

1400798

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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, Wiring: Freewheeling diode, cable length: 5 m

Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Convenient: increased machine availability thanks to quick and easy diagnostics
- Our standard: robust halogen-free PUR cable

Commercial data

|                                      |                     |
|--------------------------------------|---------------------|
| Item number                          | 1400798             |
| Packing unit                         | 1 pc                |
| Minimum order quantity               | 1 pc                |
| Product key                          | BF1DAA              |
| Catalog page                         | Page 236 (C-2-2019) |
| GTIN                                 | 4046356510325       |
| Weight per piece (including packing) | 182.6 g             |
| Weight per piece (excluding packing) | 166.2 g             |
| Customs tariff number                | 85444290            |
| Country of origin                    | PL                  |

# SAC-3P- 5,0-PUR/A-1L-R - Sensor/actuator cable



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## 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                                         |

### Data management status

|                  |    |
|------------------|----|
| Article revision | 04 |
|------------------|----|

### Insulation characteristics

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

### Material specifications

|                                        |        |
|----------------------------------------|--------|
| Flammability rating according to UL 94 | V0     |
| Seal material                          | TPU    |
| Material housing valve plug            | TPU    |
| Contact material                       | CuSn   |
| Valve plug contact insert material     | PA 6.6 |
| Contact surface material               | Sn     |

### Electrical properties

|                       |                            |
|-----------------------|----------------------------|
| Insulation resistance | $\geq 100 \text{ M}\Omega$ |
| Nominal voltage $U_N$ | 24 V DC                    |
| Nominal current $I_N$ | 2 A                        |

### Signaling

|                        |       |
|------------------------|-------|
| Status display         | 1 LED |
| Status display present | Yes   |

### Connector

#### Connection 1

|      |                |
|------|----------------|
| Type | free cable end |
|------|----------------|

#### Connection 2

|                     |                           |
|---------------------|---------------------------|
| Type                | Valve connector A         |
| Number of positions | 3                         |
| Material            | CuSn (Contact)            |
|                     | Sn (Contact surface)      |
|                     | PA 6.6 (Contact carriers) |
|                     | TPU (Housing)             |

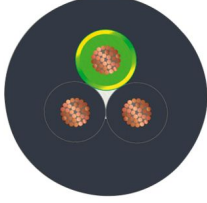
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## Cable/line

|                                               |                                                                                                                                         |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Cable length                                  | 5 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                                                                                                                                      |
| 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                                                                                                               |
|                                               | According to DIN EN 50265-2-1                                                                                                           |
| Resistance to oil                             | in accordance with DIN EN 60811-2-1                                                                                                     |
| Other resistance                              | largely oil-resistant                                                                                                                   |

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|                                 |                                                              |
|---------------------------------|--------------------------------------------------------------|
|                                 | 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)              |

## Environmental and real-life conditions

### Ambient conditions

|                                 |                               |
|---------------------------------|-------------------------------|
| Degree of protection            | IP65                          |
|                                 | IP67                          |
| Ambient temperature (operation) | -20 °C ... 85 °C (valve plug) |

