

## Sensor/Actuator cable - SAC-8P-M12MS/ 1,5-PVC/M12FR - 1415747

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Sensor/Actuator cable, 8-position, PVC, Black RAL 9005, Plug straight M12, A-coded, on Socket angled M12, A-coded, Cable length: 1.5 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	Poland

### Technical data

#### Dimensions

Length of cable	1.5 m
-----------------	-------

#### Ambient conditions

Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
Degree of protection	IP65
	IP67
	IP68

#### General

Rated current at 40°C	2 A
Rated voltage	30 V
Number of positions	8
Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Coding	A - standard

## Sensor/Actuator cable - SAC-8P-M12MS/ 1,5-PVC/M12FR - 1415747

### Technical data

#### General

Standards/regulations	M12 connector IEC 61076-2-101
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	CuZn
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	8x 0.25 mm <sup>2</sup> (signal line)
AWG signal line	24
Conductor structure signal line	14x 0.15 mm
Core diameter including insulation	1.17 mm ±0.05 mm
Thickness, insulation	≥ 0.23 mm
Wire colors	white, brown, green, yellow, gray, pink, blue, red
Overall twist	8 wires around filler to the core
External sheath, color	Black RAL 9005
Outer sheath thickness	≥ 0.76 mm
External cable diameter D	5.9 mm ±0.2 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Cable weight	54 kg/km
Outer sheath, material	PVC
Material conductor insulation	PVC
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 200 MΩ*km (at 20 °C)

# Sensor/Actuator cable - SAC-8P-M12MS/ 1,5-PVC/M12FR - 1415747

## Technical data

### Cable

Conductor resistance	79 Ω/km (at 20 °C)
Nominal voltage, cable	≤ 300 V AC
Test voltage, cable	≥ 3000 V AC

## Classifications

### eCl@ss

eCl@ss 5.1	27061801
eCl@ss 6.0	27061801

### ETIM

ETIM 5.0	EC001855
----------	----------

## Approvals

### Approvals

---

### Approvals

UL Listed / cUL Listed / cULus Listed

---


### Ex Approvals

---

### Approvals submitted

---

## Approval details

UL Listed 	
Nominal current I <sub>N</sub>	2 A
Nominal voltage U <sub>N</sub>	30 V

# Sensor/Actuator cable - SAC-8P-M12MS/ 1,5-PVC/M12FR - 1415747

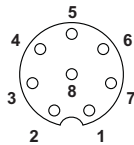
## Approvals

cUL Listed	
Nominal current I <sub>N</sub>	2 A
Nominal voltage U <sub>N</sub>	30 V

cULus Listed	
--------------	--

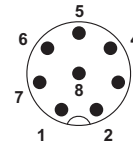
## Drawings

Schematic diagram



Pin assignment M12 socket, 8-pos., A-coded, view female side

Schematic diagram



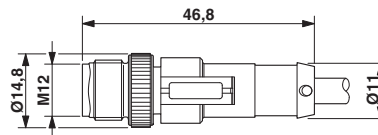
Pin assignment M12 plug, 8-pos., view plug side

Cable cross section



PVC black [PVC]

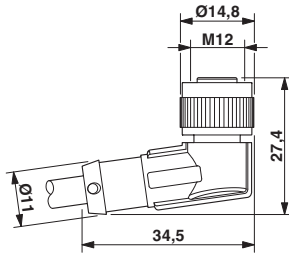
Dimensional drawing



M12 x 1 plug, straight

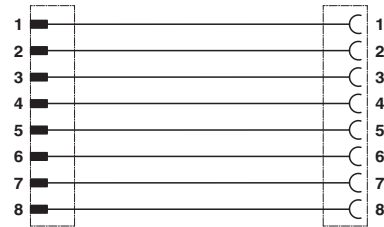
## Sensor/Actuator cable - SAC-8P-M12MS/ 1,5-PVC/M12FR - 1415747

Dimensional drawing



M12 x 1 socket, angled

Circuit diagram



Contact assignment of the M12 plug and the M12 socket