

# SAC-5P-MS/10,0-PUR/FS SCO - Sensor/actuator cable



1413171

<https://www.phoenixcontact.com/us/products/1413171>

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 documentation. Our general terms of use for downloads are valid.



Sensor/actuator cable, 5-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12 SPEEDCON, coding: A, on Socket straight M12 SPEEDCON, coding: A, cable length: 10 m

## Commercial data

Item number	1413171
Packing unit	1 pc
Minimum order quantity	50 pc
Product key	AF1CDA
GTIN	4046356990172
Weight per piece (including packing)	366.4 g
Weight per piece (excluding packing)	366.4 g
Country of origin	PL

# SAC-5P-MS/10,0-PUR/FS SCO - Sensor/actuator cable



1413171

<https://www.phoenixcontact.com/us/products/1413171>

## Technical data

### Product properties

Product type	Sensor/actuator cable
Number of positions	5
No. of cable outlets	1
Shielded	no
Coding	A

### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Material specifications

Flammability rating according to UL 94	HB
Seal material	NBR
Material of grip body	TPU, hardly inflammable, self-extinguishing
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material for screw connection	Zinc die-cast, nickel-plated
Outer sheath, material	PUR
Conductor material	Bare Cu litz wires

### Electrical properties

Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	48 V AC
	60 V DC
Nominal current I <sub>N</sub>	4 A
Max. conductor resistance	58 Ω/m

### Mechanical properties

#### Mechanical data

Max. bending cycles	4000000
---------------------	---------

### Signaling

Status display	no
Status display present	no

### Connector

#### Connection 1

Type	Plug straight M12 SPEEDCON
Number of positions	5

# SAC-5P-MS/10,0-PUR/FS SCO - Sensor/actuator cable



1413171

<https://www.phoenixcontact.com/us/products/1413171>

Locking type	SPEEDCON
Coding type	A

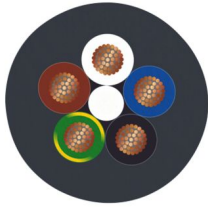
## Connection 2

Type	Socket straight M12 SPEEDCON
Number of positions	5
Locking type	SPEEDCON
Coding type	A

## Cable/line

Cable length	10 m
--------------	------

## PUR halogen-free black [PUR]

Dimensional drawing	
Cable weight	33 kg/km
UL AWM Style	20549
Number of positions	5
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor cross-section	5x 0.34 mm <sup>2</sup> (Signal line)
Wire diameter incl. insulation	1.27 mm 0.05 mm (Signal line)
External cable diameter	4.55 mm ±0.15 mm
Outer sheath, material	PUR
External sheath, color	black-gray RAL 7021
Conductor material	Bare Cu litz wires
Material wire insulation	PP
Single wire, color	brown, white, blue, black, green-yellow
Thickness, insulation	approx. 0.50 mm
Max. conductor resistance	max. 58 Ω/km (at 20 °C)
Insulation resistance	≥ 16 GΩ*km (at 20 °C)
Nominal voltage, cable	300 V
Test voltage	3000 V
Smallest bending radius, fixed installation	23 mm
Smallest bending radius, movable installation	46 mm
Dynamic load capacity (bending)	Max. bending cycles: 10000000, Bending radius: 46 mm, Bending radius: 10 x D, Traversing path: 10 m, Traversing rate: 3

# SAC-5P-MS/10,0-PUR/FS SCO - Sensor/actuator cable



1413171

<https://www.phoenixcontact.com/us/products/1413171>

	m/s, Acceleration: 10 m/s <sup>2</sup>
Dynamic load capacity (torsion)	Torsion: ±180 °/m, Torsion cycles: ≥5000000, Torsional frequency: 35 cycles/min.
Halogen-free	in accordance with DIN VDE 0472 part 815
Flame resistance	in accordance with UL 758/1581 FT2 DIN EN 60332-2-2 (20 s)
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	Highly resistant to acids, alkaline solutions and solvents hydrolysis and microbe resistant Resistant to salt water partly UV-resistant (in accordance with DIN EN ISO 4892-2-A)
Special properties	Flexible cable conduit capable Silicone-free Free of substances which would hinder coating with paint or varnish flexible
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation) -25 °C ... 80 °C (Cable, flexible installation)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP65 IP68
Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket) -40 °C ... 80 °C (cable, fixed installation) -5 °C ... 80 °C (Cable, flexible installation)

# SAC-5P-MS/10,0-PUR/FS SCO - Sensor/actuator cable

1413171

<https://www.phoenixcontact.com/us/products/1413171>

## Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing



M12 x 1 socket, straight

# SAC-5P-MS/10,0-PUR/FS SCO - Sensor/actuator cable

1413171

<https://www.phoenixcontact.com/us/products/1413171>

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

# SAC-5P-MS/10,0-PUR/FS SCO - Sensor/actuator cable



1413171

<https://www.phoenixcontact.com/us/products/1413171>

Circuit diagram



Contact assignment of the M12 plug and the M12 socket

# SAC-5P-MS/10,0-PUR/FS SCO - Sensor/actuator cable



1413171

<https://www.phoenixcontact.com/us/products/1413171>

## Classifications

### ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

### UNSPSC

UNSPSC 21.0	26121600
-------------	----------

# SAC-5P-MS/10,0-PUR/FS SCO - Sensor/actuator cable



1413171

<https://www.phoenixcontact.com/us/products/1413171>

## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
---	--------------------

### China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

### EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
-------------------------------------	----------------------------

Phoenix Contact 2026 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)