

# Sensor/Actuator cable - SAC-3P-10,0-PVC/M12FS B-L - 1431665

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Sensor/Actuator cable, 3-position, PVC, Black RAL 9005, free cable end, on Socket straight M12, A-coded, Cable length: 10 m

## Why buy this product

- Easy and safe: 100% electrically tested plug-in components
- Our PVC cable for average mechanical strain



## Key commercial data

|                      |                     |
|----------------------|---------------------|
| Packing unit         | 1                   |
| GTIN                 | <br>4 046356 506359 |
| Custom tariff number | 85444290            |

## Technical data

### Dimensions

|                 |      |
|-----------------|------|
| Length of cable | 10 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         | 250 V                         |
| Number of positions   | 3                             |
| Contact resistance    | ≤ 5 mΩ                        |
| Insulation resistance | ≥ 100 MΩ                      |
| Coding                | A - standard                  |
| Standards/regulations | M12 connector IEC 61076-2-101 |

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### Technical data

#### General

|                              |                        |
|------------------------------|------------------------|
| Status display               | No                     |
| Protective circuit/component | Unwired                |
| Surge voltage category       | II                     |
| Pollution degree             | 3                      |
| Insertion/withdrawal cycles  | ≥ 100                  |
| Torque                       | 0.4 Nm (M12 connector) |

#### 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                |

#### Cable

|   |  |
|---|--|
| Cable type                                    | PVC black                                    |
| Cable type (abbreviation)                     | PVC  |
| Cable abbreviation                            | LiYY   |
| UL AWM style                                  | 2464 / 1729 (80°C/300 V)                     |
| Conductor cross section                       | 3x 0.34 mm <sup>2</sup> (signal line)        |
| AWG signal line                               | 22   |
| Conductor structure signal line               | 42x 0.10 mm                                  |
| Core diameter including insulation            | 1.45 mm ±0.02 mm                             |
| Thickness, insulation                         | ≥ 0.23 mm (Core insulation)                  |
| Wire colors                                   | brown, blue, black                           |
| Overall twist                                 | 3 wires, twisted                             |
| External sheath, color                        | Black RAL 9005                               |
| Outer sheath thickness                        | ≥ 0.76 mm                                    |
| External cable diameter D                     | 5.2 mm ±0.2 mm                               |
| Minimum bending radius, fixed installation    | 5 x D  |
| Minimum bending radius, flexible installation | 10 x D                                       |
| Cable weight                                  | 40 kg/km                                     |
| Outer sheath, material                        | PVC  |
| Material conductor insulation                 | PVC  |
| Conductor material                            | Bare Cu litz wires                           |
| Insulation resistance                         | ≥ 100 MΩ*km (at 20 °C)                       |
| Conductor resistance                          | max. 58 Ω/km (at 20 °C)                      |
| Nominal voltage, cable                        | ≤ 300 V                                      |
| Test voltage, cable                           | ≥ 2500 V                                     |
| Flame resistance                              | As per UL-Style 2464                         |
| Resistance to oil                             | According to DIN EN 60811-2-1, 168 h at 90°C |

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## Technical data

### Cable

|                                 |   |
|---------------------------------|---|
| Ambient temperature (operation) | -40 °C ... 80 °C (cable, fixed installation)    |
|                                 | -25 °C ... 80 °C (cable, flexible installation) |

## Classifications

### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27060306 |
| eCl@ss 4.1 | 27060306 |
| eCl@ss 5.0 | 27061801 |
| eCl@ss 5.1 | 27061801 |
| eCl@ss 6.0 | 27061801 |
| eCl@ss 7.0 | 27061801 |
| eCl@ss 8.0 | 27279218 |

### ETIM

|          |          |
|----------|----------|
| ETIM 4.0 | EC001855 |
| ETIM 5.0 | EC001855 |

### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 31251501 |
| UNSPSC 7.0901 | 31251501 |
| UNSPSC 11     | 31251501 |
| UNSPSC 12.01  | 31251501 |
| UNSPSC 13.2   | 31251501 |

## 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

# Sensor/Actuator cable - SAC-3P-10,0-PVC/M12FS B-L - 1431665

## Approvals

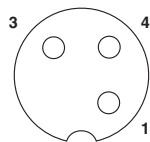
|                    |       |
|--------------------|-------|
| UL Listed          |       |
| Nominal current IN | 4 A   |
| Nominal voltage UN | 300 V |

|                    |       |
|--------------------|-------|
| cUL Listed         |       |
| Nominal current IN | 4 A   |
| Nominal voltage UN | 300 V |

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

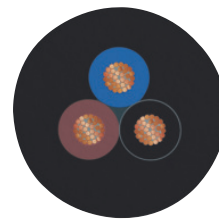
## Drawings

Schematic diagram



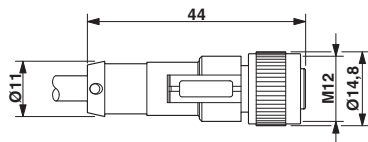
Pin assignment M12 socket, 3-pos., A-coded, view female side

Cable cross section



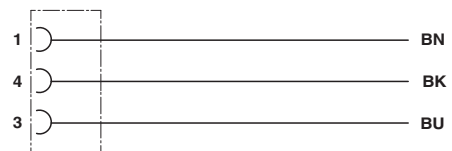
PVC black [PVC]

Dimensioned drawing



M12 x 1 socket, straight

Circuit diagram



Contact assignment of the M12 socket