

## Sensor/Actuator cable - SAC-5P-M12MS/2,0-PVC/M12FS B-L - 1432033

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Sensor/Actuator cable, 5-position, PVC, Black RAL 9005, Plug straight M12, A - standard, on Socket straight M12, A - standard, Cable length: 2 m

### Product Features

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



### Key commercial data

|                                      |           |
|--------------------------------------|-----------|
| Packing unit                         | 1 1       |
| Weight per Piece (excluding packing) | 120.0 GRM |
| Custom tariff number                 | 85444290  |
| Country of origin                    | China     |

### Technical data

#### Dimensions

|                 |     |
|-----------------|-----|
| Length of cable | 2 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 |

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### Technical data

#### General

|                             |                               |
|-----------------------------|-------------------------------|
| Coding                      | A - standard                  |
| Standards/regulations       | M12 connector IEC 61076-2-101 |
| Status display              | No                            |
| 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                |

#### 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               | 42x 0.10 mm                             |
| Core diameter including insulation            | 1.45 mm ±0.02 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                     | 5.9 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)                  |
| Conductor resistance                          | max. 58 Ω/km (at 20 °C)                 |

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### Technical data

#### Cable

|                                 |                                                 |
|---------------------------------|-------------------------------------------------|
| Nominal voltage, cable          | ≤ 300 V                                         |
| Test voltage, cable             | ≥ 3000 V                                        |
| Flame resistance                | As per UL-Style 2464                            |
|                                 | According to UL 758/1581 FT1                    |
| Resistance to oil               | According to DIN EN 60811-2-1, 168 h at 90°C    |
| 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 | 27061801 |

#### 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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## Approvals

Ex Approvals

Approvals submitted

## Approval details

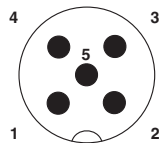
|                                                                                             |       |
|---------------------------------------------------------------------------------------------|-------|
| UL Listed  |       |
| Nominal current IN                                                                          | 4 A   |
| Nominal voltage UN                                                                          | 125 V |

|                                                                                                |       |
|------------------------------------------------------------------------------------------------|-------|
| cUL Listed  |       |
| Nominal current IN                                                                             | 4 A   |
| Nominal voltage UN                                                                             | 125 V |

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

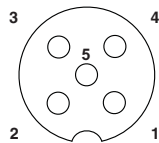
## Drawings

Schematic diagram



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

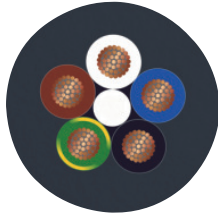
Schematic diagram



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

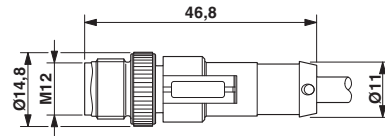
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Cable cross section



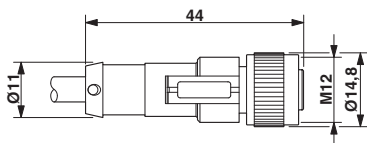
PVC black [PVC]

Dimensioned drawing



M12 x 1 plug, straight

Dimensioned drawing



M12 x 1 socket, straight

Circuit diagram



Contact assignment of the M12 plug and the M12 socket