

# SAC-5P-M12MS/0,6-240/AD-2L - Sensor/actuator cable

1438668

<https://www.phoenixcontact.com/us/products/1438668>

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, yellow, Plug straight M12, coding: A, with 2 LEDs, on Valve connector AD (pressure switch), with 2 LEDs, Wiring: unwired, cable length: 0.6 m

The figure shows the SPEEDCON version with a black conductor

## Commercial data

Item number	1438668
Packing unit	1 pc
Minimum order quantity	25 pc
Product key	AF1DKA
GTIN	4046356488556
Weight per piece (including packing)	61.3 g
Weight per piece (excluding packing)	61.3 g
Country of origin	PL

# SAC-5P-M12MS/0,6-240/AD-2L - Sensor/actuator cable



1438668

<https://www.phoenixcontact.com/us/products/1438668>

## Technical data

### Product properties

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

### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Connection data

#### Conductor connection

Tightening torque	0.6 Nm (Valve connector)
	0.4 Nm (M12 connector)

### Material specifications

Flammability rating according to UL 94	V0
Seal material	TPU
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

Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage $U_N$	24 V AC
	24 V DC
Nominal current $I_N$	4 A

### Mechanical properties

#### Mechanical data

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

### Signaling

Status display	2 LEDs
----------------	--------

# SAC-5P-M12MS/0,6-240/AD-2L - Sensor/actuator cable



1438668

<https://www.phoenixcontact.com/us/products/1438668>

Status display present	yes
------------------------	-----

## Connector

### Connection 1

Type	Plug straight M12
Number of positions	5
Coding type	A

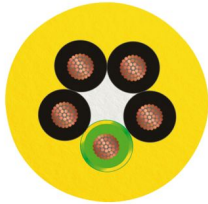
### Connection 2

Type	Valve connector AD (pressure switch)
Number of positions	5
Material	CuSn (Contact)
	Sn (Contact surface)
	PA 6 (Contact carrier)
	TPU (Housing)
Protective circuit	unwired

## Cable/line

Cable length	0.6 m
--------------	-------

### PUR halogen-free yellow [240]

Dimensional drawing	
Cable weight	47.3 kg/km
UL AWM Style	20549
Number of positions	5
Shielded	no
Cable type	PUR halogen-free yellow [240]
Conductor structure signal line	28x 0.15 mm
AWG signal line	20
Conductor cross-section	5x 0.5 mm <sup>2</sup> (Signal line)
Wire diameter incl. insulation	1.5 mm ±0.05 mm (Signal line)
External cable diameter	5.30 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	yellow
Conductor material	Bare Cu litz wires
Material wire insulation	PP
Single wire, color	black 1, black 2, black 3, black 4, green/yellow

# SAC-5P-M12MS/0,6-240/AD-2L - Sensor/actuator cable



1438668

<https://www.phoenixcontact.com/us/products/1438668>

Overall twist	Wires twisted in layers
Max. conductor resistance	39 Ω/km (at 20 °C)
Insulation resistance	≥ 20 MΩ*km
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
Dynamic load capacity (bending)	Max. bending cycles: 15000000, Bending radius: 50 mm, Traversing path: 0.9 m, Traversing rate: 5 m/s, Acceleration: 30 m/s <sup>2</sup>
Flame resistance	according to DIN VDE 0482
	According to DIN EN 50265-2-1
Resistance to oil	largely oil-resistant
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-20 °C ... 80 °C (Cable, flexible installation)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP65
	IP67
Ambient temperature (operation) (male connector/female connector)	-25 °C ... 90 °C (Plug / socket)
Ambient temperature (operation) (Valve connector)	-20 °C ... 85 °C (Valve connector)

