

# Sensor/Actuator cable - SAC-3P-M12MS/2,0-PUR/A-1L-Z - 1439599

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Sensor/Actuator cable, 3-position, PUR halogen-free, Black-gray RAL 7021, Plug straight M12, A-coded, on Valve connector A, with 1 LED, connected with Z diode, Cable length: 2 m

The illustration shows the SPEEDCON version

## Key commercial data

package_quantity	1
GTIN	4046356489447

## Technical data

### Dimensions

Length of cable	2 m
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### Ambient conditions

Degree of protection	IP65
Degree of protection	IP67

### General

Rated current at 40°C	4 A
Rated voltage	24 V
Number of positions	3
Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Status display	1 LED
Protective circuit/component	Z diode
Surge voltage category	III
Pollution degree	3
Insertion/withdrawal cycles	≥ 100

### Material

Inflammability class according to UL 94	HB
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF

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## Technical data

### Material

Material of grip body	TPU
Valve plug contact material	CuSn
Valve plug contact surface material	Sn
Valve plug contact insert material	PA 66
Material housing valve plug	TPU
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	TPU (Seal molded)

### Cable

Cable type	PUR halogen-free black
Cable type (abbreviation)	PUR
Cable abbreviation	Li9Y11Y-HF
UL AWM style	20549
Conductor cross section	3x 0.5 mm <sup>2</sup>
AWG signal line	20
Conductor structure signal line	28x 0.15 mm
Core diameter including insulation	1.5 mm ±0.05 mm (signal line)
Wire colors	black 1, black 2, green/yellow
Overall twist	3 wires, twisted
External sheath, color	Black-gray RAL 7021
External cable diameter D	4.5 mm ± 0.2 mm
Smallest bending radius, fixed installation	22.5 mm
Number of bending cycles	15000000
Bending radius	50 mm
Traversing path	0.9 m
Traversing rate	5 m/s
Acceleration	30 m/s <sup>2</sup>
Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Insulation resistance	min. 20 MΩ*km
Conductor resistance	39 Ω/km (at 20 °C)
Nominal voltage, cable	≤ 300 V
Test voltage, cable	≥ 1200 V
Flame resistance	According to DIN VDE 0482
Flame resistance	According to DIN EN 50265-2-1
Halogen-free	in accordance with DIN VDE 0472 part 815
Other resistance	Largely oil-resistant
Other resistance	partly UV-resistant in accordance with DIN EN ISO 4892-2-A
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)

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## Technical data

### Cable

<b>Ambient temperature (operation)</b>	-20 °C ... 80 °C (cable, flexible installation)
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## classifications

### eCl@ss

<b>eCl@ss 4.0</b>	27060306
<b>eCl@ss 4.1</b>	27060306
<b>eCl@ss 5.0</b>	27061801
<b>eCl@ss 5.1</b>	27061801
<b>eCl@ss 6.0</b>	27061801
<b>eCl@ss 7.0</b>	27061801
<b>eCl@ss 8.0</b>	27061801

### ETIM

<b>ETIM 3.0</b>	EC001855
<b>ETIM 4.0</b>	EC001855
<b>ETIM 5.0</b>	EC001855

### UNSPSC

<b>UNSPSC 6.01</b>	31251501
<b>UNSPSC 7.0901</b>	31251501
<b>UNSPSC 11</b>	31251501
<b>UNSPSC 12.01</b>	31251501
<b>UNSPSC 13.2</b>	31251501

