

# SAC-5P-M12MS/2,0-PVC B-L - Sensor/actuator cable



1431526

<https://www.phoenixcontact.com/us/products/1431526>

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, PVC, black RAL 9005, Plug straight M12, coding: A, on free cable end, cable length: 2 m

## Your advantages

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

## Commercial data

Item number	1431526
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	BF03
Product key	AF1CDA
GTIN	4046356506205
Weight per piece (including packing)	109.6 g
Weight per piece (excluding packing)	108.5 g
Customs tariff number	85444290
Country of origin	CN

1431526

<https://www.phoenixcontact.com/us/products/1431526>

## Technical data

### Product properties

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

### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Material specifications

Flammability rating according to UL 94	HB
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

### Electrical properties

Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage $U_N$	60 V
Nominal current $I_N$	4 A

### Mechanical properties

#### Mechanical data

Insertion/withdrawal cycles	$\geq 100$
-----------------------------	------------

### Signaling

Status display	no
Status display present	no

### Connector

#### Connection 1

Type	Plug straight M12
Number of positions	5
Coding type	A

#### Connection 2

Type	free cable end
------	----------------

### Cable/line

Cable length	2 m
--------------	-----

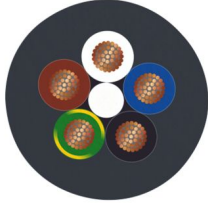
# SAC-5P-M12MS/2,0-PVC B-L - Sensor/actuator cable



1431526

<https://www.phoenixcontact.com/us/products/1431526>

PVC black [PVC]

Dimensional drawing	
Cable weight	51 kg/km
UL AWM Style	2464 / 1729 (80°C/300 V)
Number of positions	5
Shielded	no
Cable type	PVC black [PVC]
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	1.45 mm ±0.02 mm
External cable diameter	5.90 mm ±0.15 mm
Outer sheath, material	PVC
External sheath, color	black RAL 9005
Conductor material	Bare Cu litz wires
Material wire insulation	PVC
Single wire, color	brown, white, blue, black, green-yellow
Thickness, insulation	≥ 0.23 mm (Core insulation)
Thickness, outer sheath	≥ 0.76 mm
Overall twist	5 wires around filler to the core
Max. conductor resistance	max. 58 Ω/km (at 20 °C)
Insulation resistance	≥ 200 MΩ*km (at 20 °C)
Nominal voltage, cable	≤ 300 V
Test voltage	≥ 3000 V
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Smallest bending radius, fixed installation	30 mm
Smallest bending radius, movable installation	59 mm
Flame resistance	As per UL-Style 2464 according to UL 758/1581 FT1
Resistance to oil	according to DIN EN 60811-2-1, 168 h at 90 °C
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation) -25 °C ... 80 °C (Cable, flexible installation)

## Environmental and real-life conditions

Ambient conditions

# SAC-5P-M12MS/2,0-PVC B-L - Sensor/actuator cable



1431526

<https://www.phoenixcontact.com/us/products/1431526>

Degree of protection	IP65
	IP67
	IP68
Ambient temperature (operation) (male connector/female connector)	-25 °C ... 90 °C (Plug / socket)
Ambient temperature (operation) (Cable, fixed installation)	-40 °C ... 80 °C (cable, fixed installation)
Ambient temperature (operation) (Cable, flexible installation)	-25 °C ... 80 °C (Cable, flexible installation)

## Standards and regulations

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101

Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Schematic diagram



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

# SAC-5P-M12MS/2,0-PVC B-L - Sensor/actuator cable



1431526

<https://www.phoenixcontact.com/us/products/1431526>

Circuit diagram



Contact assignment of the M12 plug

# SAC-5P-M12MS/2,0-PVC B-L - Sensor/actuator cable



1431526

<https://www.phoenixcontact.com/us/products/1431526>

## Classifications

### ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

1431526

<https://www.phoenixcontact.com/us/products/1431526>

## Environmental product compliance

### China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

### 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)