

# Sensor/actuator cable - SAC-5P-MS/ 1,5-PUR/AD-2L SCO



1435056

<https://www.phoenixcontact.com/pc/products/1435056>

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 Valve connector AD (pressure switch), with 2 LEDs, cable length: 1.5 m

## Your advantages

- Easy and safe: 100% electrically tested plug-in components
- Save time, thanks to installation with SPEEDCON fast locking system
- Our standard: robust halogen-free PUR cable

## Commercial Data

Item number	1435056
Packing unit	1 pc
Minimum order quantity	1 pc
Product Key	BF1DKA
Catalog Page	Page 240 (C-2-2019)
GTIN	4046356413428
Weight per Piece (including packing)	100.7 g
Weight per Piece (excluding packing)	99 g
Customs tariff number	85444290
Country of origin	PL

# Sensor/actuator cable - SAC-5P-MS/ 1,5-PUR/AD-2L SCO



1435056

<https://www.phoenixcontact.com/pc/products/1435056>

## Technical Data

### Product properties

Product type	Sensor/actuator cable with valve connector
Number of positions	5
Application	Standard
No. of cable outlets	1
Shielded	no
Coding	A - standard

### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Material specifications

Flammability rating according to UL 94	V0
Sealing material	TPU (Seal molded)
Material housing valve plug	TPU
Material of grip body	TPU
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Contact material	CuSn
Valve plug contact insert material	PA 6
Contact surface material	Sn
Material for screw connection	Zinc die-cast, nickel-plated

### Electrical properties

Contact resistance	$\leq 5 \text{ m}\Omega$
Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage $U_N$	24 V DC
Nominal current $I_N$	4 A
Protective circuit	unwired

### Valve connector characteristics

Fixing screws	M3 x 29
---------------	---------

### Mechanical properties

#### Mechanical data

Insertion/withdrawal cycles	$\geq 100$ (M12 connector)
-----------------------------	----------------------------

### LED signaling

Status display	2 LEDs
Status display present	yes

# Sensor/actuator cable - SAC-5P-MS/ 1,5-PUR/AD-2L SCO

1435056

<https://www.phoenixcontact.com/pc/products/1435056>

## Connector

### Connection 1

Head design	Plug
Head cable outlet	straight
Head thread type	M12
Head locking type	SPEEDCON
Coding	A

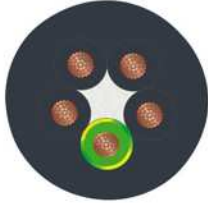
### Connection 2

Head design	Valve connector
Head thread type	AD (pressure switch)
Status indicator head	2 LEDs

## Cable / line

Cable length	1.5 m
--------------	-------

### PUR halogen-free black [PUR]

Dimensional drawing	
Cable weight	44.8 kg/km
UL AWM Style	20549
Number of positions	5
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	28x 0.15 mm
AWG signal line	20
Conductor cross section	5x 0.5 mm <sup>2</sup>
Wire diameter incl. insulation	1.5 mm ±0.05 mm (Signal line)
External cable diameter	5.3 mm ±0.02 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	Black 1, black 2, black 3, black 4, green/yellow
Overall twist	5 cores, twisted
Max. conductor resistance	39 Ω/km (at 20 °C)
Insulation resistance	min. 20 MΩ*km

# Sensor/actuator cable - SAC-5P-MS/ 1,5-PUR/AD-2L SCO



1435056

<https://www.phoenixcontact.com/pc/products/1435056>

Nominal voltage, cable	≤ 300 V
Test voltage	≥ 1200 V
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Smallest bending radius, fixed installation	26.5 mm
Smallest bending radius, movable installation	53 mm
Max. bending cycles	15000000
Halogen-free	in accordance with DIN VDE 0472 part 815
Flame resistance	in accordance with DIN UL-Style 20549
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 largely oil-resistant 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
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation) -20 °C ... 80 °C (Cable, flexible installation)

## Ambient conditions

Degree of protection	IP65 IP67
Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket) -20 °C ... 85 °C (valve plug) -40 °C ... 80 °C (cable, fixed installation) -15 °C ... 80 °C (Cable, flexible installation)

## Standards and regulations

### M12

Standards/specifications	IEC 61076-2-101
--------------------------	-----------------

### Valve connector

Standards/specifications	EN 175301-803
--------------------------	---------------

