

1415942

<https://www.phoenixcontact.com/us/products/1415942>

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Sensor/actuator cable, 3-position, PVC, black RAL 9005, free cable end, on Valve connector CI (9.4 mm), with 1 LED, Wiring: Varistor, cable length: 3 m

Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Convenient: increased machine availability thanks to quick and easy diagnostics

Commercial data

|                                      |                     |
|--------------------------------------|---------------------|
| Item number                          | 1415942             |
| Packing unit                         | 1 pc                |
| Minimum order quantity               | 1 pc                |
| Sales key                            | BF07                |
| Product key                          | BF1DFA              |
| Catalog page                         | Page 231 (C-2-2019) |
| GTIN                                 | 4055626055176       |
| Weight per piece (including packing) | 129.3 g             |
| Weight per piece (excluding packing) | 121.7 g             |
| Customs tariff number                | 85444290            |
| Country of origin                    | PL                  |

# SAC-3P- 3,0-PVC/CI-1L-V - 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                                         |

### 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 AC                    |
|                       | 24 V DC                    |
| Nominal current $I_N$ | 4 A                        |

### Valve connector characteristics

|               |         |
|---------------|---------|
| Fixing screws | M3 x 29 |
|---------------|---------|

### Signaling

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

### Connector

#### Connection 1

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

#### Connection 2

|                     |                             |
|---------------------|-----------------------------|
| Type                | Valve connector CI (9.4 mm) |
| Number of positions | 3                           |
| Material            | CuSn (Contact)              |
|                     | Sn (Contact surface)        |
|                     | PA 6.6 (Contact carriers)   |
|                     | TPU (Housing)               |

# SAC-3P- 3,0-PVC/CI-1L-V - Sensor/actuator cable



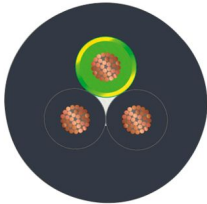
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## Cable/line

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

### PVC black [PVC]

|                                             |                                                                                                |
|---------------------------------------------|------------------------------------------------------------------------------------------------|
| Dimensional drawing                         |              |
| Cable weight                                | 38.6 kg/km                                                                                     |
| UL AWM Style                                | 2464                                                                                           |
| Number of positions                         | 3                                                                                              |
| Shielded                                    | no                                                                                             |
| Cable type                                  | PVC black [PVC]                                                                                |
| Conductor structure signal line             | 16x 0.20 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                                                                                |
| External cable diameter                     | 4.80 mm ±0.2 mm                                                                                |
| Outer sheath, material                      | PVC                                                                                            |
| External sheath, color                      | black RAL 9005                                                                                 |
| Conductor material                          | Bare Cu litz wires                                                                             |
| Material wire insulation                    | PVC                                                                                            |
| 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                       | ≥ 20 MΩ*km                                                                                     |
| Nominal voltage, cable                      | 300 V                                                                                          |
| Test voltage                                | 1200 V                                                                                         |
| Minimum bending radius, fixed installation  | 5 x D                                                                                          |
| Smallest bending radius, fixed installation | 24 mm                                                                                          |
| Flame resistance                            | DIN VDE 0482<br>DIN EN 50265-2-1                                                               |
| Resistance to oil                           | in accordance with DIN EN 60811-2-1                                                            |
| Ambient temperature (operation)             | -40 °C ... 80 °C (cable, fixed installation)<br>-5 °C ... 80 °C (Cable, flexible installation) |

## Environmental and real-life conditions

### Ambient conditions

|                      |      |
|----------------------|------|
| Degree of protection | IP65 |
|----------------------|------|

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|                                 |                               |
|---------------------------------|-------------------------------|
|                                 | IP67                          |
| Ambient temperature (operation) | -20 °C ... 85 °C (valve plug) |

