

## Sensor/Actuator cable - SAC-4P-M 8MS/ 5,0-PVC B-L - 1404710

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)




Sensor/Actuator cable, 4-position, PVC, Black RAL 9005, Plug straight M8, on free cable end, Cable length: 5 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 724920 |
| Custom tariff number | 85444290  |

### Technical data

#### Dimensions

|                 |     |
|-----------------|-----|
| Length of cable | 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         | 30 V                         |
| Number of positions   | 4                            |
| Contact resistance    | ≤ 5 mΩ                       |
| Insulation resistance | ≥ 100 MΩ                     |
| Coding                | A - standard                 |
| Standards/regulations | M8 connector IEC 61076-2-104 |

## Sensor/Actuator cable - SAC-4P-M 8MS/ 5,0-PVC B-L - 1404710

### Technical data

#### General

|                              |                        |
|------------------------------|------------------------|
| Status display               | No                     |
| Protective circuit/component | Unwired                |
| Surge voltage category       | II                     |
| Pollution degree             | 3                      |
| Insertion/withdrawal cycles  | ≥ 100                  |
| Torque                       | 0.2 Nm (M8 connectors) |

#### 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   |
| Conductor cross section            | 4x 0.25 mm <sup>2</sup> (signal line)          |
| AWG signal line                    | 24   |
| Conductor structure signal line    | 32x 0.10 mm                                    |
| Core diameter including insulation | 1.25 mm ±0.02 mm                               |
| Thickness, insulation              | ≥ 0.23 mm (Core insulation)                    |
|                                    | ≥ 0.76 mm (Outer cable sheath)                 |
| Wire colors                        | brown, white, blue, black                      |
| Overall twist                      | 4 wires, twisted                               |
| External sheath, color             | Black RAL 9005                                 |
| External cable diameter D          | 4.7 mm ±0.15 mm                                |
| Cable weight                       | 33 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. 78 Ω/km (at 20 °C)                        |
| Nominal voltage, cable             | ≤ 300 V  |
| Test voltage, cable                | ≥ 3000 V                                       |
| Flame resistance                   | As per UL-Style 2464                           |
| Ambient temperature (operation)    | -25 °C ... 80 °C (cable, fixed installation)   |
|                                    | -5 °C ... 80 °C (cable, flexible installation) |

# Sensor/Actuator cable - SAC-4P-M 8MS/ 5,0-PVC B-L - 1404710

## 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 3.0 | EC001855 |
| 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

---

#### Approvals

UL Listed / cUL Listed / cULus Listed

---

#### Ex Approvals

---

#### Approvals submitted

---

### Approval details

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

# Sensor/Actuator cable - SAC-4P-M 8MS/ 5,0-PVC B-L - 1404710

## Approvals

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

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

## Accessories

### Accessories

#### Conductor marking

Insert label - PABA WH/15 - 1013151



Insert label, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

Insert label - PABA YE/15 - 1013698



Insert label, Strip, yellow, unlabeled, can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

Insert label - PABA RD/15 - 1013944



Insert label, Strip, red, unlabeled, can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

## Cutting tools

## Sensor/Actuator cable - SAC-4P-M 8MS/ 5,0-PVC B-L - 1404710

### Accessories

Diagonal cutter - CUTFOX-S VDE - 1212207



Diagonal cutter for copper and aluminum conductors, VDE-tested

---

### Marker carrier cable

Conductor marker carrier - PATG 2/15 - 1013038



Conductor marker carrier, transparent, unlabeled, Mounting type: slide on, Cable diameter: 2-4 mm, Lettering field: 4 x 15 mm

---

Conductor marker carrier - PATG 3/15 - 1013041



Conductor marker carrier, transparent, unlabeled, Mounting type: slide on, Cable diameter: 4-7 mm, Lettering field: 4 x 15 mm

---

Conductor marker carrier - PATG 4/15 - 1013054



Conductor marker carrier, transparent, unlabeled, Mounting type: slide on, Cable diameter: 6-10 mm, Lettering field: 4 x 15 mm

---

### Marker pen

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

---

### Protective cap

## Sensor/Actuator cable - SAC-4P-M 8MS/ 5,0-PVC B-L - 1404710

### Accessories

Sealing cap - PROT-M 8 FS-PA-CHAIN - 1430857

M8 sealing cap made of plastic with fixing band for sensor cables, for M8 plugs



---

### Screwdriver tools

Tool - SAC BIT M8-D10 - 1208461



Nut for assembling sensor/actuator cables with M8 connector and for M8 connectors with QUICKON fast connection technology, for 4 mm hexagonal drive

---

### Stripping tool

Stripping tool - WIREFOX SAC-1 - 1212757



Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from  $\varnothing$  of 3.2 to 4.4 mm, any stripping length

---

Stripping tool - WIREFOX SAC - 1212623



Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from  $\varnothing$  of 4.4 to 7 mm, any stripping length

---

Stripping tool - WIREFOX 10 - 1212150



Stripping tool, for cables and conductors from 0.02 - 10 mm<sup>2</sup>, self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 mm<sup>2</sup> stranded/1.5 mm<sup>2</sup> solid, replaceable stripping blade

---

### Torque tool

# Sensor/Actuator cable - SAC-4P-M 8MS/ 5,0-PVC B-L - 1404710

## Accessories

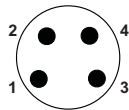
Torque screwdriver - TSD 02 SAC - 1208487



Torque screwdriver, with preset torque of 0.2 Nm and 4 mm hexagonal drive for M8 connectors

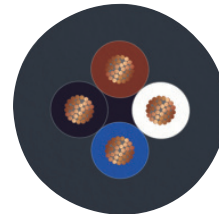
## Drawings

Schematic diagram



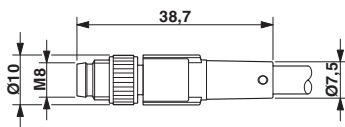
Pin assignment M8 plug, 4-pos., view male side

Cable cross section



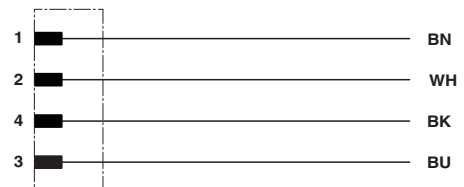
PVC black [PVC]

Dimensioned drawing



M8 x 1 male plug, straight version

Circuit diagram



Contact assignment of the M8 plug