

# SAC-3P-MR/ 3,0-PUR/B-1L-Z SCO - Sensor/actuator cable



1435360

<https://www.phoenixcontact.com/us/products/1435360>

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, 3-position, PUR halogen-free, black-gray RAL 7021, Plug angled M12 SPEEDCON, coding: A, with 1 LED, on Valve connector B (10 mm), with 1 LED, Wiring: Z diode, cable length: 3 m

## Your advantages

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

## Commercial data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 1435360       |
| Packing unit                         | 1 pc          |
| Minimum order quantity               | 1 pc          |
| Sales key                            | BF07          |
| Product key                          | AF1DLA        |
| GTIN                                 | 4046356413671 |
| Weight per piece (including packing) | 123.6 g       |
| Weight per piece (excluding packing) | 123.6 g       |
| Customs tariff number                | 85444290      |
| Country of origin                    | PL            |

# SAC-3P-MR/ 3,0-PUR/B-1L-Z SCO - Sensor/actuator cable



1435360

<https://www.phoenixcontact.com/us/products/1435360>

## Technical data

### Product properties

|                      |  |
|----------------------|--|
| Product type         | Sensor/actuator cable with valve connector |
| Application          | Standard                                   |
| Number of positions  | 3  |
| No. of cable outlets | 1  |
| Shielded             | no   |
| Coding               | A  |

### Insulation characteristics

|                      |     |
|----------------------|-----|
| Overvoltage category | III |
| Degree of pollution  | 3   |

### Connection data

#### Conductor connection

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

### Material specifications

|  |                              |
|--|------------------------------|
| Flammability rating according to UL 94 | HB                           |
| 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 6.6                       |
| 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                        |

### Valve connector characteristics

|                  |   |
|------------------|---|
| Fixing screws    | M3 x 29                                 |
| Pulse power      | 40 W (at 100 $\mu$ s square-wave pulse) |
| Terminal voltage | 70 V (at 2 mA constant current)         |
| Reverse voltage  | 50 V                                    |

# SAC-3P-MR/ 3,0-PUR/B-1L-Z SCO - Sensor/actuator cable



1435360

<https://www.phoenixcontact.com/us/products/1435360>

## Mechanical properties

### Mechanical data

|                             |                       |
|-----------------------------|-----------------------|
| Insertion/withdrawal cycles | ≥ 100 (M12 connector) |
|-----------------------------|-----------------------|

## Signaling

|                        |       |
|------------------------|-------|
| Status display         | 1 LED |
| Status display present | yes   |

## Connector

### Connection 1

|                     |                          |
|---------------------|--------------------------|
| Type                | Plug angled M12 SPEEDCON |
| Number of positions | 3                        |
| Locking type        | SPEEDCON                 |
| Coding type         | A                        |

### Connection 2

|                     |   |
|---------------------|---|
| Type                | Valve connector B (10 mm)   |
| Number of positions | 3   |
| Material            | CuSn (Contact)<br>Sn (Contact surface)<br>PA 6.6 (Contact carrier)<br>TPU (Housing) |
| Protective circuit  | Z diode   |

## Cable/line

|              |     |
|--------------|-----|
| Cable length | 3 m |
|--------------|-----|

### PUR halogen-free black [PUR]

|                                 |  |
|---------------------------------|--|
| Dimensional drawing             |  |
| Cable weight                    | 30 kg/km   |
| UL AWM Style                    | 20549  |
| Number of positions             | 3  |
| Shielded                        | no   |
| Cable type                      | PUR halogen-free black [PUR]   |
| Conductor structure signal line | 28x 0.15 mm  |
| AWG signal line                 | 20   |