# Sensor/actuator cable - SAC-5P-MS/ 1,5-PUR/AD-2L SCO

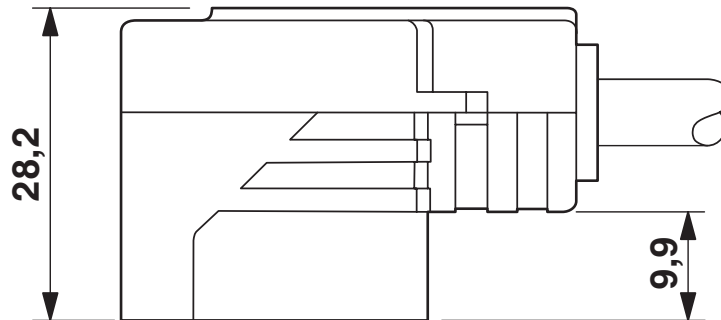


1435056

<https://www.phoenixcontact.com/pc/products/1435056>

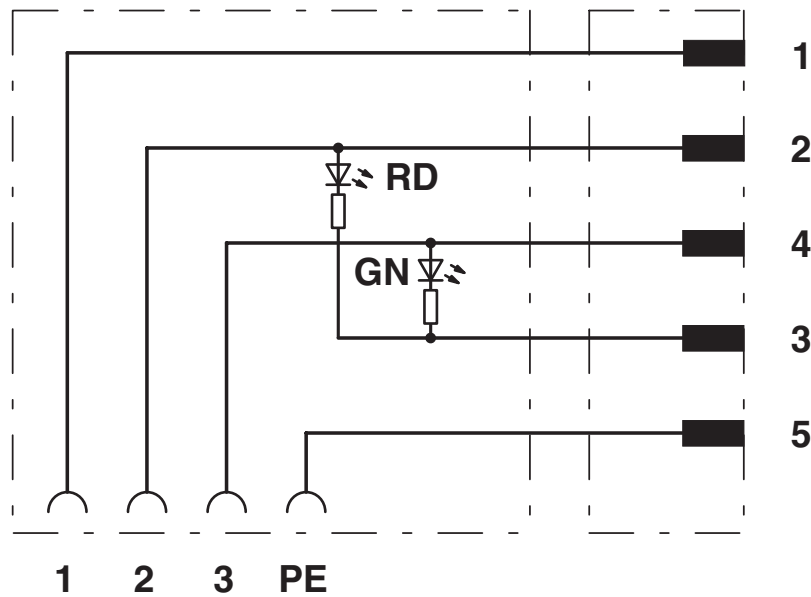
## Drawings

Dimensional drawing



Valve connector, type AD, side view

Circuit diagram

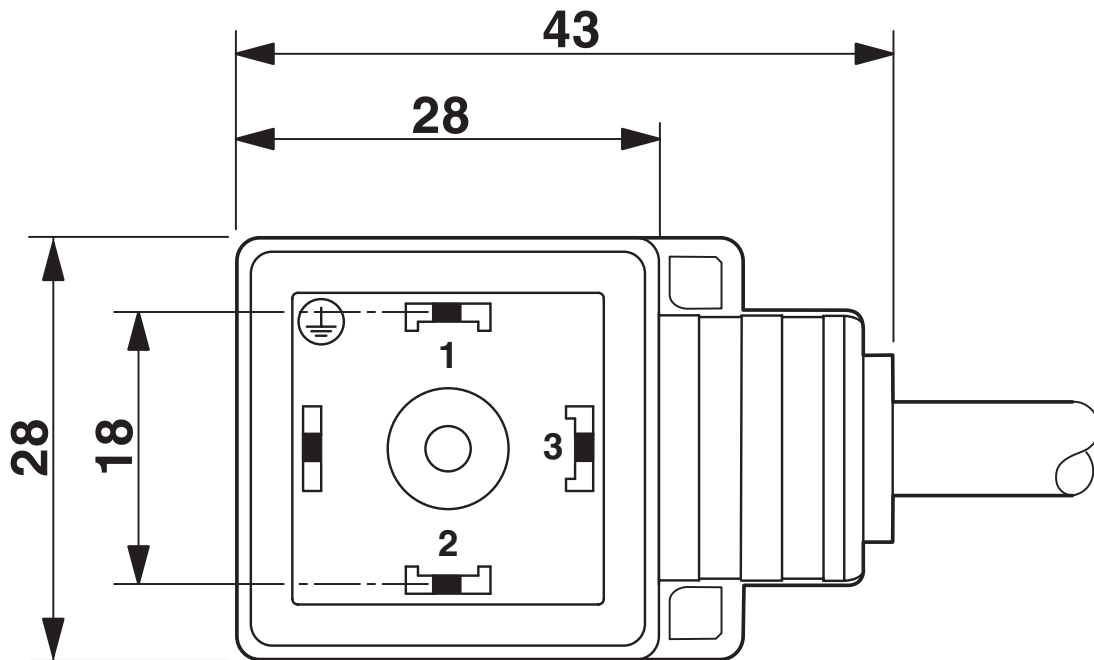


# Sensor/actuator cable - SAC-5P-MS/ 1,5-PUR/AD-2L SCO

1435056

