

## SAC-4P-M12MS/ 0,5-186/M12FS

Order No.: 1509539



Sensor/Actuator cable, 4-position, PUR, Black-gray RAL 7021, Plug, straight M12, A-coded, on Socket, straight M12, A-coded, Cable length: 0.5 m

### Commercial data

|                          |                                                                                                       |
|--------------------------|-------------------------------------------------------------------------------------------------------|
| EAN                      | <br>4 017918 899172 |
| Pack                     | 1                                                                                                     |
| Customs tariff           | 85444290                                                                                              |
| Catalog page information | Page 12 (PC-2005)                                                                                     |

### Product notes

WEEE/RoHS-compliant since:  
2006-03-02



### Technical data

#### General data

|                       |                            |
|-----------------------|----------------------------|
| Rated current at 40°C | 4 A                        |
| Rated voltage         | 250 V                      |
| Number of positions   | 4                          |
| Volume resistance     | $\leq 5 \text{ m}\Omega$   |
| Insulation resistance | $\geq 100 \text{ M}\Omega$ |
| Length of cable       | 0.5 m                      |

|                                 |                                                      |
|---------------------------------|------------------------------------------------------|
| Ambient temperature (operation) | -25 °C ... 90 °C (Male connector / female connector) |
|---------------------------------|------------------------------------------------------|

**General characteristics**

|                             |                                             |
|-----------------------------|---------------------------------------------|
| Coding                      | A - standard                                |
| Surge voltage category      | II                                          |
| Pollution degree            | 3                                           |
| Degree of protection        | IP65/IP68/IP69K                             |
| Insertion/withdrawal cycles | ≥ 100                                       |
| 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                                         |
| Status display              | No                                          |

**Conductor data**

|                                    |                                                               |
|------------------------------------|---------------------------------------------------------------|
| Cable type                         | PUR POWER 0.75 mm <sup>2</sup> black                          |
| Cable type (abbreviation)          | 186                                                           |
| Cable abbreviation                 | LiY11Y                                                        |
| Conductor cross section            | 0.75 mm <sup>2</sup>                                          |
| AWG signal line                    | 18                                                            |
| Conductor structure signal line    | 42x 0.15 mm                                                   |
| Core diameter including insulation | 1.75 mm ±0.05 mm                                              |
| Thickness, insulation              | ≥ 0.23 mm (Core insulation)<br>≥ 0.76 mm (Outer cable sheath) |
| External cable diameter            | 5.90 mm                                                       |
| Wire colors                        | Brown, white, blue, black                                     |
| External sheath, color             | Black-gray RAL 7021                                           |
| Insulation resistance              | ≥ 1 MΩ*km                                                     |
| Conductor resistance               | max. 26 Ω/km                                                  |
| Nominal voltage, conductor         | ≤ 300 V                                                       |
| Test voltage, conductor            | ≥ 3000 V                                                      |
| Overall twist                      | 4 wires, twisted                                              |
| Outer sheath, material             | PUR                                                           |
| Material conductor insulation      | PVC                                                           |

|                                               |                                                                                                |
|-----------------------------------------------|------------------------------------------------------------------------------------------------|
| Conductor material                            | Bare Cu litz wires                                                                             |
| Cable weight                                  | 57 kg/km                                                                                       |
| Smallest bending radius, movable installation | 59 mm                                                                                          |
| Number of bending cycles                      | 2000000                                                                                        |
| Bending radius                                | 59 mm                                                                                          |
| Traversing path                               | 5 m                                                                                            |
| Traversing rate                               | 3 m/s                                                                                          |
| Acceleration                                  | 5 m/s <sup>2</sup>                                                                             |
| Ambient temperature (operation)               | -25 °C ... 80 °C (cable, fixed installation)<br>-5 °C ... 80 °C (cable, flexible installation) |
| Flame resistance                              | in accordance with DIN UL-Style 20549                                                          |

## Certificates

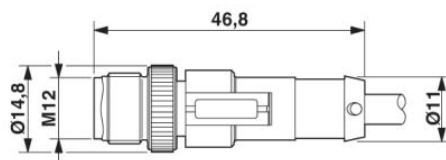


Certification

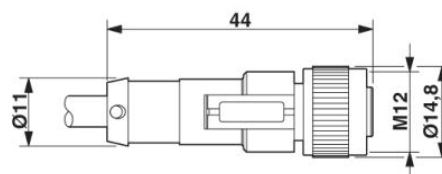
CUL Listed, UL Listed

## Drawings

Dimensioned drawing

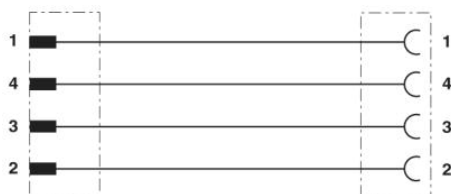


M12 x 1 male connector, straight



M12 x 1 female connector, straight

Circuit diagram



Contact assignment of the M12 connector and the M12 socket

Schematic diagram

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Pin assignment M12 plug, 4-pos., A-coded, view plug side



Pin assignment M12 socket, 4-pos., A-coded, view female side