

# Sensor/actuator cable - SAC-3P-10,0-PUR/A-1L-R-ES 4A - 1401168


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Sensor/actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Valve connector A, with 1 LED, connected with Damping diode, cable length: 10 m, With holding current limiting device for energy reduction



## Key Commercial Data

|              |   |
|--------------|---|
| Packing unit | 1 pc  |
| GTIN         | <br>4 046356 924542 |
| GTIN         | 4046356924542   |

## Technical data

### Dimensions

|                               |         |
|-------------------------------|---------|
| Length of cable               | 10 m    |
| Central screw valve connector | M3 x 28 |

### Ambient conditions

|                                 |                               |
|---------------------------------|-------------------------------|
| Ambient temperature (operation) | -25 °C ... 80 °C (valve plug) |
| Degree of protection            | IP67                          |

### General

|                              |   |
|------------------------------|---|
| Rated current at 40°C        | 4 A   |
| Rated voltage                | 24 V DC ±20 %   |
| Number of positions          | 3   |
| Insulation resistance        | ≥ 100 MΩ  |
| Standards/regulations        | Valve connector EN 175301-803                           |
| Status display               | 1 LED   |
| Protective circuit/component | Freewheeling diode with holding current limiting device |
| Switch-over time             | approx. 500 ms (Initial operating time)                 |
| Clock frequency              | approx. 800 Hz (Holding current limiting device)        |
| Switching frequency          | max. 1 Hz (Connected valve)                             |

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## Technical data

### Material

|                                     |                   |
|-------------------------------------|-------------------|
| Valve plug contact material         | CuSn              |
| Valve plug contact surface material | Ag                |
| Valve plug contact insert material  | PA 6.6            |
| Material housing valve plug         | TPU               |
| Sealing material                    | TPU (Seal molded) |

### Standards and Regulations

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

### 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                                  |
|   | According to DIN EN 50265-2-1                              |
| Halogen-free                                | in accordance with DIN VDE 0472 part 815                   |
| Other resistance                            | largely oil-resistant                                      |
|   | partly UV-resistant in accordance with DIN EN ISO 4892-2-A |
| Ambient temperature (operation)             | -40 °C ... 80 °C (cable, fixed installation)               |
|   | -20 °C ... 80 °C (cable, flexible installation)            |

