

## Sensor/actuator cable - SAC-3P-MS/1,0-PUR/M 8FS SCO - 1535930

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Sensor/actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12 SPEEDCON, coding: A, on Socket straight M8, cable length: 1 m



### Key Commercial Data

|                                      |   |
|--------------------------------------|---|
| Packing unit                         | 1 pc  |
| Minimum order quantity               | 50 pc   |
| GTIN                                 | <br>4 046356 027472 |
| GTIN                                 | 4046356027472   |
| Weight per Piece (excluding packing) | 44.390 g  |
| Custom tariff number                 | 85444290  |
| Country of origin                    | Poland  |

### Technical data

#### Dimensions

|                 |     |
|-----------------|-----|
| Length of cable | 1 m |
|-----------------|-----|

#### Ambient conditions

|                      |      |
|----------------------|------|
| Degree of protection | IP65 |
|                      | IP67 |
|                      | IP68 |

#### General

|                       |         |
|-----------------------|---------|
| Rated current at 40°C | 4 A     |
| Rated voltage         | 48 V AC |
|                       | 60 V DC |

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## Technical data

### General

|                       |                            |
|-----------------------|----------------------------|
| Number of positions   | 3                          |
| Insulation resistance | $\geq 100 \text{ M}\Omega$ |
| Coding                | A - standard               |
| Status display        | No                         |
| Ovvoltge category     | II                         |
| Degree of pollution   | 3                          |

### Material

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

### Standards and Regulations

|  |    |
|--|----|
| Flammability rating according to UL 94 | HB |
|--|----|

### Cable

|   |                                  |
|---|----------------------------------|
| Cable type                                    | PUR halogen-free black           |
| Cable type (abbreviation)                     | PUR                              |
| Cable abbreviation                            | Li9Y11Y-HF                       |
| UL AWM style                                  | 20549 / 10493 (80°C/300 V)       |
| Conductor cross section                       | 3x 0.25 mm <sup>2</sup>          |
| AWG signal line                               | 24                               |
| Conductor structure signal line               | 32x 0.10 mm                      |
| Core diameter including insulation            | 1.17 mm $\pm 0.02$ mm            |
| Thickness, insulation                         | $\geq 0.21$ mm (Core insulation) |
| Wire colors                                   | brown, blue, black               |
| Overall twist                                 | 3 wires, twisted                 |
| Length of twist, overall twist                | 40 mm                            |
| External sheath, color                        | black-gray RAL 7021              |
| Outer sheath thickness                        | approx. 0.5 mm                   |
| External cable diameter D                     | 3.6 mm $\pm 0.15$ mm             |
| Smallest bending radius, fixed installation   | 18 mm                            |
| Smallest bending radius, movable installation | 36 mm                            |
| Number of bending cycles                      | 10000000                         |
| Bending radius                                | 44 mm                            |

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## Technical data

### Cable

|                                 |   |
|---------------------------------|---|
| Traversing path                 | 10 m  |
| Traversing rate                 | 3 m/s   |
| Acceleration                    | 10 m/s <sup>2</sup>   |
| Cable weight                    | 18 kg/km  |
| Outer sheath, material          | PUR   |
| Material conductor insulation   | PP  |
| Conductor material              | Bare Cu litz wires  |
| Insulation resistance           | ≥ 100 GΩ*km (at 20 °C)  |
| Conductor resistance            | ≤ 78 Ω/km (at 20 °C)  |
| Nominal voltage, cable          | ≤ 300 V   |
| Test voltage, cable             | ≥ 3000 V  |
| Special properties              | Flexible cable conduit capable                                      |
|                                 | Silicone-free   |
|                                 | Free of substances which would hinder coating with paint or varnish |
| Flame resistance                | in accordance with UL 758/1581 FT2                                  |
|                                 | DIN EN 60332-2-2 (20 s)   |
| Halogen-free                    | in accordance with DIN VDE 0472 part 815                            |
| 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          |
| Ambient temperature (operation) | -40 °C ... 80 °C (cable, fixed installation)                        |
|                                 | -25 °C ... 80 °C (cable, flexible installation)                     |

