


## Sensor/actuator cable - SAC-5P- 5,0-115/M12FR BK - 1578683

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Sensor/actuator cable, 5-position, PUR, black-gray RAL 7021, free cable end, on Socket angled M12, A-coded, cable length: 5 m

### Key Commercial Data

|                        |   |
|------------------------|---|
| Packing unit           | 1 pc  |
| Minimum order quantity | 50 pc   |
| GTIN                   | <br>4 046356 474146 |
| GTIN                   | 4046356474146   |

### Technical data

#### Dimensions

|  |       |
|--|-------|
| Length of cable                            | 5 m   |
| Stripping length of the free conductor end | 50 mm |

#### Ambient conditions

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

#### General

|                             |              |
|-----------------------------|--------------|
| Rated current at 40°C       | 4 A          |
| Rated voltage               | 48 V AC      |
|                             | 60 V DC      |
| Number of positions         | 5            |
| Insulation resistance       | ≥ 100 MΩ     |
| Coding                      | A - standard |
| Status display              | No           |
| Overvoltage category        | II           |
| Degree of pollution         | 3            |
| Insertion/withdrawal cycles | ≥ 100        |

#### Material

|  |      |
|--|------|
| Flammability rating according to UL 94 | HB   |
| Contact material                       | CuSn |

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## Technical data

### Material

|                          |   |
|--------------------------|---|
| 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, black, 5th conductor gray                                      |
| Cable type (abbreviation)                     | 115   |
| Cable abbreviation                            | Li9Y11Y-HF  |
| UL AWM style                                  | 20549 / 10493 (80°C/300 V)  |
| Conductor cross section                       | 5x 0.34 mm <sup>2</sup>   |
| AWG signal line                               | 22  |
| Conductor structure signal line               | 42x 0.10 mm   |
| Core diameter including insulation            | 1.27 mm ±0.02 mm  |
| Thickness, insulation                         | ≥ 0.21 mm   |
| Wire colors                                   | Brown, white, blue, black, gray                                     |
| Overall twist                                 | 5 cores, twisted  |
| External sheath, color                        | black-gray RAL 7021   |
| Outer sheath thickness                        | approx. 0.7 mm  |
| External cable diameter D                     | 5 mm ±0.15 mm   |
| Minimum bending radius, fixed installation    | 5 x D   |
| Minimum bending radius, flexible installation | 10 x D  |
| Number of bending cycles                      | 4000000   |
| Bending radius                                | 50 mm   |
| Traversing path                               | 10 m  |
| Traversing rate                               | 3 m/s   |
| Acceleration                                  | 10 m/s <sup>2</sup>   |
| Cable weight                                  | 35 kg/km  |
| Outer sheath, material                        | PUR   |
| Material, filler                              | PP  |
| Material conductor insulation                 | PP  |
| Conductor material                            | Bare Cu litz wires  |
| Conductor resistance                          | ≤ 58 Ω/km   |
| 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 |

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## Technical data

### Cable

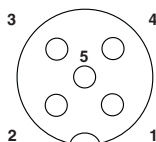
|                                 |  |
|---------------------------------|--|
|                                 | flexible   |
| Flame resistance                | in accordance with DIN UL-Style 20549                      |
|                                 | in accordance with UL 758/1581 FT2                         |
| Halogen-free                    | in accordance with DIN VDE 0472 part 815                   |
| Resistance to oil               | in accordance with DIN EN 60811-2-1                        |
| Other resistance                | partly UV-resistant in accordance with DIN EN ISO 4892-2-A |
|                                 | hydrolysis and microbe resistant                           |
|                                 | Resistant to salt water                                    |
|                                 | Low adhesion   |
|                                 | abrasion-resistant   |
| 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          |

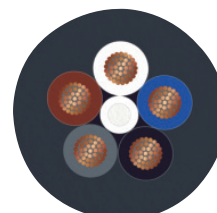
## Drawings

Schematic diagram



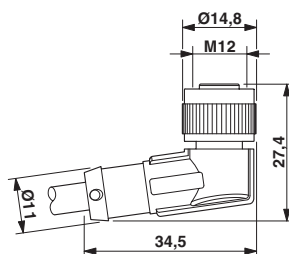
Pin assignment M12 socket, 5-pos., A-coded, socket side view

Cable cross section



PUR, black, 5th conductor gray [115]

Dimensional drawing



M12 x 1 socket, angled

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## Approvals

### Approvals

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#### Approvals

UL Listed / cUL Listed / 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 |  | 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 |
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| Nominal voltage UN |  | 125 V   |               |
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|              |  |  |  |
|--------------|--|--|--|
| cULus Listed |  |  |  |
|--------------|--|--|--|

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