## accessories

### Mounting material

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

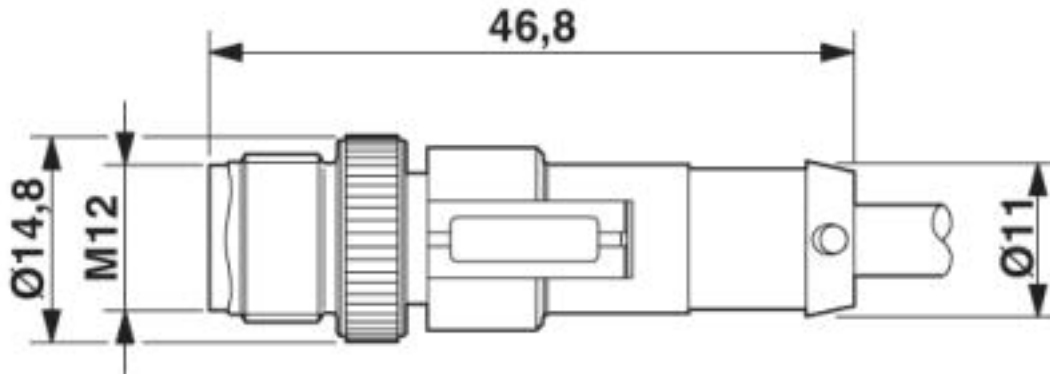


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## Drawings

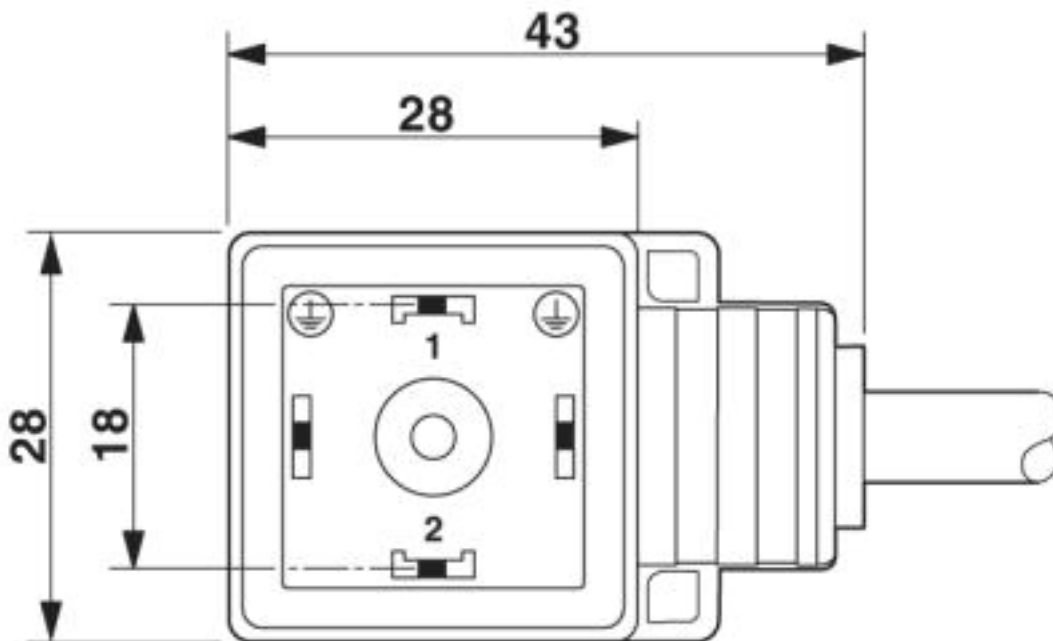
# Sensor/Actuator cable - SAC-3P-M12MS/2,0-PUR/A-1L-Z - 1439599