## Standards and regulations

### M12

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

### Valve connector

Standard designation	Valve connector
Standards/specifications	EN 175301-803

# SAC-5P-M12MS/0,6-240/AD-2L - Sensor/actuator cable

1438668

<https://www.phoenixcontact.com/us/products/1438668>

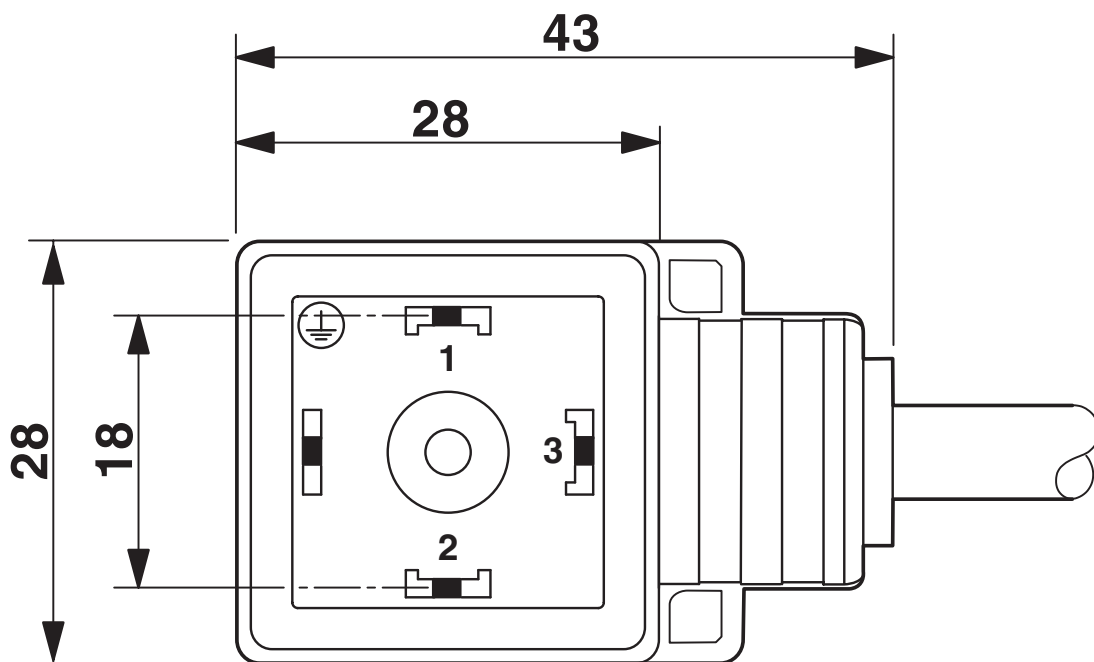
## Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing

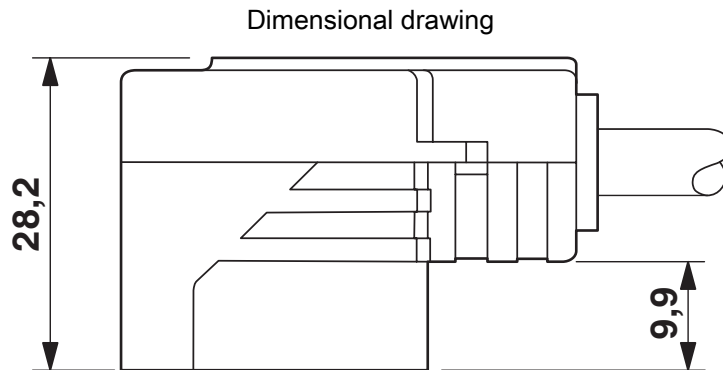


Valve connector, type AD

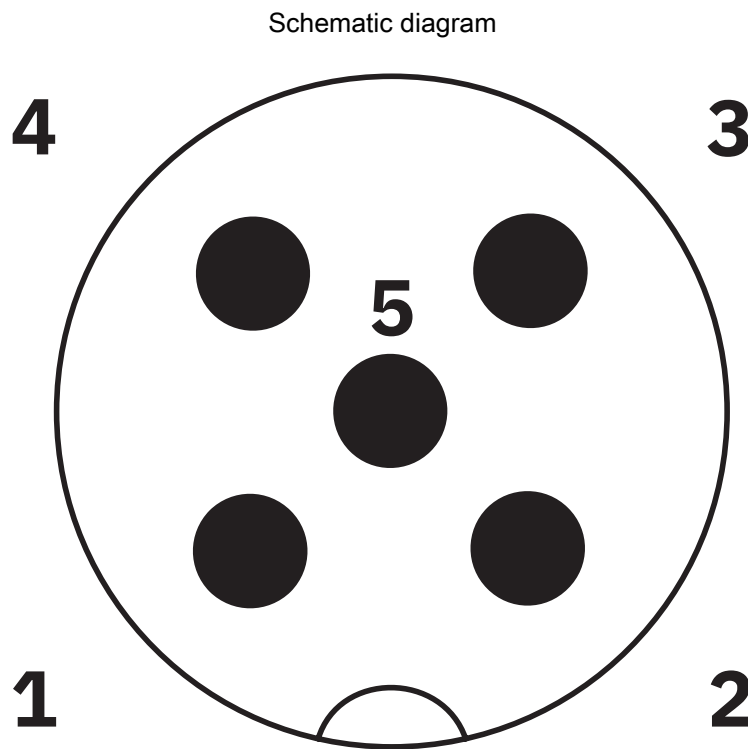
# SAC-5P-M12MS/0,6-240/AD-2L - Sensor/actuator cable