# SAC-3P-MR/ 3,0-PUR/B-1L-Z SCO - Sensor/actuator cable



1435360

<https://www.phoenixcontact.com/us/products/1435360>

|   |   |
|---|---|
| Conductor cross-section                       | 3x 0.5 mm <sup>2</sup>  |
| Wire diameter incl. insulation                | 1.5 mm ±0.05 mm (Signal line)   |
| External cable diameter                       | 4.50 mm ±0.2 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, green/yellow  |
| Overall twist                                 | 3 wires, twisted  |
| Max. conductor resistance                     | 39 Ω/km (at 20 °C)  |
| Insulation resistance                         | min. 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   | 22.5 mm   |
| Smallest bending radius, movable installation | 45 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> |
| Halogen-free                                  | in accordance with DIN VDE 0472 part 815  |
| Flame resistance                              | according to DIN VDE 0482<br>According to DIN EN 50265-2-1  |
| Resistance to oil                             | in accordance with DIN EN 60811-2-1   |
| Other resistance                              | largely oil-resistant<br>partly UV-resistant (in accordance with DIN EN ISO 4892-2-A)   |
| Ambient temperature (operation)               | -40 °C ... 80 °C (cable, fixed installation)<br>-20 °C ... 80 °C (Cable, flexible installation)   |

## Environmental and real-life conditions

### Ambient conditions

|   |   |
|---|---|
| Degree of protection  | IP65<br>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)              |
| Ambient temperature (operation) (Cable, fixed installation)       | -40 °C ... 80 °C (cable, fixed installation)    |
| Ambient temperature (operation) (Cable, flexible installation)    | -15 °C ... 80 °C (Cable, flexible installation) |

## Standards and regulations

### M12

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

# SAC-3P-MR/ 3,0-PUR/B-1L-Z SCO - Sensor/actuator cable



1435360

<https://www.phoenixcontact.com/us/products/1435360>

Valve connector

|                          |                 |
|--------------------------|-----------------|
| Standard designation     | Valve connector |
| Standards/specifications | EN 175301-803   |

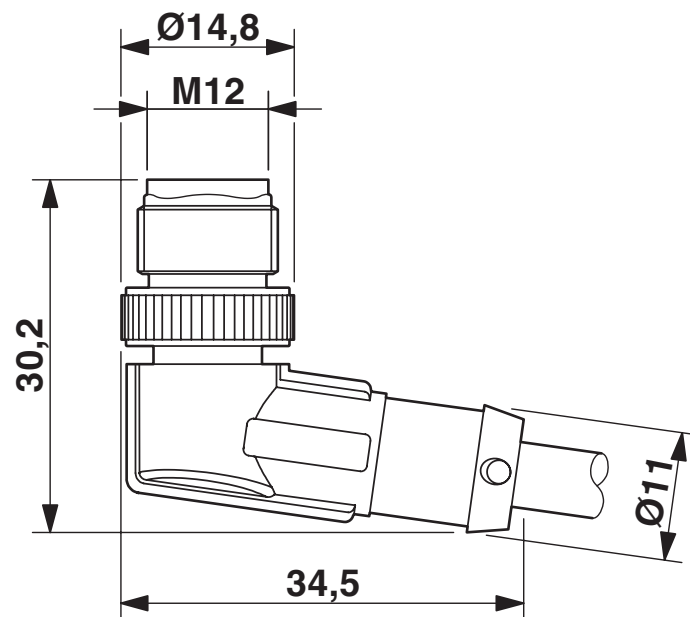
# SAC-3P-MR/ 3,0-PUR/B-1L-Z SCO - Sensor/actuator cable