Dimensioned drawing



M12 x 1 plug, straight

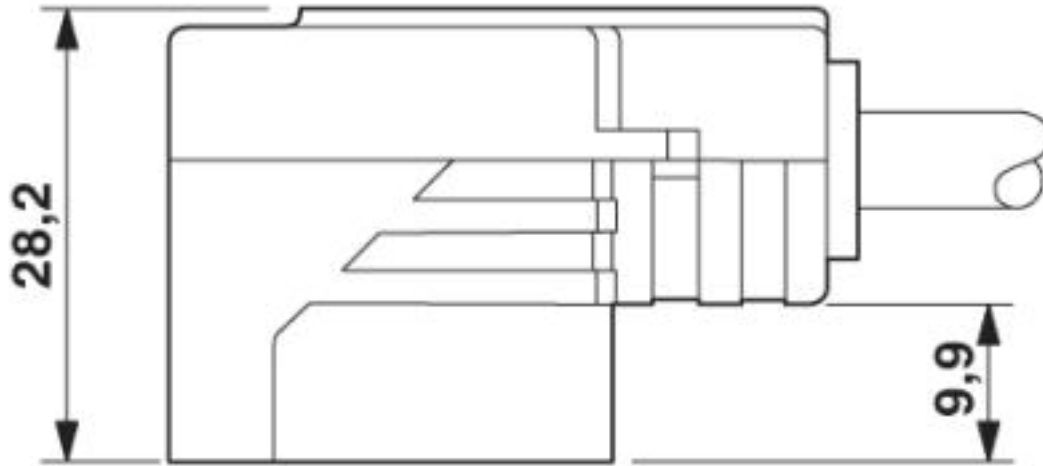
Dimensioned drawing



Valve connector, type A

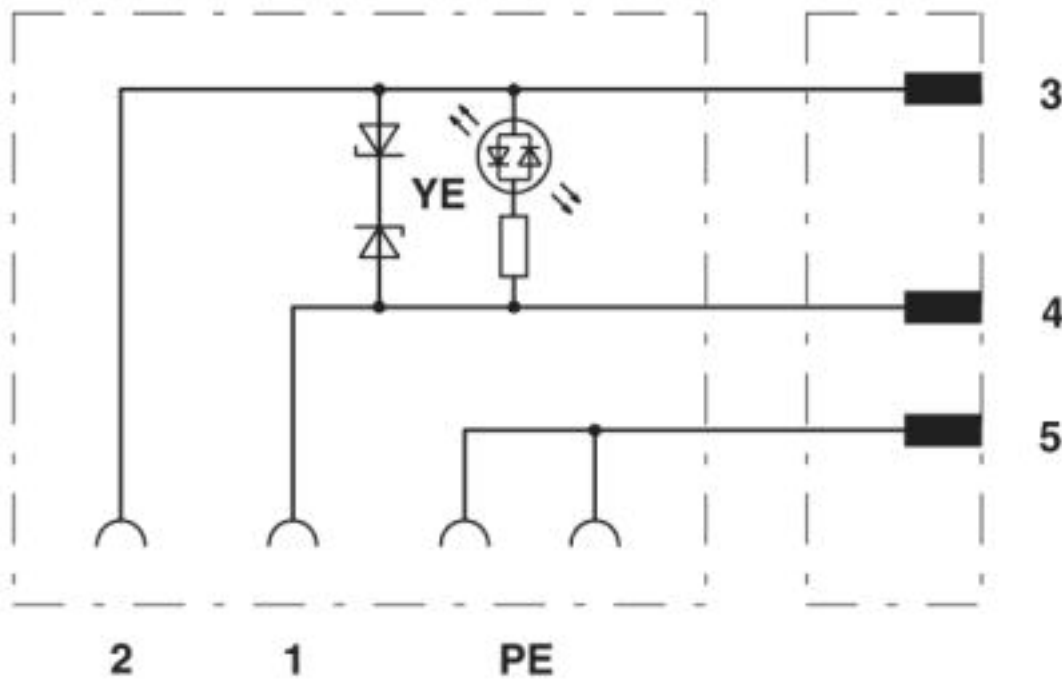
# Sensor/Actuator cable - SAC-3P-M12MS/2,0-PUR/A-1L-Z - 1439599

