

## Sensor/Actuator cable - SAC-5P- 1,5-PVC/M12FS - 1415683

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Sensor/Actuator cable, 5-position, PVC, Black RAL 9005, free cable end, on Socket straight M12, A-coded, Cable length: 1.5 m

### Product Features

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓



### Key commercial data

|                      |          |
|----------------------|----------|
| Packing unit         | 1 pc     |
| Custom tariff number | 85444290 |
| Country of origin    | Germany  |

### Technical data

#### Dimensions

|                 |       |
|-----------------|-------|
| Length of cable | 1.5 m |
|-----------------|-------|

#### Ambient conditions

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

#### General

|                       |              |
|-----------------------|--------------|
| Rated current at 40°C | 4 A          |
| Rated voltage         | 60 V         |
| Number of positions   | 5            |
| Contact resistance    | ≤ 5 mΩ       |
| Insulation resistance | ≥ 100 MΩ     |
| Coding                | A - standard |

## Sensor/Actuator cable - SAC-5P- 1,5-PVC/M12FS - 1415683

### Technical data

#### General

|                              |                               |
|------------------------------|-------------------------------|
| Standards/regulations        | M12 connector IEC 61076-2-101 |
| Status display               | No                            |
| Protective circuit/component | Unwired                       |
| Surge voltage category       | II                            |
| Pollution degree             | 3                             |
| Insertion/withdrawal cycles  | ≥ 100                         |

#### Material

|   |   |
|---|---|
| Inflammability class 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   |

#### Cable

|   |   |
|---|---|
| Cable type                                    | PVC black                               |
| Cable type (abbreviation)                     | PVC                                     |
| Cable abbreviation                            | LiYY                                    |
| UL AWM style                                  | 2464 / 1729 (80°C/300 V)                |
| Conductor cross section                       | 5x 0.34 mm <sup>2</sup> (signal line)   |
| AWG signal line                               | 22                                      |
| Conductor structure signal line               | 19x 0.15 mm                             |
| Core diameter including insulation            | 1.26 mm ±0.05 mm                        |
| Thickness, insulation                         | ≥ 0.23 mm (Core insulation)             |
| Wire colors                                   | brown, white, blue, black, green-yellow |
| Overall twist                                 | 5 wires around filler to the core       |
| External sheath, color                        | Black RAL 9005                          |
| Outer sheath thickness                        | ≥ 0.76 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                                  |
| Cable weight                                  | 51 kg/km                                |
| Outer sheath, material                        | PVC                                     |
| Material conductor insulation                 | PVC                                     |
| Conductor material                            | Bare Cu litz wires                      |
| Insulation resistance                         | ≥ 200 MΩ*km (at 20 °C)                  |

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## Technical data

### Cable

|                        |                                 |
|------------------------|---------------------------------|
| Conductor resistance   | max. 57 $\Omega$ /km (at 20 °C) |
| Nominal voltage, cable | $\leq$ 300 V                    |
| Test voltage, cable    | $\geq$ 3000 V                   |
| Flame resistance       | As per UL-Style 2464            |

## Classifications

### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 5.1 | 27061801 |
| eCl@ss 6.0 | 27279218 |

### ETIM

|          |          |
|----------|----------|
| ETIM 5.0 | EC001855 |
|----------|----------|

## Approvals

### Approvals

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#### Approvals

UL Listed / cUL Listed / cULus Listed

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#### Ex Approvals

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#### Approvals submitted

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## Approval details

|   |       |
|---|-------|
| UL Listed  |       |
| Nominal current I <sub>N</sub>  | 4 A   |
| Nominal voltage U <sub>N</sub>  | 125 V |

# Sensor/Actuator cable - SAC-5P- 1,5-PVC/M12FS - 1415683

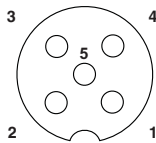
## Approvals

|                                |       |
|--------------------------------|-------|
| cUL Listed                     |       |
| Nominal current I <sub>N</sub> | 4 A   |
| Nominal voltage U <sub>N</sub> | 125 V |

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

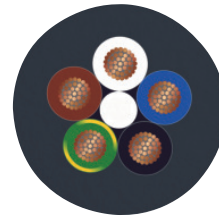
## Drawings

Schematic diagram



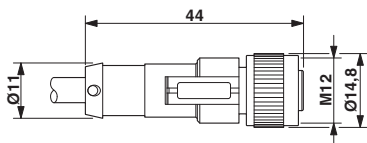
Pin assignment M12 socket, 5-pos., A-coded, socket side view

Cable cross section



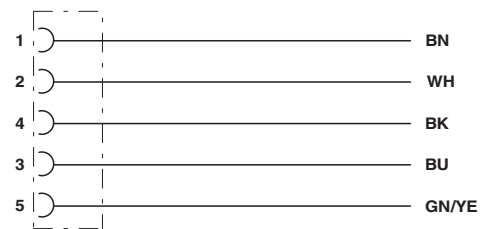
PVC black [PVC]

Dimensional drawing



M12 x 1 socket, straight

Circuit diagram



Contact assignment of the M12 sockets