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## Sensor/Actuator cable - SAC-8P-M12MR/ 3,0-PUR SH - 1522820

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Sensor/Actuator cable, 8-position, PUR halogen-free, black-gray RAL 7021, shielded, Plug angled M12, A-coded, on free cable end, Cable length: 3 m

### Why buy this product

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

### Key Commercial Data

|              |                     |
|--------------|---------------------|
| Packing unit | 1 STK               |
| GTIN         | <br>4 017918 957612 |

### Technical data

#### Dimensions

|  |       |
|--|-------|
| Length of cable                            | 3 m   |
| Stripping length of the free conductor end | 50 mm |

#### Ambient conditions

|                                 |                                  |
|---------------------------------|----------------------------------|
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket) |
| Degree of protection            | IP65                             |
|                                 | IP67                             |

#### General

|                              |                               |
|------------------------------|-------------------------------|
| Rated current at 40°C        | 2 A                           |
| Rated voltage                | 30 V                          |
| Number of positions          | 8                             |
| Insulation resistance        | ≥ 100 MΩ                      |
| Coding                       | A - standard                  |
| Standards/regulations        | M12 connector IEC 61076-2-101 |
| Status display               | No                            |
| Protective circuit/component | Unwired                       |
| Overvoltage category         | II                            |
| Degree of pollution          | 3                             |

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## Technical data

### General

|                             |                        |
|-----------------------------|------------------------|
| Insertion/withdrawal cycles | ≥ 100                  |
| Torque                      | 0.4 Nm (M12 connector) |

### Material

|  |   |
|--|---|
| Flammability rating according to UL 94 | HB  |
| Contact material                       | CuZn  |
| 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                   | M12 connector   |
| Standards/regulations                  | IEC 61076-2-101 |
| Flammability rating according to UL 94 | HB              |

### Cable

|   |  |
|---|--|
| Cable type                                    | PUR halogen-free black                             |
| Cable type (abbreviation)                     | PUR  |
| Cable abbreviation                            | LiF9YC11Y  |
| UL AWM style                                  | 20549 / 10493 (80°C/300 V)                         |
| Conductor cross section                       | 8x 0.25 mm <sup>2</sup> (Signal line)              |
| AWG signal line                               | 24   |
| Conductor structure signal line               | 32x 0.10 mm  |
| Core diameter including insulation            | 1.17 mm ±0.02 mm                                   |
| Wire colors                                   | Brown, white, green, yellow, gray, pink, blue, red |
| Overall twist                                 | 8 wires around filler to the core                  |
| Shielding                                     | Tinned copper braided shield                       |
| Optical shield covering                       | 85 %   |
| External sheath, color                        | black RAL 9005                                     |
| External cable diameter D                     | 5.9 mm ±0.2 mm                                     |
| Smallest bending radius, fixed installation   | 47.2 mm  |
| Smallest bending radius, movable installation | 59 mm (up to +60°C)                                |
| Number of bending cycles                      | 4000000  |
| Bending radius                                | 59 mm  |
| Traversing path                               | 10 m   |
| Traversing rate                               | 3 m/s  |
| Acceleration                                  | 10 m/s <sup>2</sup>                                |
| Outer sheath, material                        | PUR  |
| Material conductor insulation                 | PP   |
| Conductor material                            | Bare Cu litz wires                                 |
| Insulation resistance                         | ≥ 1 GΩ*km (at 20 °C)                               |

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### Technical data

#### Cable

|                                 |  |
|---------------------------------|--|
| Conductor resistance            | ≤ 78 Ω/km (at 20 °C)                                       |
| Nominal voltage, cable          | ≤ 300 V AC   |
| Test voltage, cable             | ≥ 3000 V AC (Spark test)                                   |
| Test voltage Core/Shield        | ≥ 2000 V AC (for 60 s)                                     |
| Special properties              | Flexible cable conduit capable                             |
| Flame resistance                | in acc. with UL FT-2                                       |
|                                 | according to UL 758/1581 (horizontal)                      |
|                                 | in accordance with UL 758/1581 FT2                         |
|                                 | According to DIN EN 60332-2-2 (20 s)                       |
| Halogen-free                    | in accordance with DIN VDE 0472 part 815                   |
|                                 | in accordance with DIN EN 50267-2-1                        |
| Other resistance                | hydrolysis and microbe 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)            |

### 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 2.0 | EC000830 |
| 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 |

# Sensor/Actuator cable - SAC-8P-M12MR/ 3,0-PUR SH - 1522820

## Approvals

### Approvals

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#### Approvals

UL Listed / cUL Listed / EAC / cULus Listed

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#### Ex Approvals


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#### Approvals submitted


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## Approval details

|  |      |
|--|------|
| UL Listed  |      |
| Nominal current IN   | 2 A  |
| Nominal voltage UN   | 30 V |

|  |      |
|--|------|
| cUL Listed  |      |
| Nominal current IN   | 2 A  |
| Nominal voltage UN   | 30 V |

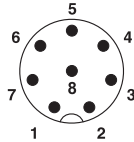
|     |
|-----|
| EAC |
|-----|

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

## Drawings

# Sensor/Actuator cable - SAC-8P-M12MR/ 3,0-PUR SH - 1522820

Schematic diagram



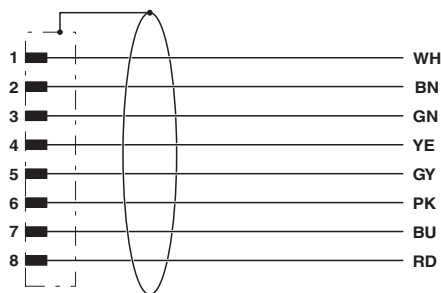
Pin assignment M12 plug, 8-pos., view plug side

Cable cross section



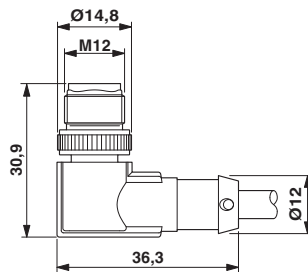
PUR halogen-free black [PUR]

Circuit diagram



Contact assignment of the M12 plug

Dimensional drawing



M12 x 1 male plug, angled, shielded

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