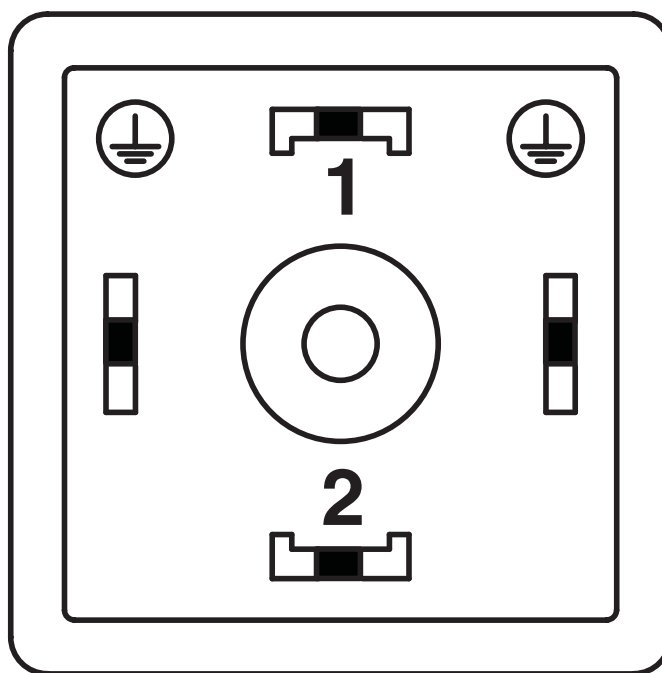
## Standards and regulations

### Valve connector

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

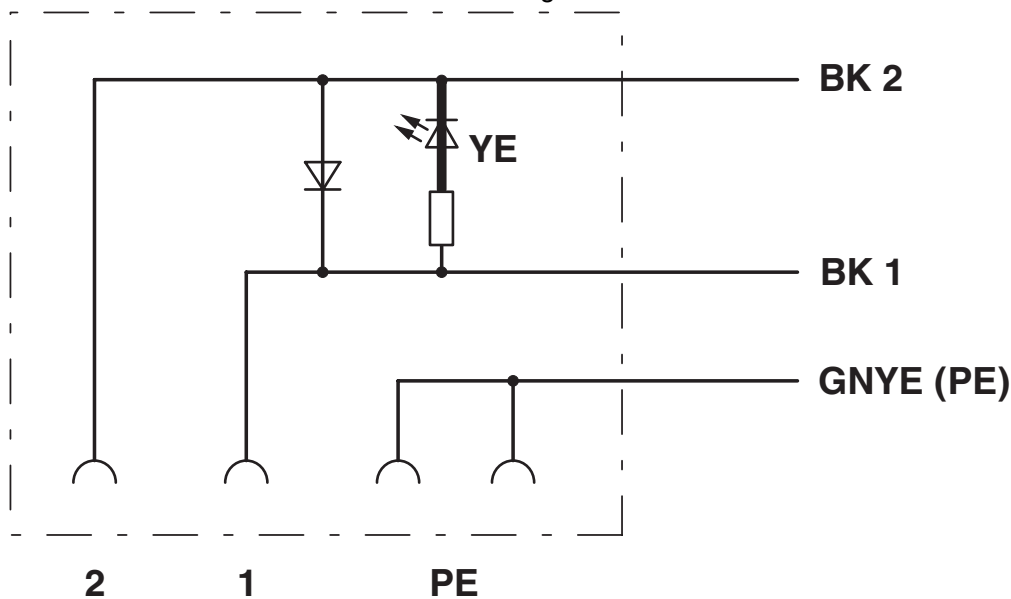
## Drawings

Schematic diagram

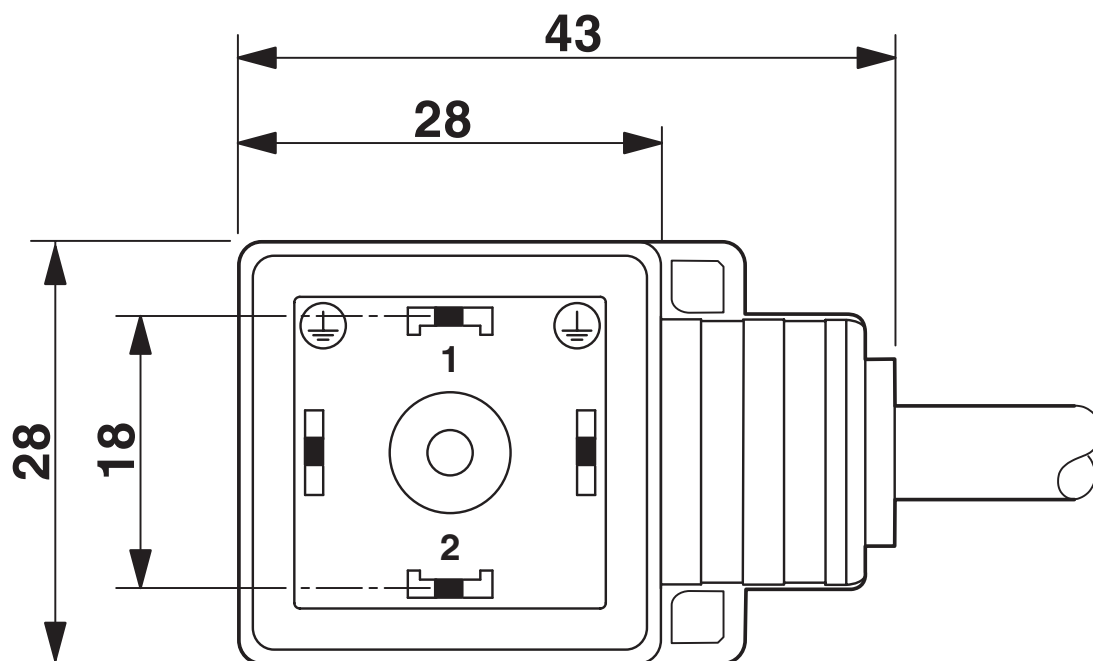


Valve connector pin assignment, type A

Circuit diagram

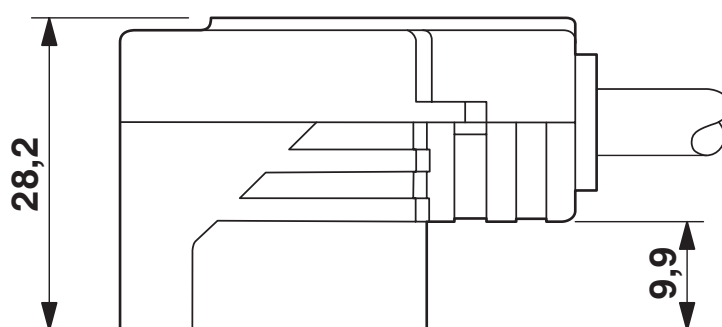


Dimensional drawing



Valve connector, type A

Dimensional drawing



Valve connector, type A, side view

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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/pc/products/1400798>

|                                                                                                                    |                                |                                |                   |                               |
|--------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------|-------------------|-------------------------------|
|  <b>CSA</b><br>Approval ID: 13631 |                                |                                |                   |                               |
|                                                                                                                    | Nominal voltage U <sub>N</sub> | Nominal current I <sub>N</sub> | Cross section AWG | Cross section mm <sup>2</sup> |
|                                                                                                                    | 24 V                           | 4 A                            | -                 | -                             |

|                                                                                                                      |                                |                                |                   |                               |
|----------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------|-------------------|-------------------------------|
|  <b>CSAus</b><br>Approval ID: 13631 |                                |                                |                   |                               |
|                                                                                                                      | Nominal voltage U <sub>N</sub> | Nominal current I <sub>N</sub> | Cross section AWG | Cross section mm <sup>2</sup> |
|                                                                                                                      | 24 V                           | 4 A                            | -                 | -                             |

|               |
|---------------|
| <b>cCSAus</b> |
|---------------|

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## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-11.0 | 27060312 |
| ECLASS-12.0 | 27060312 |
| ECLASS-13.0 | 27060312 |

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC001855 |
|----------|----------|

### UNSPSC

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

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## Environmental product compliance

|                                         |              |
|-----------------------------------------|--------------|
| EU RoHS                                 |              |
| Fulfills EU RoHS substance requirements | Yes          |
| Exemption                               | 7(a), 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.) | Lead(CAS: 7439-92-1)                 |
| SCIP                                | 0e816422-8a04-4480-ba71-bbd7acc25ddc |

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