

## Sensor/Actuator cable - SAC-8P-M 8MS/ 1,5-PUR/M 8FS SH - 1404135

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Sensor/Actuator cable, 8-position, PUR, Black RAL 9005, shielded, Plug straight M8, on Socket straight M8, Cable length: 1.5 m

### Product Features

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Our standard: robust halogen-free PUR cable
- ✓ Save space – with high-pos. plug-in connectors
- ✓ Reliable signal transmission – 360° shielding in environments with electromagnetic interference



### Key commercial data

|                      |                                                                                                         |
|----------------------|---------------------------------------------------------------------------------------------------------|
| Packing unit         | 1 PCE                                                                                                   |
| GTIN                 | <br>4 046356 751872 |
| Custom tariff number | 85444290                                                                                                |
| Country of origin    | GERMANY                                                                                                 |

### Technical data

#### General data

|                                 |                                  |
|---------------------------------|----------------------------------|
| Rated current at 40°C           | 1.5 A                            |
| Rated voltage                   | 30 V                             |
| Number of positions             | 8                                |
| Volume resistance               | ≤ 5 mΩ                           |
| Insulation resistance           | ≥ 100 MΩ                         |
| Length of cable                 | 1.5 m                            |
| Ambient temperature (operation) | -25 °C ... 85 °C (Plug / socket) |

#### General characteristics

|                       |                                      |
|-----------------------|--------------------------------------|
| Standards/regulations | M8 plug-in connector IEC 61076-2-104 |
|-----------------------|--------------------------------------|

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## Technical data

### General characteristics

|                             |                                             |
|-----------------------------|---------------------------------------------|
| Coding                      | A - standard                                |
| Pollution degree            | 3                                           |
| Degree of protection        | IP65                                        |
| Degree of protection        | IP67                                        |
| Insertion/withdrawal cycles | ≥ 100                                       |
| Torque                      | 0.2 Nm (M8 plug-in connectors)              |
| 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 abbreviation                            | Li9YV1-C-V1-11Y                                    |
| UL AWM style                                  | 20549                                              |
| Conductor cross section                       | 8x 0.14 mm <sup>2</sup> (signal line)              |
| AWG signal line                               | 26                                                 |
| Conductor structure signal line               | 18x 0.10 mm                                        |
| Core diameter including insulation            | 1 mm ±0.02 mm (signal line)                        |
| Thickness, insulation                         | ≥ 0.21 mm (signal line)                            |
| Thickness, insulation                         | ≥ 0.38 mm (Outer cable sheath)                     |
| Wire colors                                   | white, brown, green, yellow, gray, pink, blue, red |
| Overall twist                                 | 8 wires around filler to the core                  |
| Length of twist, overall twist                | 58 mm                                              |
| Shielding                                     | Tinned copper braided shield                       |
| Optical shield covering                       | 85 %                                               |
| External sheath, color                        | Black-gray RAL 7021                                |
| External cable diameter D                     | 5.9 mm ± 0.2 mm                                    |
| Smallest bending radius, fixed installation   | 29.5 mm                                            |
| Smallest bending radius, movable installation | 59 mm                                              |
| Number of bending cycles                      | 2000000                                            |
| Bending radius                                | 59 mm                                              |
| Traversing path                               | 10 m                                               |
| Traversing rate                               | 3 m/s                                              |
| Acceleration                                  | 10 m/s <sup>2</sup>                                |
| Outer sheath, material                        | PUR                                                |

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### Technical data

#### Conductor data

|                                 |                                                 |
|---------------------------------|-------------------------------------------------|
| Material, filler                | PE                                              |
| Material conductor insulation   | PP                                              |
| Conductor material              | Bare Cu litz wires                              |
| Insulation resistance           | 1 GΩ*km (at 20 °C)                              |
| Conductor resistance            | 139 Ω/km (at 20 °C)                             |
| Nominal voltage, conductor      | ≤ 300 V AC                                      |
| Test voltage, conductor         | ≥ 3000 V AC (Spark test)                        |
| Test voltage Core/Shield        | ≥ 2000 V AC (for 60 s)                          |
| Flame resistance                | according to UL 758/1581 (horizontal)           |
| Flame resistance                | In accordance with UL 758/1581 FT2              |
| Halogen-free                    | in accordance with DIN VDE 0472 part 815        |
| Halogen-free                    | in accordance with DIN EN 50267-2-1             |
| Resistance to oil               | According to DIN EN 60811-2-1, 168 h at 100°C   |
| Other resistance                | hydrolysis and microbe resistant                |
| Other resistance                | Resistant to salt water                         |
| Other resistance                | Low adhesion                                    |
| Other resistance                | abrasion-resistant                              |
| Ambient temperature (operation) | -40 °C ... 80 °C (cable, fixed installation)    |
| Ambient temperature (operation) | -25 °C ... 80 °C (cable, flexible installation) |

### Classifications

#### ETIM

|          |          |
|----------|----------|
| ETIM 3.0 | EC001855 |
| ETIM 4.0 | EC001855 |
| ETIM 5.0 | EC001855 |

#### UNSPSC

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

#### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27060306 |
| eCl@ss 4.1 | 27060306 |
| eCl@ss 5.0 | 27061801 |

