

## Sensor/actuator cable - SAC-8P-M 8MS/ 1,5-PUR - 1404178

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Sensor/actuator cable, 8-position, PUR halogen-free, black-gray RAL 7021, Plug straight M8, on free cable end, cable length: 1.5 m

### Your advantages

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Our standard: robust halogen-free PUR cable
- ✓ Save space – with high-pos. connectors

RoHS

### Key Commercial Data

|              |   |
|--------------|---|
| Packing unit | 1 pc  |
| GTIN         | <br>4 046356 680912 |
| GTIN         | 4046356680912   |

### Technical data

#### Dimensions

|                 |       |
|-----------------|-------|
| Length of cable | 1.5 m |
|-----------------|-------|

#### Ambient conditions

|                                 |                                  |
|---------------------------------|----------------------------------|
| Ambient temperature (operation) | -25 °C ... 85 °C (Plug / socket) |
| Degree of protection            | IP65/IP67                        |

#### General

|                       |                              |
|-----------------------|------------------------------|
| Rated current at 40°C | 1.5 A                        |
| Rated voltage         | 30 V AC<br>30 V DC           |
| Number of positions   | 8                            |
| Insulation resistance | ≥ 100 MΩ                     |
| Coding                | A - standard                 |
| Standards/regulations | M8 connector IEC 61076-2-104 |

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## Technical data

### General

|                              |                        |
|------------------------------|------------------------|
| Status display               | No                     |
| Protective circuit/component | unwired                |
| Degree of pollution          | 3                      |
| Insertion/withdrawal cycles  | ≥ 100                  |
| Torque                       | 0.2 Nm (M8 connectors) |

### Material

|  |   |
|--|---|
| Flammability rating 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                |

### Standards and Regulations

|  |                 |
|--|-----------------|
| Standard designation                   | M8 connector    |
| Standards/regulations                  | IEC 61076-2-104 |
| Flammability rating according to UL 94 | HB              |

### Cable

|   |  |
|---|--|
| Cable abbreviation                            | Li9Y11Y  |
| 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)                            |
|   | ≥ 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  |
| External sheath, color                        | black-gray RAL 7021                                |
| External cable diameter D                     | 5.1 mm ±0.15 mm                                    |
| Smallest bending radius, fixed installation   | 25.5 mm  |
| Smallest bending radius, movable installation | 51 mm  |
| Number of bending cycles                      | 4000000  |
| Bending radius                                | 51 mm  |
| Traversing path                               | 10 m   |
| Traversing rate                               | 3 m/s  |
| Acceleration                                  | 10 m/s <sup>2</sup>                                |
| Outer sheath, material                        | PUR  |
| Material, filler                              | PE   |

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#### Cable

|                                 |  |
|---------------------------------|--|
| 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, cable          | ≤ 300 V AC   |
| Test voltage, cable             | ≥ 3000 V AC (Spark test)                                   |
| Flame resistance                | according to UL 758/1581 (horizontal)                      |
|                                 | in accordance with UL 758/1581 FT2                         |
| Halogen-free                    | in accordance with DIN VDE 0472 part 815                   |
|                                 | 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                           |
|                                 | Resistant to salt water                                    |
|                                 | Low adhesion   |
|                                 | abrasion-resistant   |
|                                 | partly UV-resistant in accordance with DIN EN ISO 4892-2-A |
| Ambient temperature (operation) | -40 °C ... 80 °C (cable, fixed installation)               |
|                                 | -25 °C ... 80 °C (cable, flexible installation)            |