# Sensor/actuator cable - SAC-3P-10,0-PUR/A-1L-R-ES 4A - 1401168

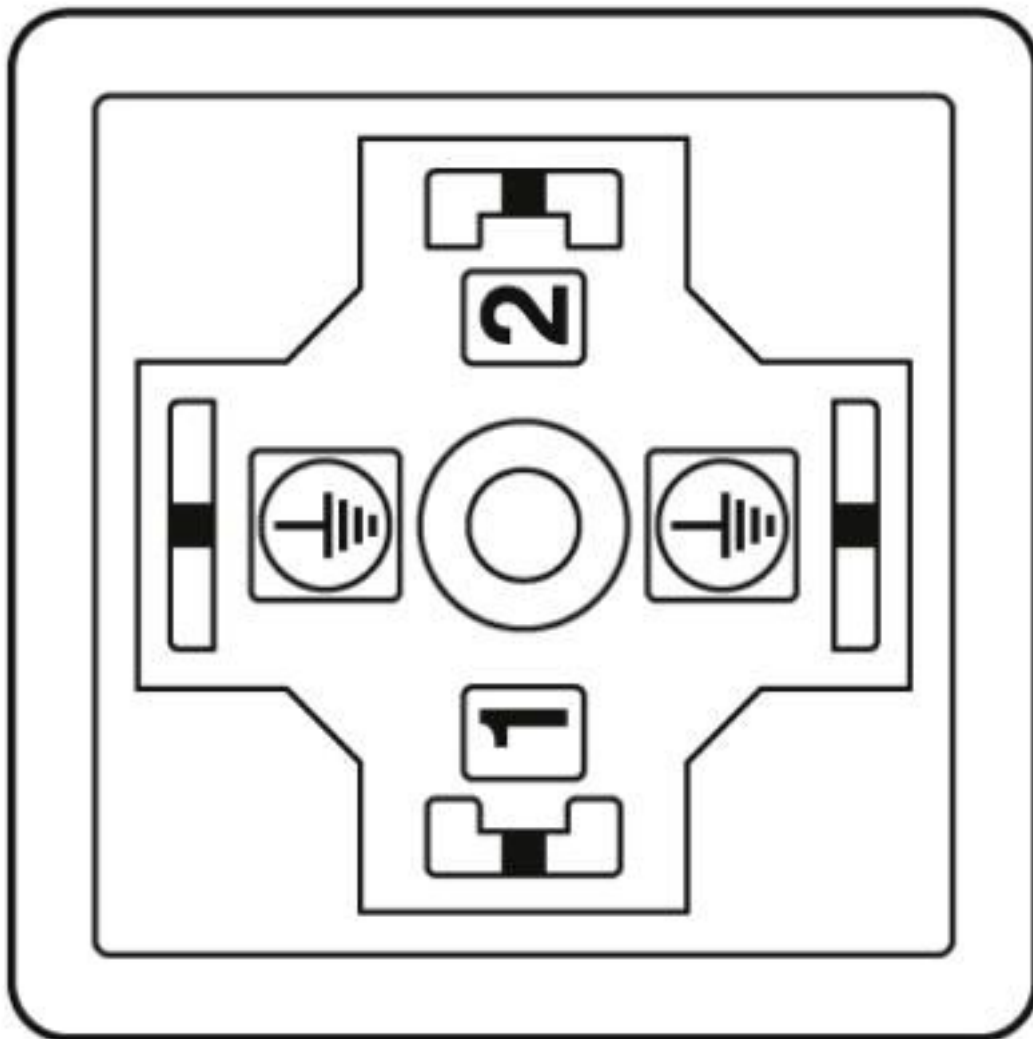
## Technical data

### Environmental Product Compliance

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