1435360

<https://www.phoenixcontact.com/us/products/1435360>

## Drawings

Dimensional drawing



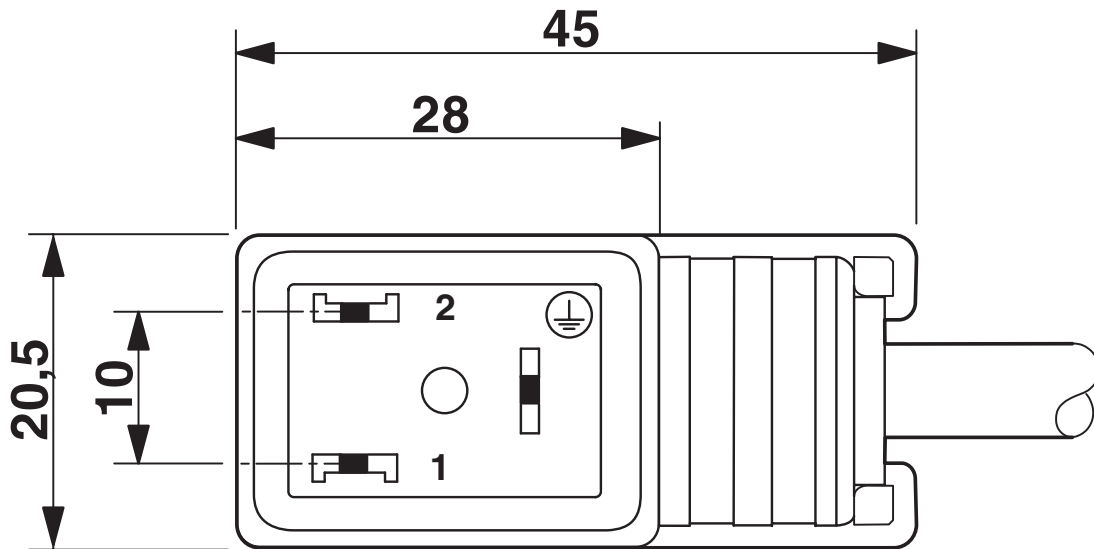
M12 x 1 male plug, angled

# SAC-3P-MR/ 3,0-PUR/B-1L-Z SCO - Sensor/actuator cable

1435360

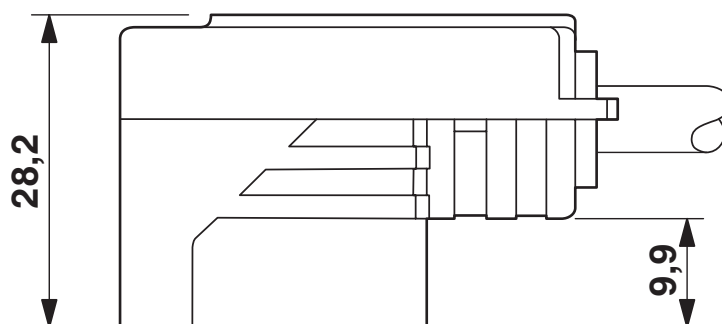
<https://www.phoenixcontact.com/us/products/1435360>