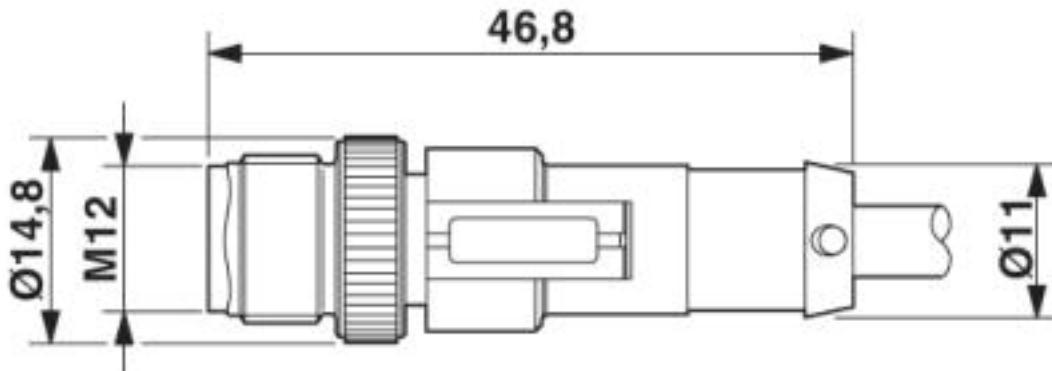
### Environmental Product Compliance

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

### Drawings

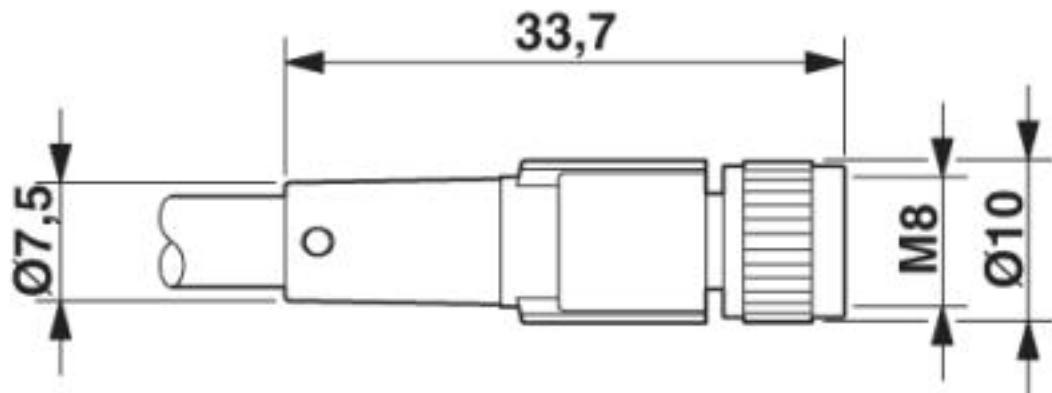
## Sensor/actuator cable - SAC-3P-MS/1,0-PUR/M 8FS SCO - 1535930

