

## Sensor/Actuator cable - SAC-3P-M12MR/3,0-PVC/M 8FR - 1415541

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Sensor/Actuator cable, 3-position, PVC, Black RAL 9005, Plug angled M12, A-coded, on Socket angled M8, Cable length: 3 m

### Product Features

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



### Key commercial data

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

### 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	60 V
Number of positions	3
Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Coding	A - standard

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### Technical data

#### General

Standards/regulations	M12 connector IEC 61076-2-101
	M8 connector IEC 61076-2-104
Status display	No
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	3x 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, blue, black
Overall twist	3 wires, twisted
External sheath, color	Black RAL 9005
Outer sheath thickness	≥ 0.76 mm
External cable diameter D	4.3 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

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## Technical data

### Cable

Insulation resistance	$\geq 100 \text{ M}\Omega \cdot \text{km}$ (at 20 °C)
Conductor resistance	max. 57 $\Omega/\text{km}$ (at 20 °C)
Nominal voltage, cable	$\leq 300 \text{ V}$
Test voltage, cable	$\geq 2500 \text{ V}$
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 <sub>N</sub>	4 A
Nominal voltage U <sub>N</sub>	125 V

# Sensor/Actuator cable - SAC-3P-M12MR/3,0-PVC/M 8FR - 1415541

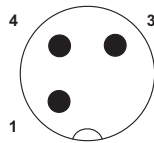
## Approvals

cUL Listed	
Nominal current I <sub>N</sub>	4 A
Nominal voltage U <sub>N</sub>	125 V

cULus Listed	
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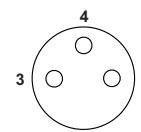
## Drawings

Schematic diagram



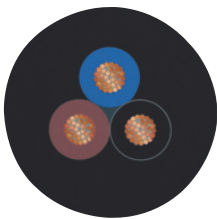
Pin assignment M12 plug, 3-pos., A-coded, view male side

Schematic diagram



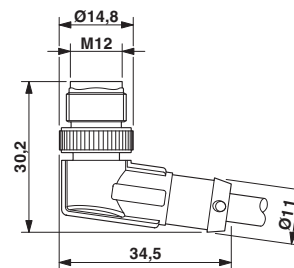
Pin assignment M8 socket, 3-pos., view female side

Cable cross section



PVC black [PVC]

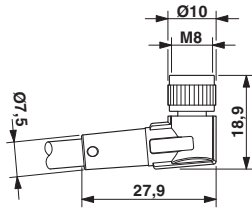
Dimensional drawing



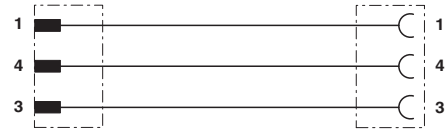
M12 x 1 male plug, angled

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Dimensional drawing



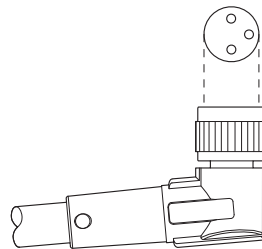
Circuit diagram



Contact assignment of M12 plugs / M8 sockets

Socket M8 x 1, angled

Schematic diagram



Layout of connector pin assignments