# SAC-3P- 1,5-PUR/M 8FR-2L - Sensor/actuator cable

1671069

https://www.phoenixcontact.com/us/products/1671069

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Sensor/actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket angled M8, coding: A, with 2 LEDs, cable length: 1.5 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 | 1671069 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | BF01 |
| Product key | BF1BBA |
| Catalog page | Page 188 (C-2-2019) |
| GTIN | 4017918134914 |
| Weight per piece (including packing) | 34.12 g |
| Weight per piece (excluding packing) | 31.8 g |
| Customs tariff number | 85444290 |
| Country of origin | PL |

# Technical data

## Product properties

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

### Insulation characteristics

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

## Material specifications

| | |
|---|---|
| Flammability rating according to UL 94 | HB |
| Seal material | NBR |
| Material of grip body | TPU, hardly inflammable, self-extinguishing |
| Contact material | CuSn |
| Contact surface material | Ni/Au |
| Contact carrier material | TPU GF |
| Material for screw connection | Zinc die-cast, nickel-plated |

## Electrical properties

| | |
|---|---|
| Insulation resistance | $\geq 100$ M$\Omega$ |
| Nominal voltage $U_N$ | 24 V DC |
| Nominal current $I_N$ | 4 A |
| Protective circuit | unwired |

## Mechanical properties

### Mechanical data

| | |
|---|---|
| Insertion/withdrawal cycles | $\geq 100$ |

## Signaling

| | |
|---|---|
| Status display | 2 LEDs |
| Status display present | Yes |

## Connection data

### Conductor connection

| | |
|---|---|
| Tightening torque | 0.2 Nm (M8 connectors) |

## Connector

### Connection 1

| Type | free cable end |
|---|---|
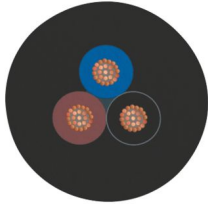
## Connection 2

| Type | Socket angled M8 |
|---|---|
| Number of positions | 3 |
| Coding type | A |

## Cable/line

| Cable length | 1.5 m |
|---|---|

### PUR halogen-free black [PUR]

| Dimensional drawing |  |
|---|---|
| Cable weight | 18 kg/km |
| UL AWM Style | 20549 / 10493 (80°C/300 V) |
| Number of positions | 3 |
| Shielded | no |
| Cable type | PUR halogen-free black [PUR] |
| Conductor structure signal line | 32x 0.10 mm |
| AWG signal line | 24 |
| Conductor cross section | 3x 0.25 mm² (Signal line) |
| Wire diameter incl. insulation | 1.17 mm ±0.02 mm |
| External cable diameter | 3.60 mm ±0.15 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 | brown, blue, black |
| Thickness, insulation | ≥ 0.21 mm (Core insulation) |
| Thickness, outer sheath | approx. 0.50 mm |
| Overall twist | 3 wires, twisted |
| Length of twist, overall twist | 40 mm |
| Max. conductor resistance | ≤ 78 Ω/km (at 20 °C) |
| Insulation resistance | ≥ 100 GΩ*km (at 20 °C) |
| Nominal voltage, cable | ≤ 300 V |
| Test voltage | ≥ 3000 V |
| Smallest bending radius, fixed installation | 18 mm |
| Smallest bending radius, movable installation | 36 mm |
| Max. bending cycles | 10000000 |

| Halogen-free | in accordance with DIN VDE 0472 part 815 |
|---|---|
| Flame resistance | in accordance with UL 758/1581 FT2 |
| | DIN EN 60332-2-2 (20 s) |
| Resistance to oil | in accordance with DIN EN 60811-2-1 |
| Other resistance | hydrolysis and microbe resistant |
| | Highly resistant to acids, alkaline solutions and solvents |
| | Resistant to salt water |
| | partly UV-resistant (in accordance with DIN EN ISO 4892-2-A) |
| Special properties | Flexible cable conduit capable |
| | Silicone-free |
| | Free of substances which would hinder coating with paint or varnish |
| Ambient temperature (operation) | -40 °C ... 80 °C (cable, fixed installation) |
| | -25 °C ... 80 °C (Cable, flexible installation) |

## Environmental and real-life conditions

### Ambient conditions

| Degree of protection | IP65 |
|---|---|
| | IP67 |
| | IP68 |
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket) |

## Standards and regulations

### M8

| Standard designation | M8 connector |
|---|---|
| Standards/specifications | IEC 61076-2-104 |

## Classifications

### ECLASS

| | |
|---|---|
| ECLASS-11.0 | 27060311 |
| ECLASS-12.0 | 27060311 |
| ECLASS-13.0 | 27060311 |

### ETIM

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

### UNSPSC

| | |
|---|---|
| UNSPSC 21.0 | 26121600 |

## Environmental product compliance

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

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