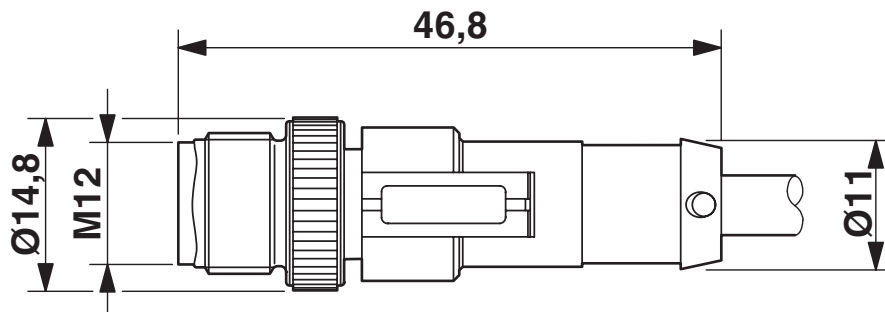
<https://www.phoenixcontact.com/pc/products/1435056>

Dimensional drawing



Valve connector, type AD

Dimensional drawing



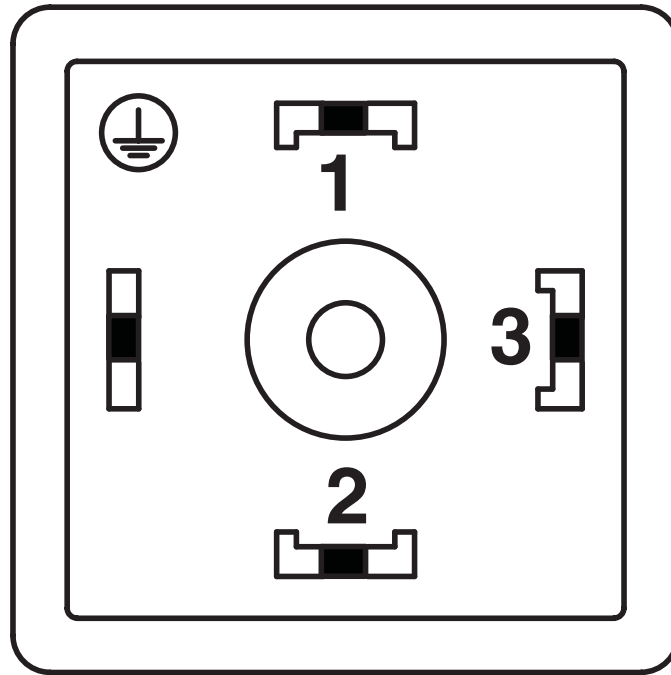
M12 SPEEDCON plug, straight

# Sensor/actuator cable - SAC-5P-MS/ 1,5-PUR/AD-2L SCO

1435056

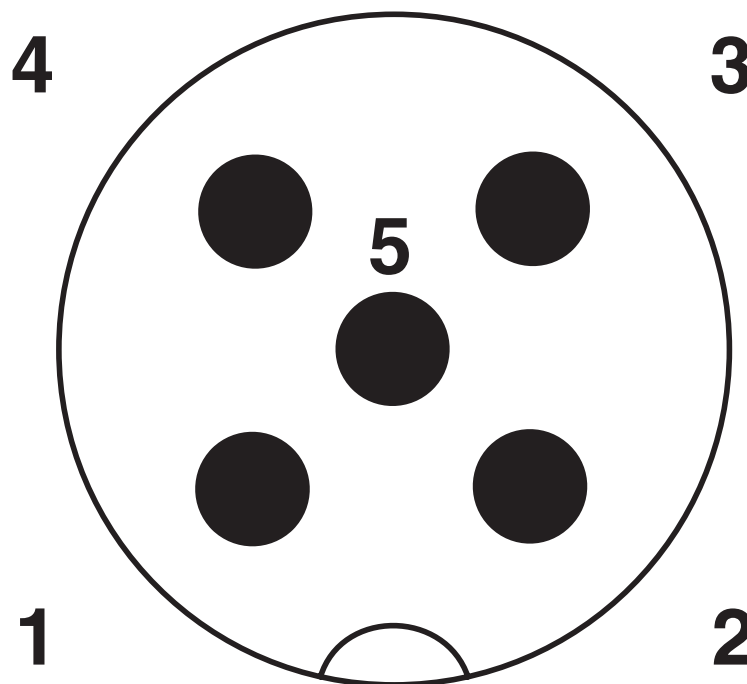
<https://www.phoenixcontact.com/pc/products/1435056>