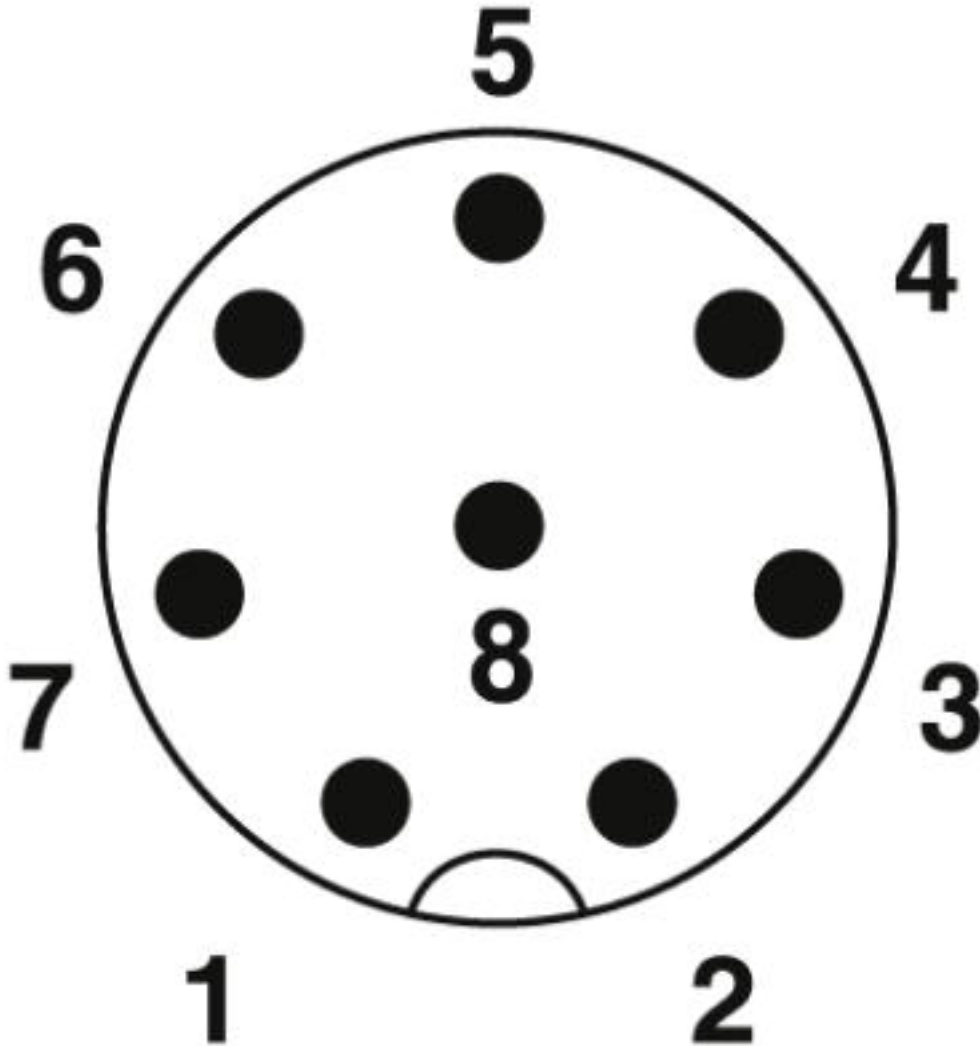
#### Environmental Product Compliance

|            |   |
|------------|---|
|            | Lead 7439-92-1  |
| China RoHS | Environmentally Friendly Use Period = 50  |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

#### Drawings

# Sensor/actuator cable - SAC-8P-M 8MS/ 1,5-PUR - 1404178

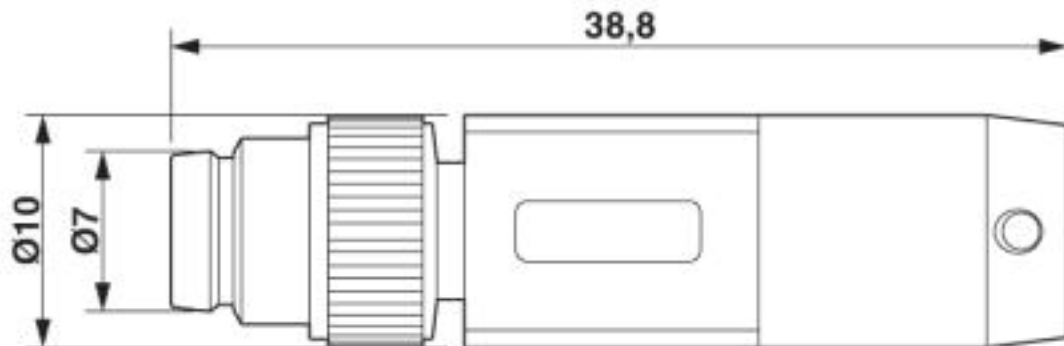
Schematic diagram



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

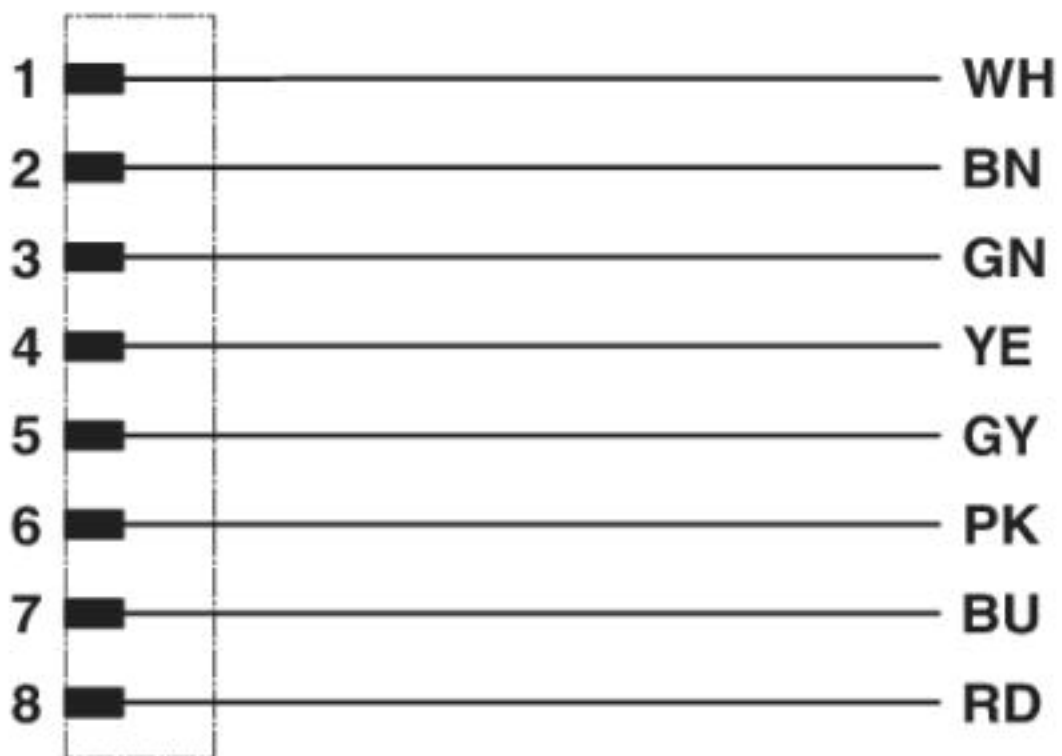
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Dimensional drawing



M8 x 1 male plug, straight version

Circuit diagram



Contact assignment of the M8 plug

# Sensor/actuator cable - SAC-8P-M 8MS/ 1,5-PUR - 1404178

Cable cross section



PUR halogen-free black [PUR]

## Approvals

Approvals

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Approvals

EAC

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Ex Approvals

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Approval details

## Sensor/actuator cable - SAC-8P-M 8MS/ 1,5-PUR - 1404178

### Approvals

EAC



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