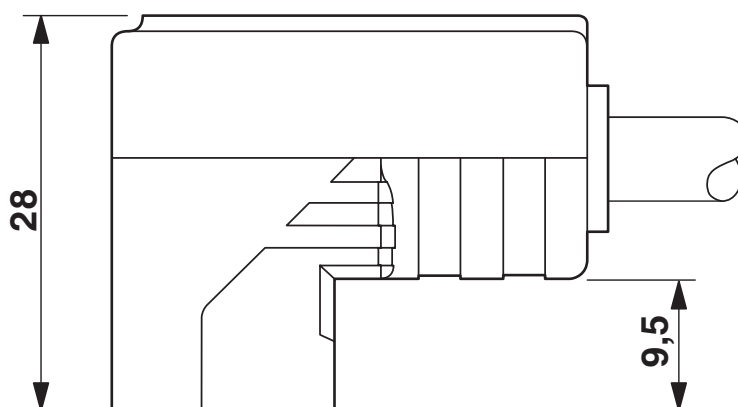
## Drawings

Dimensional drawing



Valve connector, type CI

Dimensional drawing

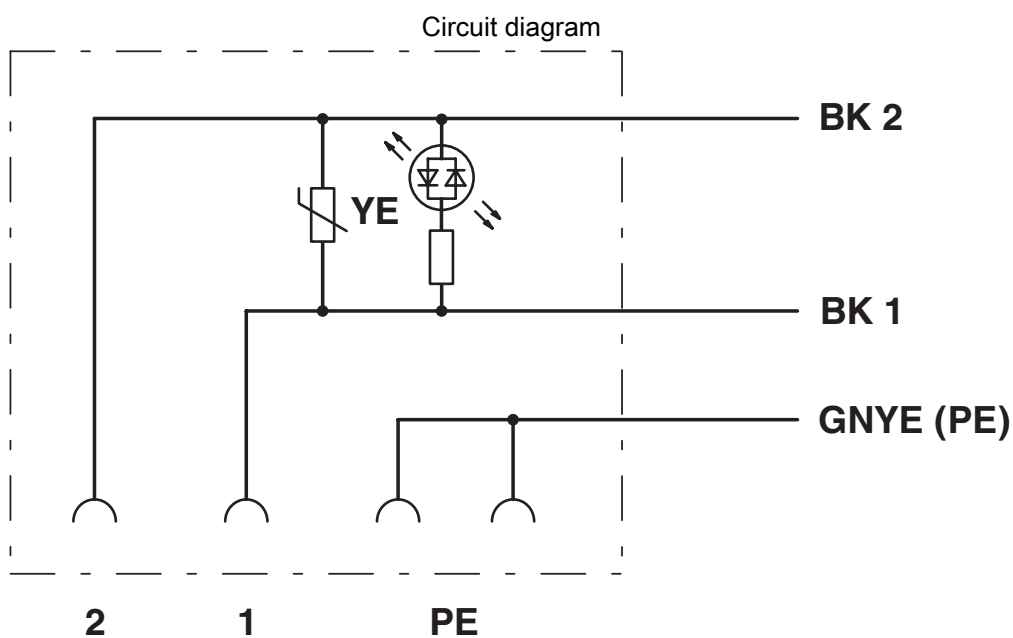


Valve connector, type CI, side view

Schematic diagram



Valve connector connector pin assignment, type CI



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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1415942>



**EAC-RoHS**  
Approval ID: RU D-DE.HB35.B.00387

|                                                                                   |                                    |                                |                   |                               |
|-----------------------------------------------------------------------------------|------------------------------------|--------------------------------|-------------------|-------------------------------|
|  | <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                               | 6 A                            | -                 | -                             |

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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, No exemptions                       |
| China RoHS                              |                                          |
| Environment friendly use period (EFUP)  | EFUP-E                                   |
|                                         | No hazardous substances above the limits |
| EU REACH SVHC                           |                                          |
| REACH candidate substance (CAS No.)     | No substance above 0.1 wt%               |

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