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### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 5.1 | 27061801 |
| eCl@ss 6.0 | 27061801 |
| eCl@ss 7.0 | 27061801 |

### Accessories

#### Accessories

#### 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

Conductor marker carrier - PATO 2/15 - 1013122



Conductor marker carrier, transparent, Unlabeled, Mounting type: Clip on, Cable diameter: 2.8-4.4 mm, Lettering field: 4 x 15 mm

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### Accessories

#### Conductor marker carrier - PATO 3/15 - 1013135



Conductor marker carrier, transparent, Unlabeled, Mounting type: Clip on, Cable diameter: 4.4-6.7 mm, Lettering field: 4 x 15 mm

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#### Conductor marker carrier - PATO 4/15 - 1013148



Conductor marker carrier, transparent, Unlabeled, Mounting type: Clip on, Cable diameter: 6.7-10 mm, Lettering field: 4 x 15 mm

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#### Marker pen - B-STIFT - 1051993



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

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### Protection and sealing elements

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



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

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#### Screw plug - PROT-M 8 MS-PA-CHAIN - 1430860



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

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## Accessories

### Tools

Torque screwdriver - TSD 02 SAC - 1208487



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

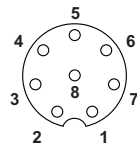
Tool - SAC BIT M8-D10 - 1208461



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

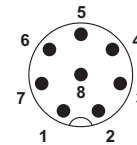
## Drawings

Schematic diagram



Connector pin assignment of M8 socket, 8-pos., view of socket side

Schematic diagram



M8 plug pin assignment, 8-pos., view of pin side

Cable cross section



PUR halogen-free black shielded [PUR]

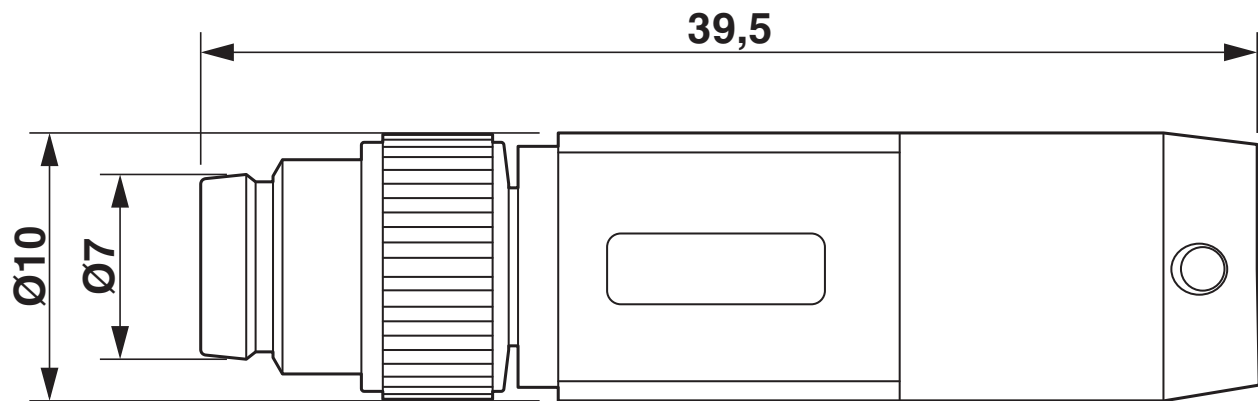
Circuit diagram



Contact assignment of M8 plugs/sockets

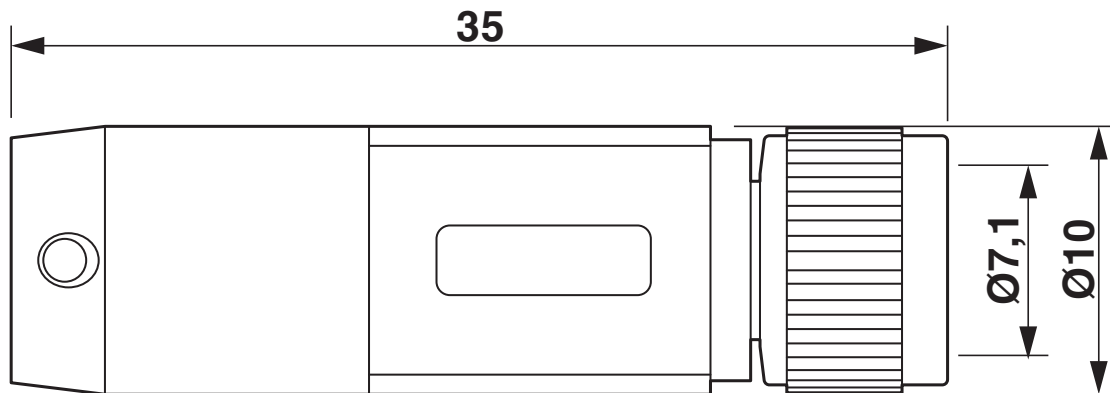
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Dimensioned drawing



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Dimensioned drawing









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- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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