

# SAC-5P-M12MS/3,0-PUR SO V2A - Sensor/actuator cable



1699876

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Sensor/actuator cable, PUR halogen-free, black-gray RAL 7021, Plug straight M12, coding: A, on free cable end, cable length: 3 m

## Commercial data

|                                      |                                |
|--------------------------------------|--------------------------------|
| Item number                          | 1699876                        |
| Packing unit                         | 5 pc                           |
| Minimum order quantity               | 5 pc                           |
| Note                                 | Made to order (non-returnable) |
| Sales key                            | BF03                           |
| Product key                          | AF1CDA                         |
| GTIN                                 | 4017918571917                  |
| Weight per piece (including packing) | 115.84 g                       |
| Weight per piece (excluding packing) | 171.56 g                       |
| Customs tariff number                | 85444290                       |
| Country of origin                    | PL                             |

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## Technical data

### Product properties

|                      |                       |
|----------------------|-----------------------|
| Product type         | Sensor/actuator cable |
| No. of cable outlets | 1                     |
| Shielded             | no                    |
| Coding               | A                     |

### Electrical properties

|                       |         |
|-----------------------|---------|
| Nominal voltage $U_N$ | 48 V AC |
|                       | 60 V DC |

### Mechanical properties

#### Mechanical data

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

### Connector

#### Connection 1

|             |                   |
|-------------|-------------------|
| Type        | Plug straight M12 |
| Coding type | A                 |

#### Connection 2

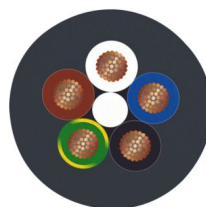
|      |                |
|------|----------------|
| Type | free cable end |
|------|----------------|

### Cable/line

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

#### PUR halogen-free black [PUR]

##### Dimensional drawing



|                                 |                              |
|---------------------------------|------------------------------|
| Cable weight                    | 33 kg/km                     |
| UL AWM Style                    | 20549                        |
| Number of positions             | 5                            |
| Shielded                        | no                           |
| Cable type                      | PUR halogen-free black [PUR] |
| Conductor structure signal line | 42x 0.10 mm                  |
| AWG signal line                 | 22                           |

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|   |   |
|---|---|
| Conductor cross section                       | 5x 0.34 mm <sup>2</sup> (Signal line)   |
| Wire diameter incl. insulation                | 1.27 mm 0.05 mm (Signal line)   |
| External cable diameter                       | 4.55 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, white, blue, black, green-yellow   |
| Thickness, insulation                         | approx. 0.50 mm   |
| Max. conductor resistance                     | max. 58 Ω/km (at 20 °C)   |
| Insulation resistance                         | ≥ 16 GΩ*km (at 20 °C)   |
| Nominal voltage, cable                        | 300 V   |
| Test voltage                                  | 3000 V  |
| Smallest bending radius, fixed installation   | 23 mm   |
| Smallest bending radius, movable installation | 46 mm   |
| Dynamic load capacity (bending)               | Max. bending cycles: 10000000, Bending radius: 46 mm, Bending radius: 10 x D, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s <sup>2</sup>                            |
| Dynamic load capacity (torsion)               | Torsion: ±180 °/m, Torsion cycles: ≥2000000, Torsional frequency: 35 cycles/min.  |
| Halogen-free                                  | in accordance with DIN VDE 0472 part 815  |
| Flame resistance                              | in accordance with UL 758/1581 FT2<br>DIN EN 60332-2-2 (20 s)   |
| Resistance to oil                             | in accordance with DIN EN 60811-2-1   |
| Other resistance                              | Highly resistant to acids, alkaline solutions and solvents<br>hydrolysis and microbe resistant<br>Resistant to salt water<br>partly UV-resistant (in accordance with DIN EN ISO 4892-2-A) |
| Special properties                            | Flexible cable conduit capable<br>Silicone-free<br>Free of substances which would hinder coating with paint or varnish<br>flexible  |
| Ambient temperature (operation)               | -40 °C ... 80 °C (cable, fixed installation)<br>-25 °C ... 80 °C (Cable, flexible installation)   |

## Environmental and real-life conditions

### Ambient conditions

|                                 |  |
|---------------------------------|--|
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket)               |
|                                 | -25 °C ... 80 °C (cable, fixed installation)   |
|                                 | -5 °C ... 80 °C (Cable, flexible installation) |

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## Approvals

📄 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1699876>



**EAC-RoHS**

Approval ID: RU D-DE.HB35.B.00387

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## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27060311 |
| ECLASS-15.0 | 27060311 |

### ETIM

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

### UNSPSC

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

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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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