1438668

<https://www.phoenixcontact.com/us/products/1438668>



Valve connector, type AD, side view



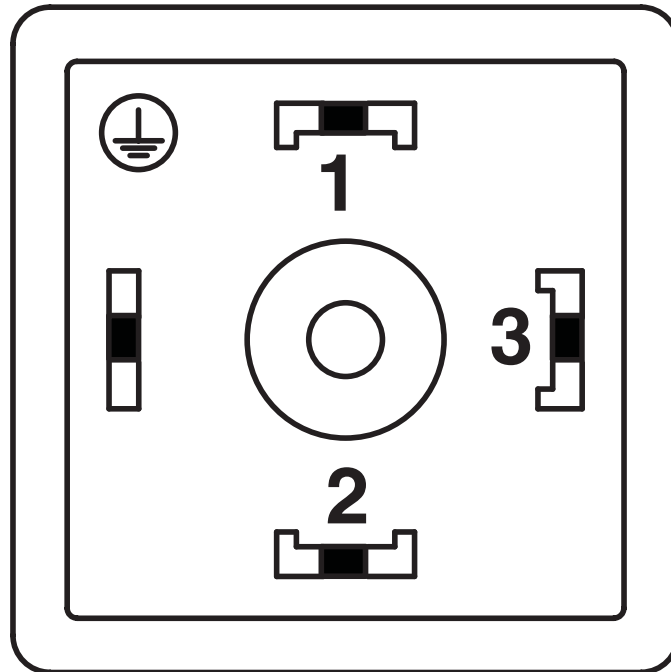
Pin assignment M12 male connector, 5-pos., A-coded, male side

# SAC-5P-M12MS/0,6-240/AD-2L - Sensor/actuator cable

1438668

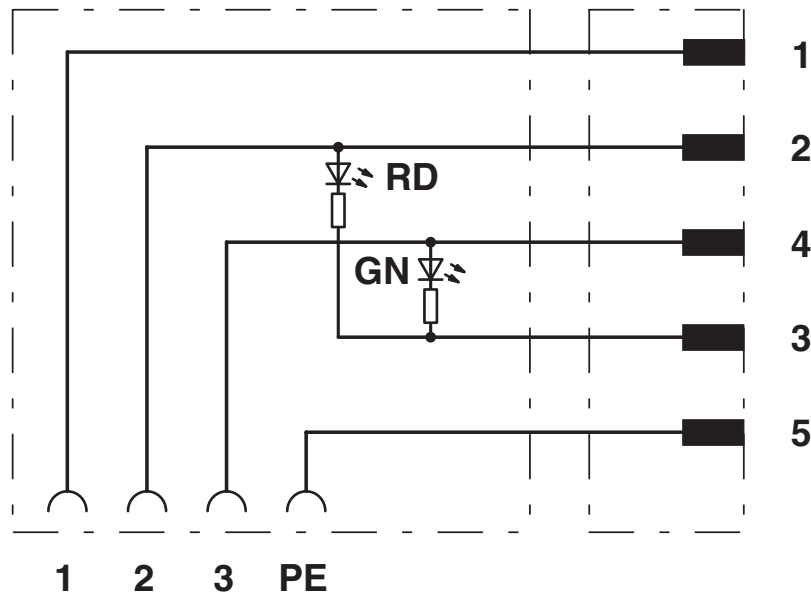
<https://www.phoenixcontact.com/us/products/1438668>

Schematic diagram



Valve plug connector pin assignment, type AD

Circuit diagram



Contact assignment of M12 plug and valve connector

# SAC-5P-M12MS/0,6-240/AD-2L - Sensor/actuator cable



1438668

<https://www.phoenixcontact.com/us/products/1438668>

## Classifications

### ECLASS

ECLASS-13.0	27060312
ECLASS-15.0	27060312

# SAC-5P-M12MS/0,6-240/AD-2L - Sensor/actuator cable



1438668

<https://www.phoenixcontact.com/us/products/1438668>

## 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)