Dimensional drawing



Plug, M12 x 1, straight, shielded

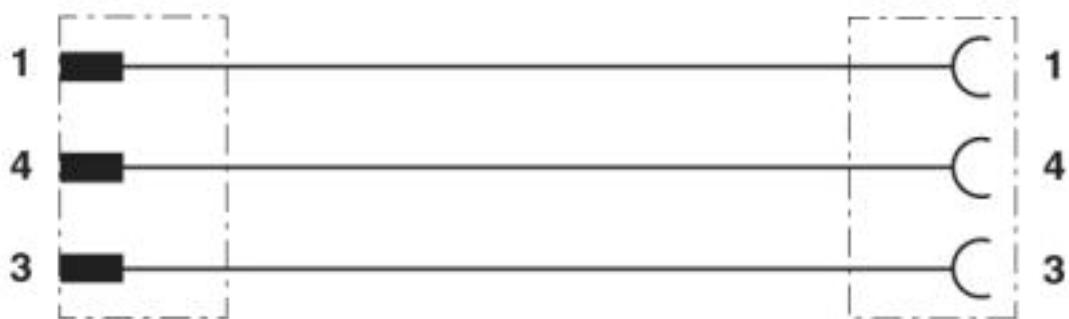
Dimensional drawing



Socket M8 x 1, straight

## Sensor/actuator cable - SAC-3P-MS/1,0-PUR/M 8FS SCO - 1535930

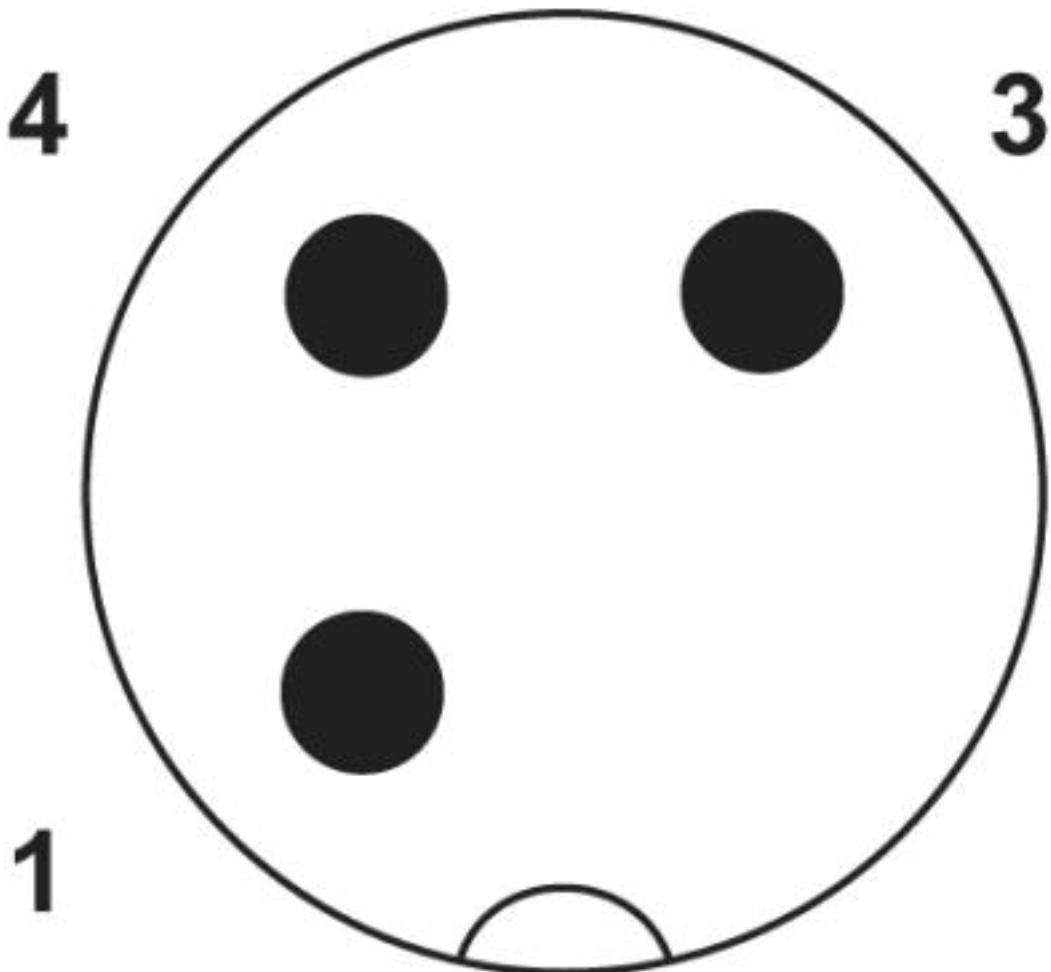
Circuit diagram



Contact assignment of M12 plugs / M8 sockets

## Sensor/actuator cable - SAC-3P-MS/1,0-PUR/M 8FS SCO - 1535930

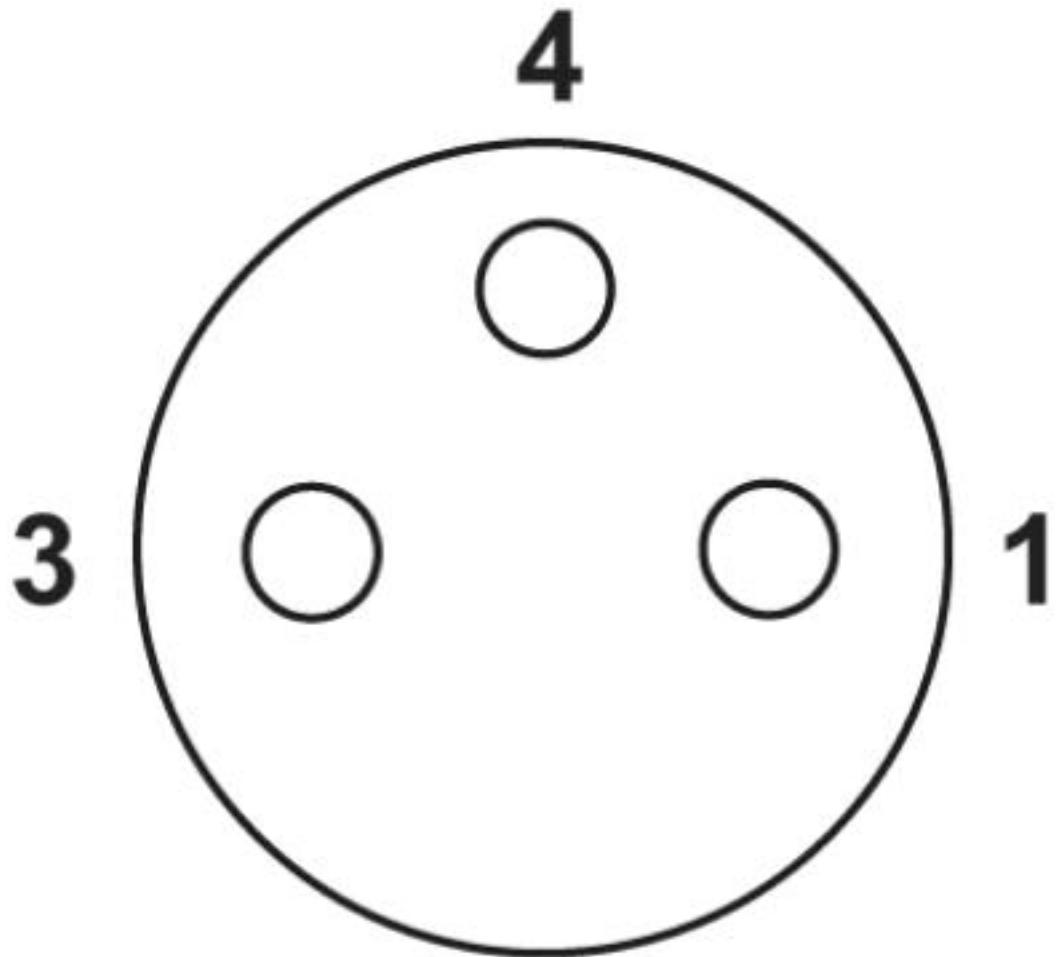
Schematic diagram



Pin assignment M12 plug, 3-pos., A-coded, view male side

## Sensor/actuator cable - SAC-3P-MS/1,0-PUR/M 8FS SCO - 1535930

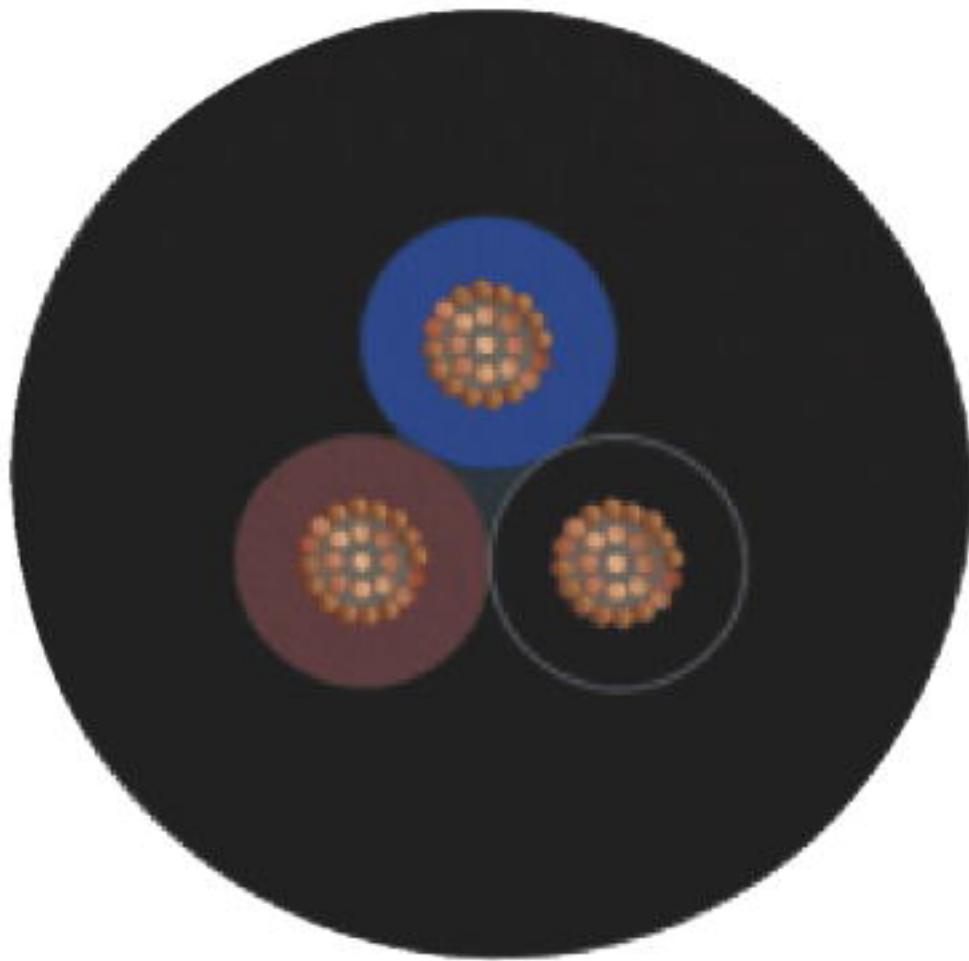
Schematic diagram



Pin assignment M8 socket, 3-pos.

## Sensor/actuator cable - SAC-3P-MS/1,0-PUR/M 8FS SCO - 1535930

Cable cross section



PUR halogen-free black [PUR]

### Classifications

eCl@ss

|               |          |
|---------------|----------|
| eCl@ss 10.0.1 | 27060311 |
| eCl@ss 4.0    | 27060300 |
| eCl@ss 4.1    | 27060300 |
| eCl@ss 5.0    | 27061800 |
| eCl@ss 5.1    | 27061800 |