Schematic diagram



Valve plug connector pin assignment, type AD

Schematic diagram



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

# Sensor/actuator cable - SAC-5P-MS/ 1,5-PUR/AD-2L SCO



1435056

<https://www.phoenixcontact.com/pc/products/1435056>

## Approvals



**EAC**

Approval ID: RU C-DE.BL08.B.00286



**EAC**

Approval ID: RU D-DE.HB35.B.00387



**CSAus**

Approval ID: 13631

	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
	24 V	4 A	-	-

# Sensor/actuator cable - SAC-5P-MS/ 1,5-PUR/AD-2L SCO



1435056

<https://www.phoenixcontact.com/pc/products/1435056>

## Classifications

### ECLASS

ECLASS-9.0	27060312
ECLASS-10.0.1	27060312
ECLASS-11.0	27060312

### ETIM

ETIM 8.0	EC001855
----------	----------

### UNSPSC

UNSPSC 21.0	31251500
-------------	----------

# Sensor/actuator cable - SAC-5P-MS/ 1,5-PUR/AD-2L SCO



1435056

<https://www.phoenixcontact.com/pc/products/1435056>

## Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

# Sensor/actuator cable - SAC-5P-MS/ 1,5-PUR/AD-2L SCO



1435056

<https://www.phoenixcontact.com/pc/products/1435056>

## Accessories

### Screw

Screw - SAC-V-SCREW-M3-29 KNURL - 1403779

<https://www.phoenixcontact.com/pc/products/1403779>



Fillister head screw with plastic knurl, M3 x 40

---

### Screw insert

Screw insert - SF-BIT-PH 1-70 - 1212582

<https://www.phoenixcontact.com/pc/products/1212582>



Screw bit, PH crosshead, E6.3-1/4" drive, size: PH 1 x 70 mm, hardened, suitable for holder according to DIN 3126-F6.3/ISO 1173

# Sensor/actuator cable - SAC-5P-MS/ 1,5-PUR/AD-2L SCO



1435056

<https://www.phoenixcontact.com/pc/products/1435056>

## Sealing cap

Sealing cap - PROT-M12 FS-PA-CHAIN - 1430873

<https://www.phoenixcontact.com/pc/products/1430873>

M12 sealing cap made of plastic with fixing band, for sensor cables, for free M12 plugs



---

## Locking clip

Locking clip - SAC-M12-EXCLIP-M - 1558988

<https://www.phoenixcontact.com/pc/products/1558988>

Locking clip for the pin side of sensor/actuator cables with M12 connector and M12 connectors for assembly, for knurl diameter: 15 mm or for Allen key with a wrench size of 14 mm, prevents the disconnection of plug-in connections without tools



# Sensor/actuator cable - SAC-5P-MS/ 1,5-PUR/AD-2L SCO

1435056

<https://www.phoenixcontact.com/pc/products/1435056>

## Insert label

Insert label - PABA WH/23 - 1013779

<https://www.phoenixcontact.com/pc/products/1013779>



Insert label, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: slide-on, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 20

---

## Insert label

Insert label - PABA YE/23 - 1013782

<https://www.phoenixcontact.com/pc/products/1013782>



Insert label, Strip, yellow, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: slide-on, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 20

# Sensor/actuator cable - SAC-5P-MS/ 1,5-PUR/AD-2L SCO



1435056

<https://www.phoenixcontact.com/pc/products/1435056>

## Marker pen

Marker pen - B-STIFT - 1051993

<https://www.phoenixcontact.com/pc/products/1051993>



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

---

## Torque screwdriver

Torque screwdriver - TSD 04 SAC - 1208429

<https://www.phoenixcontact.com/pc/products/1208429>



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

# Sensor/actuator cable - SAC-5P-MS/ 1,5-PUR/AD-2L SCO



1435056

<https://www.phoenixcontact.com/pc/products/1435056>

## Torque screwdriver

Torque screwdriver - TSD-M 1,2NM - 1212224

<https://www.phoenixcontact.com/pc/products/1212224>



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

---

## Adapter insert

Adapter insert - TSD-M SAC-BIT ADAPTER - 1212600

<https://www.phoenixcontact.com/pc/products/1212600>



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

# Sensor/actuator cable - SAC-5P-MS/ 1,5-PUR/AD-2L SCO



1435056

<https://www.phoenixcontact.com/pc/products/1435056>

## Tool

Tool - SAC BIT M12-D15 - 1208432

<https://www.phoenixcontact.com/pc/products/1208432>



Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, with a knurl diameter of 15 mm, for 4 mm hexagonal drive

---

Phoenix Contact 2022 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG

Flachsmarktstraße 8

D-32825 Blomberg

+49 (0) 5235-3 00

[info@phoenixcontact.com](mailto:info@phoenixcontact.com)