

## Sensor/actuator cable - SAC-5P-M12MS/20,0-PUR/M12FS SH - 1535668

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Sensor/actuator cable, 5-position, PUR halogen-free, black-gray RAL 7021, shielded, Plug straight M12, A-coded, on Socket straight M12, A-coded, cable length: 20 m

RoHS

### Key Commercial Data

|                        |                                                                                                         |
|------------------------|---------------------------------------------------------------------------------------------------------|
| Packing unit           | 5 pc                                                                                                    |
| Minimum order quantity | 25 pc                                                                                                   |
| GTIN                   | <br>4 046356 027328 |
| GTIN                   | 4046356027328                                                                                           |

### Technical data

#### Dimensions

|                 |      |
|-----------------|------|
| Length of cable | 20 m |
|-----------------|------|

#### Ambient conditions

|                      |      |
|----------------------|------|
| Degree of protection | IP67 |
|----------------------|------|

#### General

|                             |                    |
|-----------------------------|--------------------|
| Rated current at 40°C       | 4 A                |
| Rated voltage               | 48 V AC<br>60 V DC |
| Number of positions         | 5                  |
| Coding                      | A - standard       |
| Status display              | No                 |
| Insertion/withdrawal cycles | ≥ 100              |

#### Material

|                          |       |
|--------------------------|-------|
| Contact material         | CuSn  |
| Contact surface material | Ni/Au |

#### Cable

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## Technical data

### Cable

|                                               |                                                            |
|-----------------------------------------------|------------------------------------------------------------|
| Cable type                                    | PUR halogen-free black                                     |
| Cable type (abbreviation)                     | PUR                                                        |
| Cable abbreviation                            | LiF9YC11Y                                                  |
| UL AWM style                                  | 20549                                                      |
| Conductor cross section                       | 5x 0.34 mm <sup>2</sup> (Signal line)                      |
| AWG signal line                               | 22                                                         |
| Conductor structure signal line               | 42x 0.10 mm                                                |
| Core diameter including insulation            | 1.27 mm ±0.02 mm (Signal line)                             |
| Wire colors                                   | Brown, white, blue, black, gray                            |
| Overall twist                                 | 5 wires around filler to the core                          |
| Shielding                                     | Tinned copper braided shield                               |
| Optical shield covering                       | 80 %                                                       |
| External sheath, color                        | black RAL 9005                                             |
| External cable diameter D                     | 5.25 mm ±0.2 mm                                            |
| Smallest bending radius, fixed installation   | 26 mm                                                      |
| Smallest bending radius, movable installation | 52 mm (up to +60 °C)                                       |
| Number of bending cycles                      | 10000000                                                   |
| Bending radius                                | 52 mm                                                      |
| Traversing path                               | 10 m                                                       |
| Traversing rate                               | 3 m/s                                                      |
| Acceleration                                  | 10 m/s <sup>2</sup>                                        |
| Outer sheath, material                        | PUR                                                        |
| Material conductor insulation                 | PP                                                         |
| Conductor material                            | Bare Cu litz wires                                         |
| Insulation resistance                         | 70 GΩ*km (at 20 °C)                                        |
| Conductor resistance                          | max. 57 Ω/km (at 20 °C)                                    |
| Nominal voltage, cable                        | 300 V (at 20 °C)                                           |
| Test voltage Core/Core                        | 3000 V (at 20 °C)                                          |
| Special properties                            | Flexible cable conduit capable                             |
| 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                           |
|                                               | 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 |
|------------|---------------------------------------------------------|

# Sensor/actuator cable - SAC-5P-M12MS/20,0-PUR/M12FS SH - 1535668

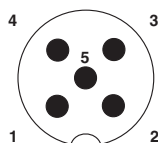
## Technical data

### Environmental Product Compliance

|  |                                                |
|--|------------------------------------------------|
|  | No hazardous substances above threshold values |
|--|------------------------------------------------|

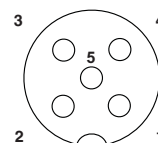
## Drawings

Schematic diagram



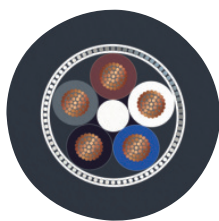
Pin assignment M12 male connector, 5-pos., A-coded, male side

Schematic diagram



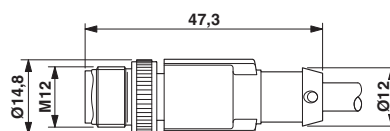
Pin assignment M12 socket, 5-pos., A-coded, socket side view

Cable cross section

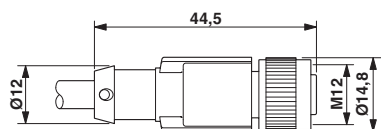


PUR halogen-free black [PUR]

Dimensional drawing



Dimensional drawing



Circuit diagram



## Approvals

### Approvals

Approvals

UL Listed / cUL Listed / EAC / cULus Listed

Ex Approvals

### Approval details

## Sensor/actuator cable - SAC-5P-M12MS/20,0-PUR/M12FS SH - 1535668

### Approvals

|                    |                                                                                   |                                                                                                                                                       |               |
|--------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 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 |                                                                                   | 125 V                                                                                                                                                 |               |
| 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 |                                                                                   | 125 V                                                                                                                                                 |               |
| Nominal current IN |                                                                                   | 4 A                                                                                                                                                   |               |

|     |                                                                                    |                          |
|-----|------------------------------------------------------------------------------------|--------------------------|
| EAC |  | RU C-<br>DE.AI30.B.00767 |
|-----|------------------------------------------------------------------------------------|--------------------------|

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

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