

SAC-3P-3,0-280/A-1L-Z - Sensor/actuator cable



1438422

<https://www.phoenixcontact.com/us/products/1438422>

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, gray RAL 7001, free cable end, on Valve connector A, with 1 LED, Wiring: Z diode

The figure shows the standard article with a black conductor

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 1438422 |
| Packing unit | 1 pc |
| Minimum order quantity | 25 pc |
| Product key | AF1DAA |
| GTIN | 4046356488235 |
| Weight per piece (including packing) | 120.6 g |
| Weight per piece (excluding packing) | 118.22 g |
| Country of origin | PL |

SAC-3P-3,0-280/A-1L-Z - Sensor/actuator cable



1438422

<https://www.phoenixcontact.com/us/products/1438422>

Technical data

Product properties

| | |
|----------------------|--|
| Product type | Sensor/actuator cable with valve connector |
| 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 | ≥ 100 MΩ |
| Nominal voltage U _N | 24 V AC |
| | 24 V DC |
| Nominal current I _N | 4 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 carrier) |
| | TPU (Housing) |
| Protective circuit | Z diode |

Cable/line

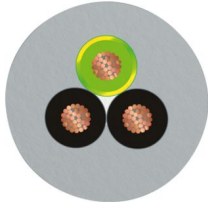
SAC-3P-3,0-280/A-1L-Z - Sensor/actuator cable



1438422

<https://www.phoenixcontact.com/us/products/1438422>

PUR halogen-free gray [280]

| | |
|---|---|
| Dimensional drawing |  |
| Cable weight | 33.2 kg/km |
| UL AWM Style | 20549 |
| Number of positions | 3 |
| Shielded | no |
| Cable type | PUR halogen-free gray [280] |
| Conductor structure signal line | 28x 0.15 mm |
| AWG signal line | 20 |
| Conductor cross-section | 3x 0.5 mm ² (Signal line) |
| 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 | gray RAL 7001 |
| Conductor material | Bare Cu litz wires |
| Material wire insulation | PP |
| Single wire, color | black 1, black 2, green/yellow |
| Overall twist | Wires twisted in layers |
| 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 |
| Minimum bending radius, flexible installation | 10 x D |
| Smallest bending radius, fixed installation | 22.5 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 ² |
| 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 |
| Ambient temperature (operation) | -40 °C ... 80 °C (cable, fixed installation) -20 °C ... 80 °C (Cable, flexible installation) |

Environmental and real-life conditions

SAC-3P-3,0-280/A-1L-Z - Sensor/actuator cable



1438422

<https://www.phoenixcontact.com/us/products/1438422>

Ambient conditions

| | |
|--|---|
| Degree of protection | IP65 |
| | IP67 |
| 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) | -20 °C ... 80 °C (Cable, flexible installation) |

SAC-3P-3,0-280/A-1L-Z - Sensor/actuator cable

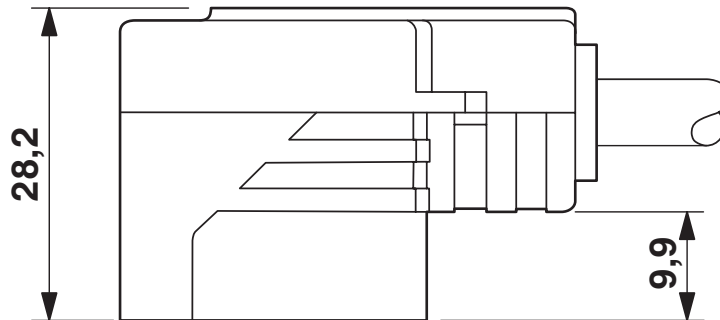


1438422

<https://www.phoenixcontact.com/us/products/1438422>

Drawings

Dimensional drawing



Valve connector, type A, side view

Dimensional drawing



Valve connector, type A

SAC-3P-3,0-280/A-1L-Z - Sensor/actuator cable

1438422

<https://www.phoenixcontact.com/us/products/1438422>

Schematic diagram



Valve connector pin assignment, type A

Circuit diagram



Contact assignment of the valve plug

SAC-3P-3,0-280/A-1L-Z - Sensor/actuator cable



1438422

<https://www.phoenixcontact.com/us/products/1438422>

Classifications

ECLASS

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

SAC-3P-3,0-280/A-1L-Z - Sensor/actuator cable



1438422

<https://www.phoenixcontact.com/us/products/1438422>

Environmental product compliance

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.) | No substance above 0.1 wt% |
|-------------------------------------|----------------------------|

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