Dimensional drawing



Valve connector, type B

Dimensional drawing



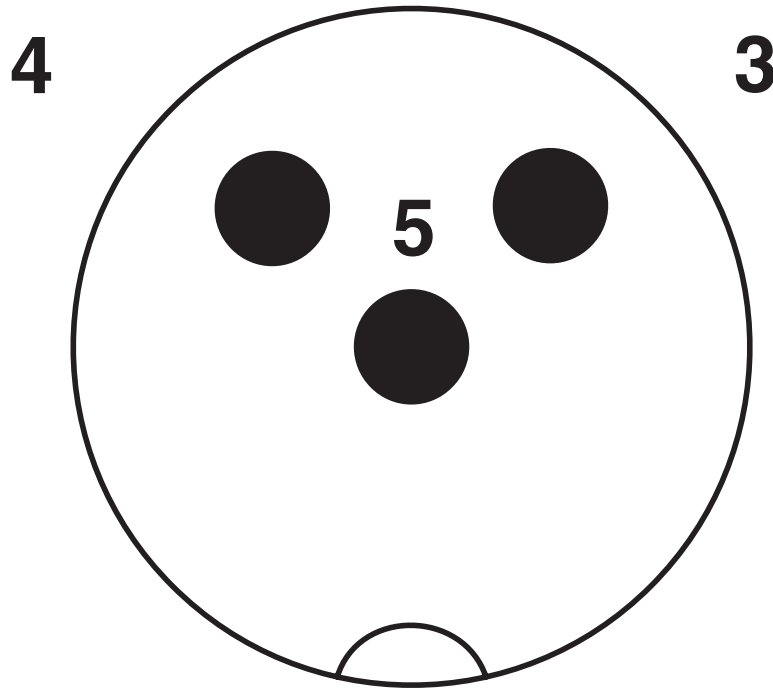
Valve connector, type B, side view

# SAC-3P-MR/ 3,0-PUR/B-1L-Z SCO - Sensor/actuator cable

1435360

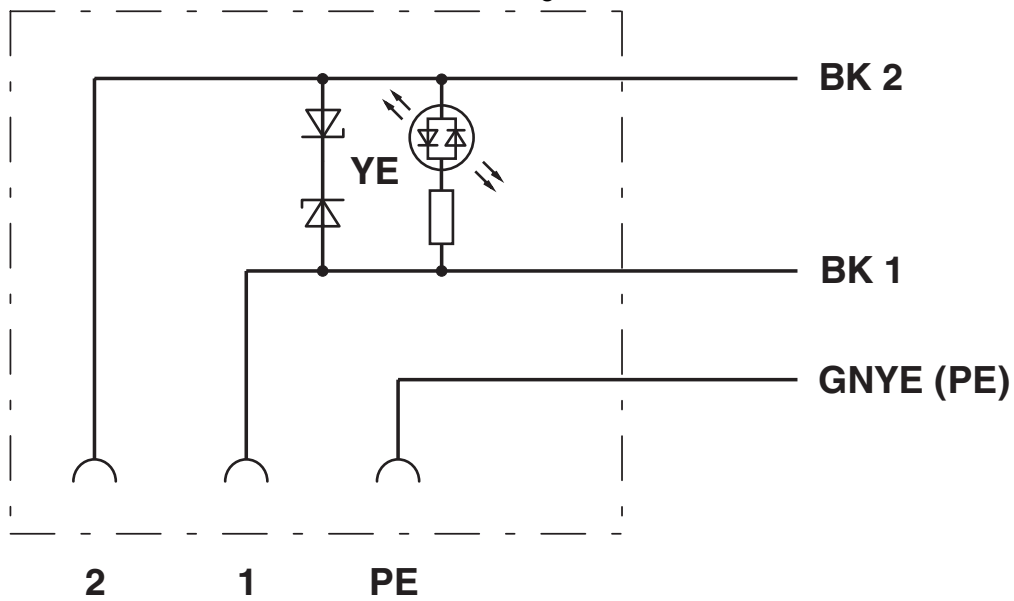
<https://www.phoenixcontact.com/us/products/1435360>

Schematic diagram



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

Circuit diagram



Contact assignment of the valve plug

# SAC-3P-MR/ 3,0-PUR/B-1L-Z SCO - Sensor/actuator cable



1435360

<https://www.phoenixcontact.com/us/products/1435360>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1435360>



**EAC-RoHS**

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 $\text{mm}^2$ |
|-------|-----------------------|-----------------------|-------------------|-----------------------------|
| keine |                       |                       |                   |                             |
|       | 24 V                  | 4 A                   | -                 | -                           |

# SAC-3P-MR/ 3,0-PUR/B-1L-Z SCO - Sensor/actuator cable



1435360

<https://www.phoenixcontact.com/us/products/1435360>

## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27060312 |
| ECLASS-15.0 | 27060312 |

### ETIM

|           |          |
|-----------|----------|
| ETIM 10.0 | EC001855 |
|-----------|----------|

### UNSPSC

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

# SAC-3P-MR/ 3,0-PUR/B-1L-Z SCO - Sensor/actuator cable



1435360

<https://www.phoenixcontact.com/us/products/1435360>

## Environmental product compliance

### EU RoHS

|   |        |
|---|--------|
| Fulfills EU RoHS substance requirements | Yes    |
| Exemption                               | 7(c)-I |

### 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.) | Diboron trioxide(CAS: 1303-86-2)           |
|                                     | Lead monoxide (lead oxide)(CAS: 1317-36-8) |
| SCIP                                | 120dcae6-cbb6-45a1-b786-5aab63f1bd8e       |

### EF3.1 Climate Change

|         |               |
|---------|---------------|
| CO2e kg | 1.231 kg CO2e |
|---------|---------------|

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)