## Drawings

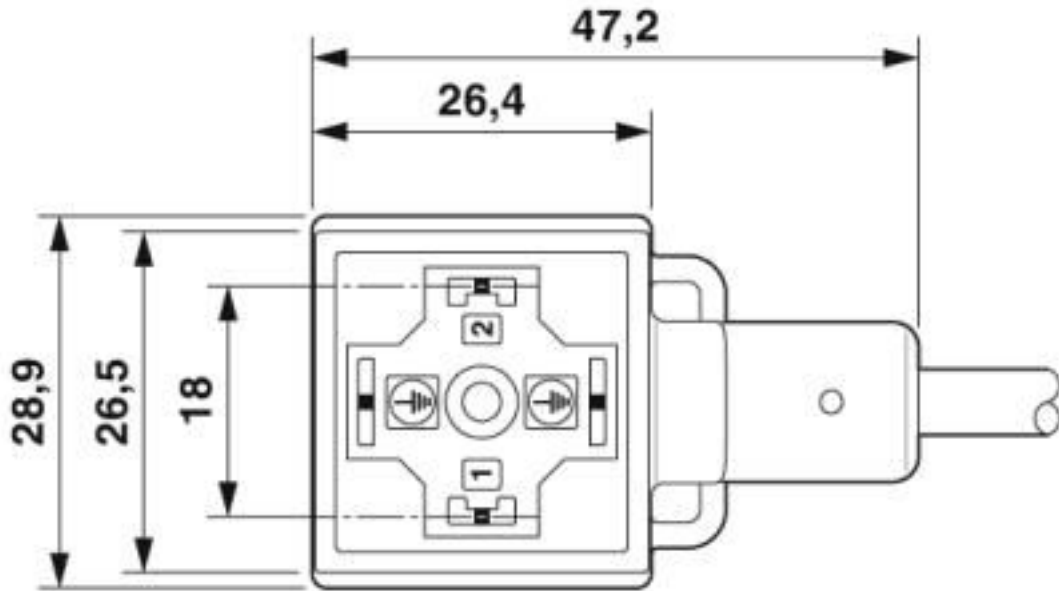
Schematic diagram



Valve connector pin assignment, type A

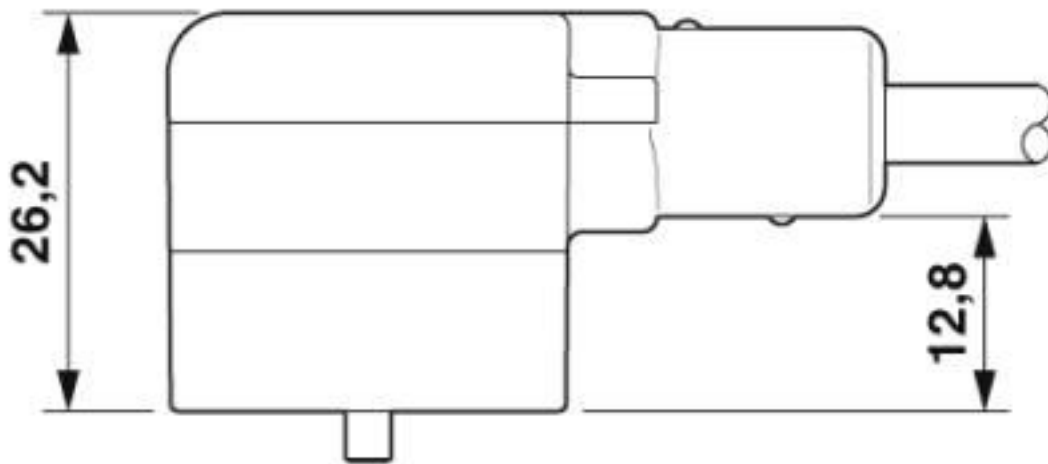
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Dimensional drawing