Dimensioned drawing



Valve connector, type A, side view

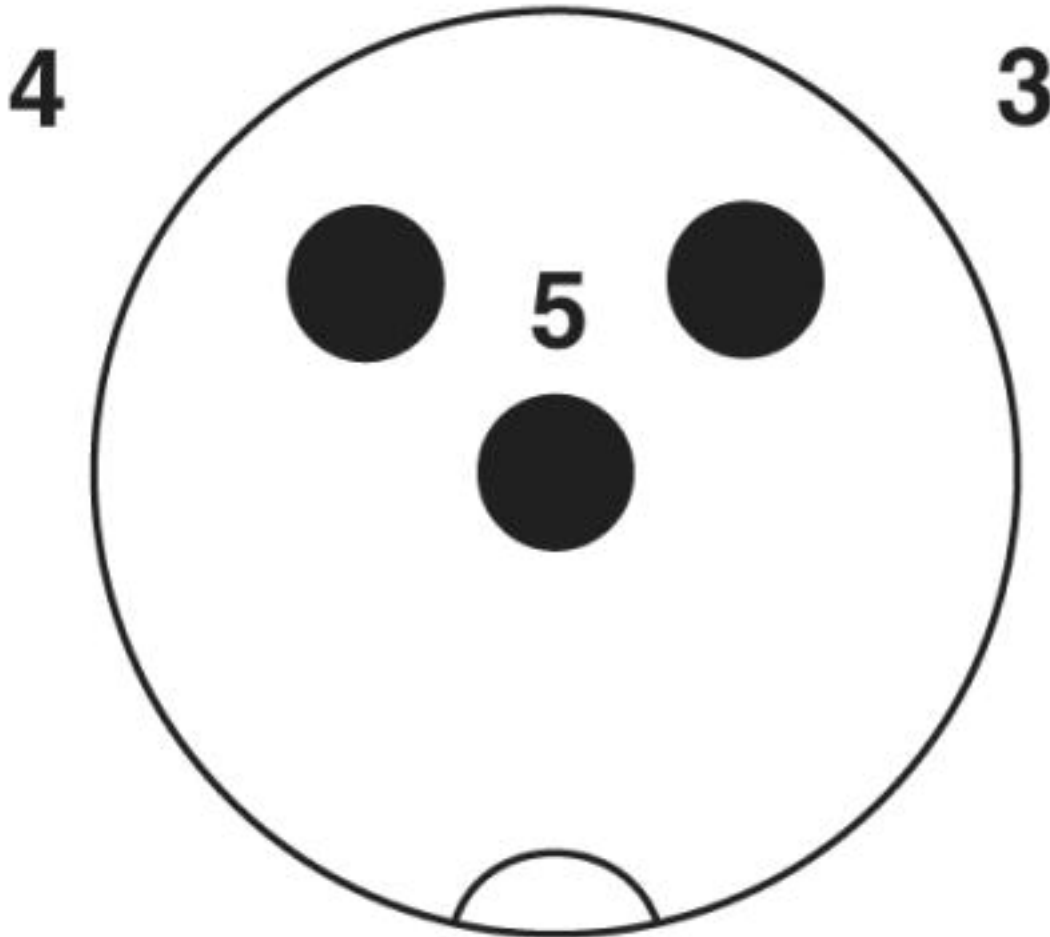
Circuit diagram



Contact assignment of M12 plug and valve connector

# Sensor/Actuator cable - SAC-3P-M12MS/2,0-PUR/A-1L-Z - 1439599

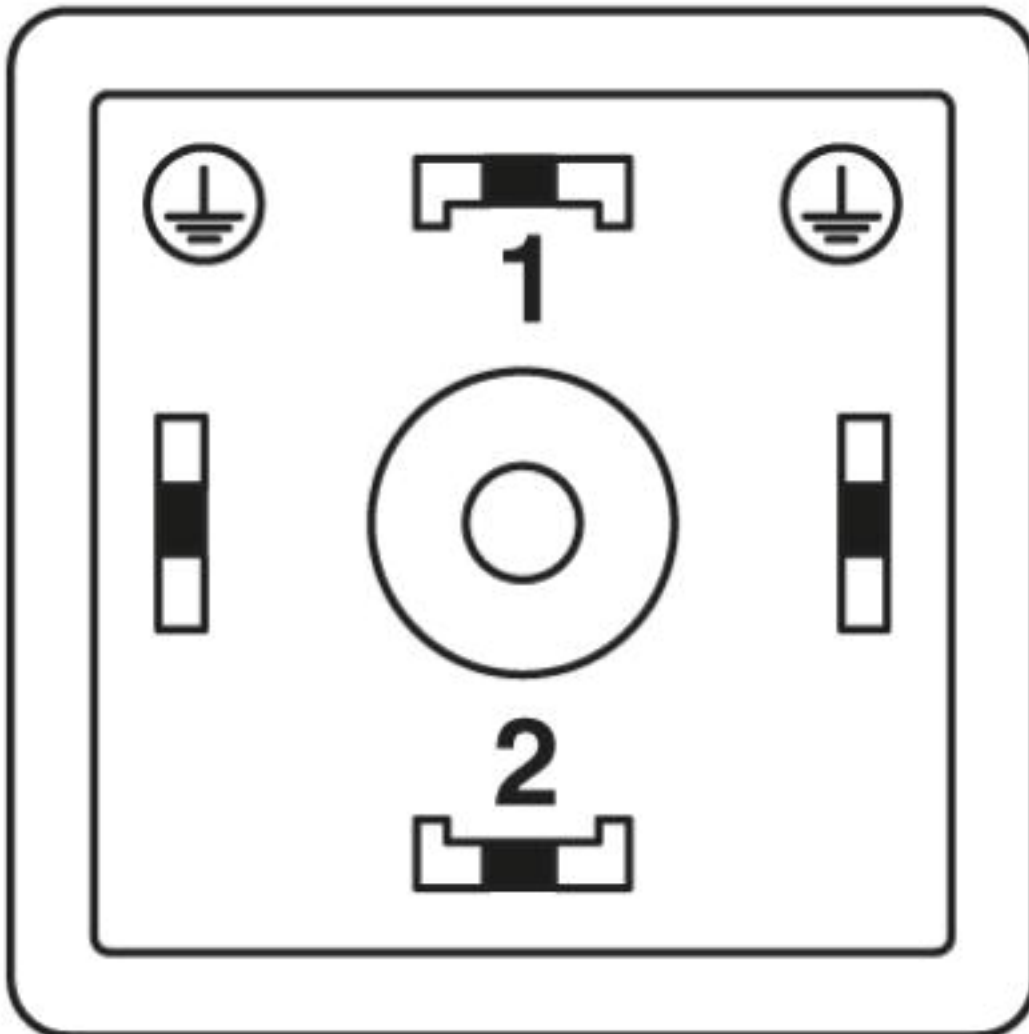
Schematic diagram



Pin assignment M12 plug, 3-pos., valve connector