| eCl@ss 6.0    | 27279200 |
| eCl@ss 7.0    | 27279218 |

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### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 8.0 | 27279218 |
| eCl@ss 9.0 | 27060311 |

#### ETIM

|          |          |
|----------|----------|
| ETIM 2.0 | EC000830 |
| ETIM 3.0 | EC001855 |
| ETIM 4.0 | EC001855 |
| ETIM 5.0 | EC001855 |
| ETIM 6.0 | EC001855 |
| ETIM 7.0 | EC001855 |

#### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 31251501 |
| UNSPSC 7.0901 | 31251501 |
| UNSPSC 11     | 31251501 |
| UNSPSC 12.01  | 31251501 |
| UNSPSC 13.2   | 31251501 |
| UNSPSC 19.0   | 31251501 |
| UNSPSC 20.0   | 31251501 |
| UNSPSC 21.0   | 31251501 |

### Approvals

#### Approvals

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#### Approvals

UL Listed / cUL Listed / EAC / cULus Listed

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#### Ex Approvals

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#### Approval details

|                    |   |   |               |
|--------------------|---|---|---------------|
| UL Listed          |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 221474 |
|                    |   |   |               |
| Nominal voltage UN |   | 60 V  |               |

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### Approvals

|                    |     |
|--------------------|-----|
|                    |     |
| Nominal current IN | 4 A |

|                    |   |   |               |
|--------------------|---|---|---------------|
| cUL Listed         |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 221474 |
| Nominal voltage UN |   | 60 V  |               |
| Nominal current IN |   | 4 A   |               |

|     |   |                          |
|-----|---|--------------------------|
| EAC |  | RU D-<br>DE.HB35.B.00387 |
|-----|---|--------------------------|

|              |  |
|--------------|--|
| cULus Listed |  |
|--------------|--|

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