Valve connector, type A

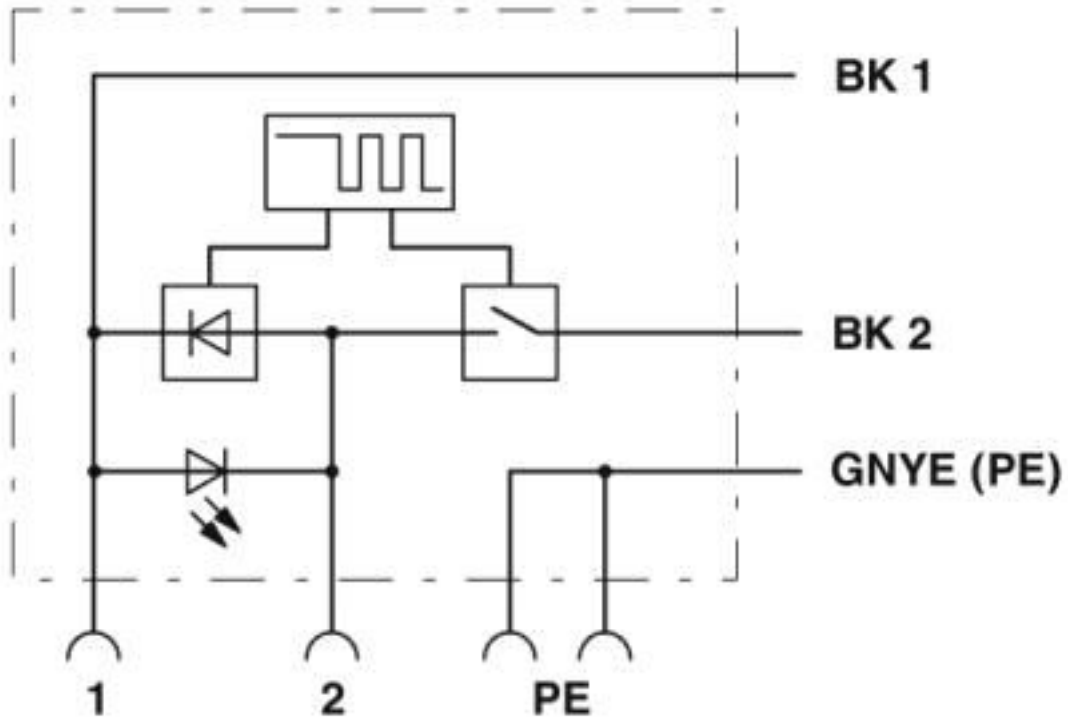
Dimensional drawing



Valve connector, type A, side view

# Sensor/actuator cable - SAC-3P-10,0-PUR/A-1L-R-ES 4A - 1401168

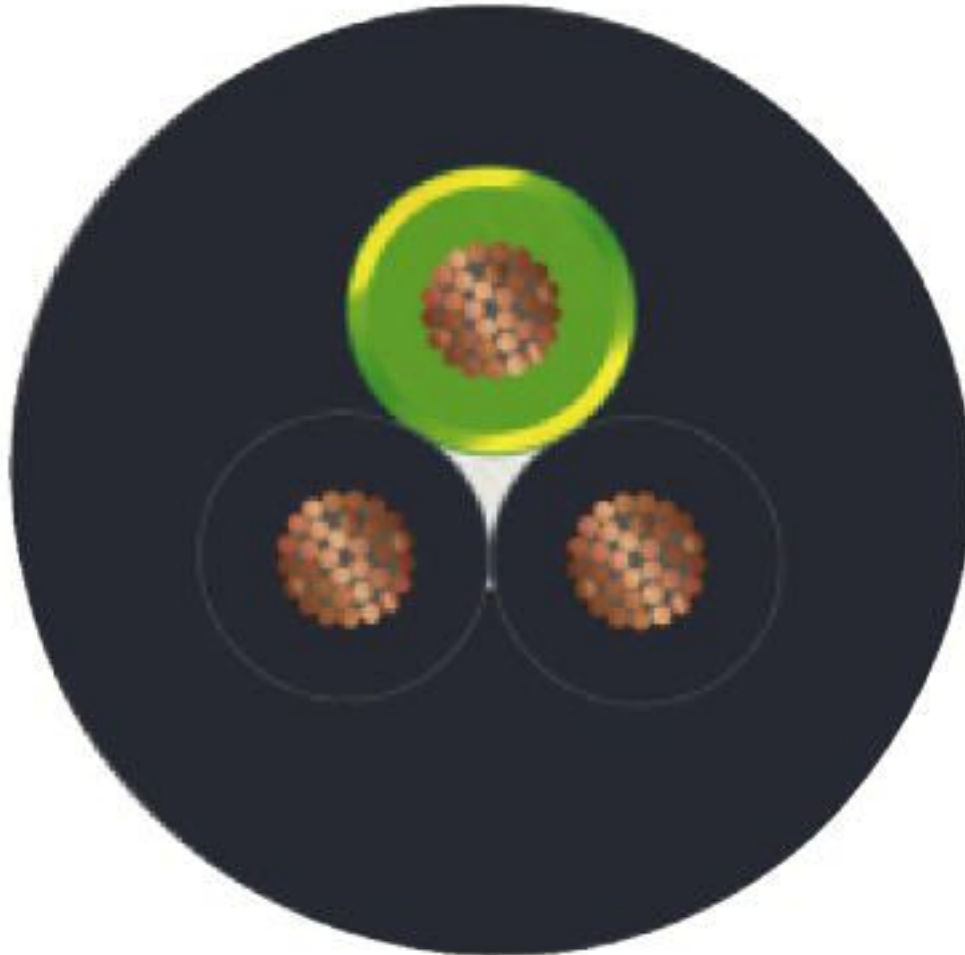
Circuit diagram



Contact assignment of the valve plug

# Sensor/actuator cable - SAC-3P-10,0-PUR/A-1L-R-ES 4A - 1401168

Cable cross section



PUR halogen-free black [PUR]

## Classifications

eCl@ss

|               |          |
|---------------|----------|
| eCl@ss 10.0.1 | 27060312 |
| eCl@ss 4.0    | 27060300 |
| eCl@ss 4.1    | 27060300 |
| eCl@ss 5.0    | 27061800 |
| eCl@ss 5.1    | 27061800 |
| eCl@ss 6.0    | 27279200 |
| eCl@ss 7.0    | 27279218 |
| eCl@ss 8.0    | 27279218 |
| eCl@ss 9.0    | 27060312 |

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## Classifications

### ETIM

|          |          |
|----------|----------|
| ETIM 4.0 | EC001855 |
| ETIM 5.0 | EC001855 |
| ETIM 6.0 | EC001855 |
| ETIM 7.0 | EC001855 |

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 13.2 | 31251501 |
| UNSPSC 19.0 | 31251501 |
| UNSPSC 20.0 | 31251501 |
| UNSPSC 21.0 | 31251501 |

## Approvals

### Approvals

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#### Approvals

EAC-RoHS / EAC

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#### Ex Approvals

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### Approval details

|          |  |                          |
|----------|--|--------------------------|
| EAC-RoHS |  | RU D-<br>DE.HB35.B.00387 |
|----------|--|--------------------------|

|     |  |                          |
|-----|--|--------------------------|
| EAC |  | RU C-<br>DE.BL08.B.00286 |
|-----|--|--------------------------|

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