# Sensor/Actuator cable - SAC-3P-M12MS/2,0-PUR/A-1L-Z - 1439599

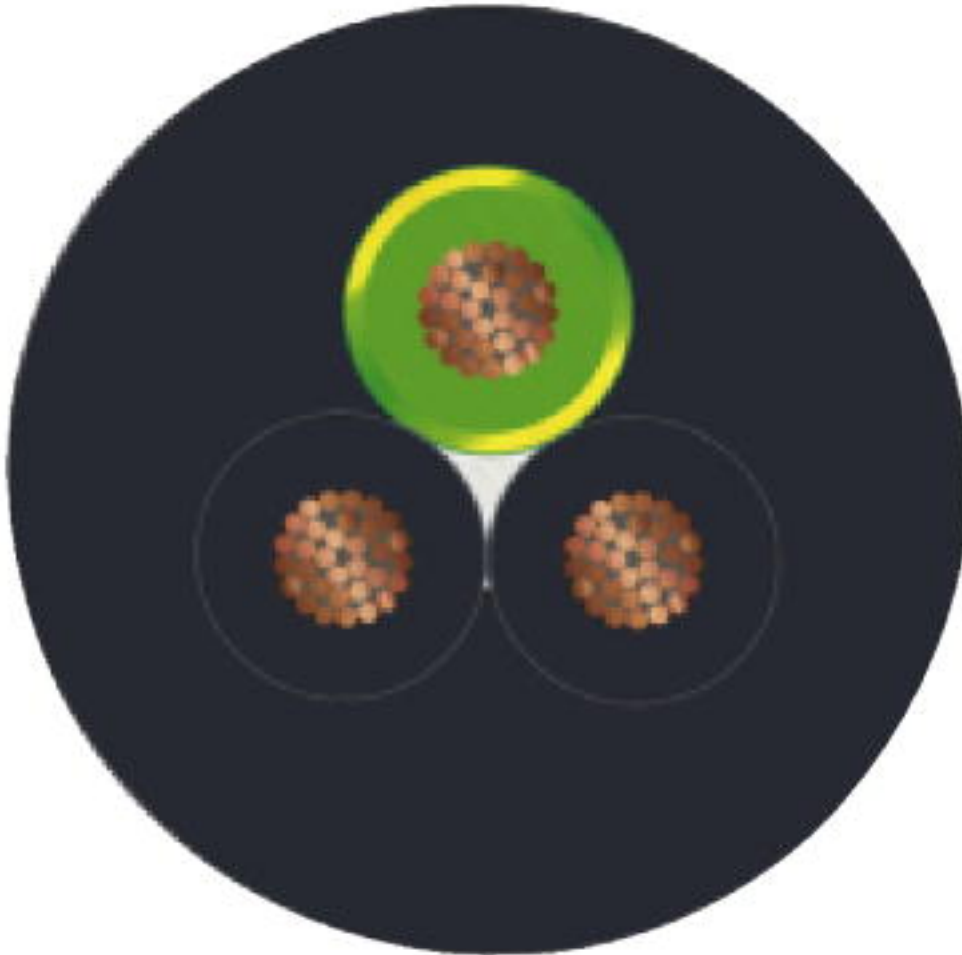
Schematic diagram



Valve connector pin assignment, type A

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Cable cross section



PUR halogen-free black [PUR]

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