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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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## Sensor/Actuator cable - SAC-8P-M 8MS/ 0,3-PUR/M 8FS SH - 1404133

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Sensor/Actuator cable, 8-position, PUR, Black RAL 9005, shielded, Plug straight M8, on Socket straight M8, Cable length: 0.3 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 680448 |
| 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                 | 0.3 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 |

# Sensor/Actuator cable - SAC-8P-M 8MS/ 0,3-PUR/M 8FS SH - 1404133

## 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



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

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



# Sensor/Actuator cable - SAC-8P-M 8MS/ 0,3-PUR/M 8FS SH - 1404133

## 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

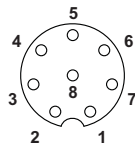
Tool - SAC BIT M8-D10 - 1208461



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

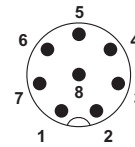
## Drawings

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]

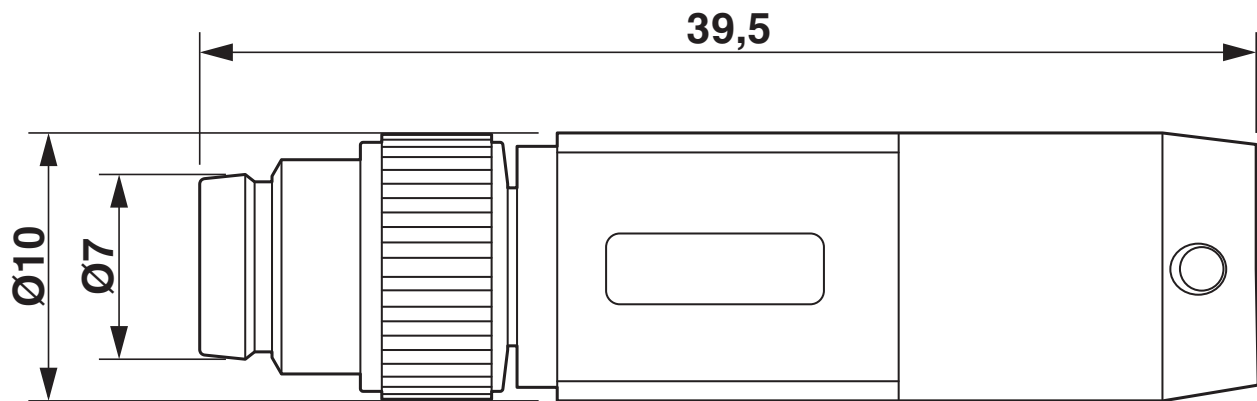
Circuit diagram



Contact assignment of M8 plugs/sockets

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Dimensioned drawing



# Sensor/Actuator cable - SAC-8P-M 8MS/ 0,3-PUR/M 8FS SH - 1404133

Dimensioned drawing

