	51 kg/km
Outer sheath, material	PVC
Material conductor insulation	PVC
Conductor material	Bare Cu litz wires

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## Technical data

### Cable

Insulation resistance	$\geq 200 \text{ M}\Omega \cdot \text{km}$ (at 20 °C)
Conductor resistance	max. 57 $\Omega/\text{km}$ (at 20 °C)
Nominal voltage, cable	$\leq 300 \text{ V}$
Test voltage, cable	$\geq 3000 \text{ V}$
Flame resistance	As per UL-Style 2464

## Classifications

### eCl@ss

eCl@ss 5.1	27061801
eCl@ss 6.0	27061801

### 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 $I_N$	4 A
Nominal voltage $U_N$	24 V

# Sensor/Actuator cable - SAC-5P-M12MS/1,5-PVC/M12FR-3L - 1415705

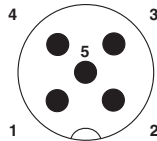
## Approvals

cUL Listed	
Nominal current I <sub>N</sub>	4 A
Nominal voltage U <sub>N</sub>	24 V

cULus Listed	
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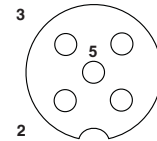
## Drawings

Schematic diagram



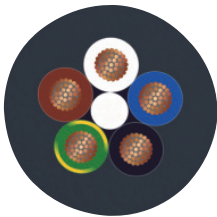
Pin assignment M12 male connector, 5-pos., A-coded, male side

Schematic diagram



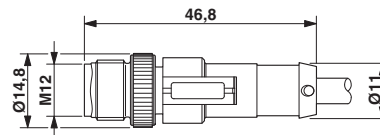
Pin assignment M12 socket, 5-pos., A-coded, socket side view

Cable cross section



PVC black [PVC]

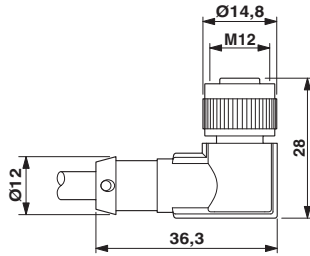
Dimensional drawing



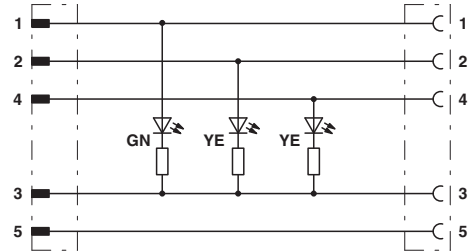
M12 x 1 plug, straight

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Dimensional drawing



Circuit diagram



Contact assignment of M12 plugs / sockets with 3 LEDs

M12 x 1 socket, angled