

**SAC-3P-M 8MR/0,3-PUR/M 8FR-2L**

Order No.: 1682100

<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=1682100>

Sensor/Actuator cable, 3-position, PUR halogen-free, Black-gray RAL 7021, Plug, angledLink:M8, on Socket, angled M8, with 2 LEDs, Cable length: 0.3 m

**Commercial data**

|                          |   |
|--------------------------|---|
| GTIN (EAN)               |  |
| Note                     | Made-to-order   |
| sales group              | D130  |
| Pack                     | 1 pcs.  |
| Customs tariff           | 85444290  |
| Catalog page information | Page 120 (PC-2011)  |

**Product notes**

WEEE/RoHS-compliant since:  
09/06/2006



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**Technical data****General data**

|                       |        |
|-----------------------|--------|
| Rated current at 40°C | 4 A    |
| Rated voltage         | 24 V   |
| Number of positions   | 3      |
| Volume resistance     | ≤ 5 mΩ |

|                                 |  |
|---------------------------------|--|
| Insulation resistance           | ≥ 100 MΩ   |
| Length of cable                 | 0.3 m  |
| Ambient temperature (operation) | -25 °C ... 90 °C (Male connector / female connector) |

#### General characteristics

|                          |   |
|--------------------------|---|
| Standards/regulations    | M8 connector IEC 61076-2-104                |
| Coding                   | A - standard                                |
| Surge voltage category   | II  |
| Pollution degree         | 3   |
| Degree of protection     | IP65/IP68/IP69K                             |
| 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           | 2 LEDs                                      |

#### Conductor data

|                                    |                                    |
|------------------------------------|------------------------------------|
| Cable type                         | PUR halogen-free black             |
| Cable type (abbreviation)          | PUR                                |
| Cable abbreviation                 | Li9Y11Y-HF                         |
| UL AWM Style                       | 20549                              |
| Conductor cross section            | 0.25 mm <sup>2</sup> (signal line) |
| AWG signal line                    | 24                                 |
| Conductor structure signal line    | 32 x 0.10 mm                       |
| Core diameter including insulation | 1.17 mm ±0.02 mm (signal line)     |
| Thickness, insulation              | ≥ 0.38 mm (Core insulation)        |
|                                    | Approx. 0.9 mm                     |
| External cable diameter            | 4.4 mm ±0.15 mm                    |
| Wire colors                        | Brown, blue, black                 |
| External sheath, color             | Black-gray RAL 7021                |
| Insulation resistance              | ≥ 100 GΩ*km (at 20°C)              |
| Conductor resistance               | ≤ 78 Ω/km (at 20°C)                |
| Nominal voltage, conductor         | ≤ 300 V                            |

|   |   |
|---|---|
| Test voltage, conductor                       | ≥ 3000 V  |
| Overall twist                                 | 3 wires, twisted  |
| Length of twist, overall twist                | 40 mm   |
| Outer sheath, material                        | PUR   |
| Material conductor insulation                 | PP  |
| Conductor material                            | Bare Cu litz wires  |
| Cable weight                                  | 24 kg/km  |
| Smallest bending radius, fixed installation   | 22 mm   |
| Smallest bending radius, movable installation | 44 mm   |
| Number of bending cycles                      | 4000000   |
| Bending radius                                | 44 mm   |
| Traversing path                               | 10 m  |
| Traversing rate                               | 3 m/s   |
| Acceleration                                  | 10 m/s <sup>2</sup>   |
| Ambient temperature (operation)               | -40 °C ... 80 °C (cable, fixed installation)<br>-25 °C ... 80 °C (cable, flexible installation)                           |
| Special properties                            | Flexible cable conduit capable<br>Silicone-free<br>Free of substances which would hinder coating with paint or varnish    |
| Flame resistance                              | in accordance with DIN UL-Style 20549   |
| Halogen-free                                  | in accordance with DIN VDE 0472 part 815  |
| Resistance to oil                             | in accordance with DIN EN 60811-2-1   |
| Other resistance                              | hydrolysis and microbe resistant<br>Highly resistant to acids, alkaline solutions and solvents<br>Resistant to salt water |

#### Certificates / Approvals

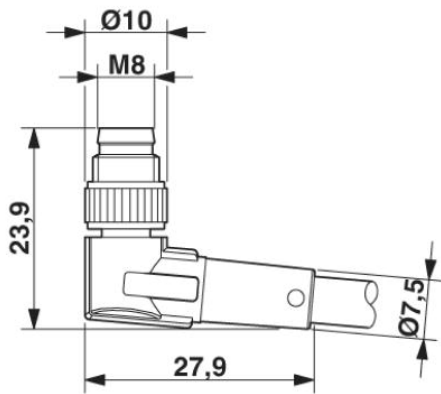


Certification

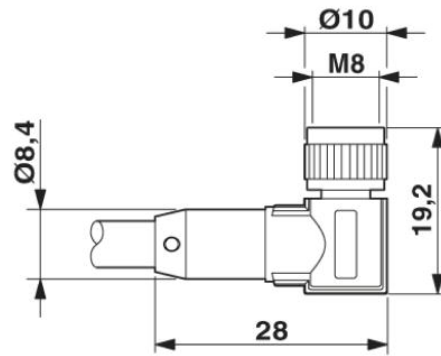
CUL Listed, UL Listed

**Diagrams/Drawings**

Dimensioned drawing

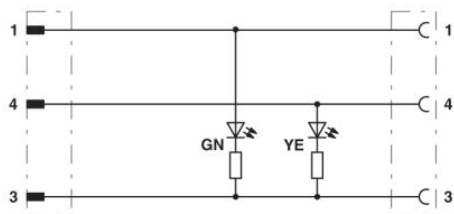


M8 x 1 male connector, angled version



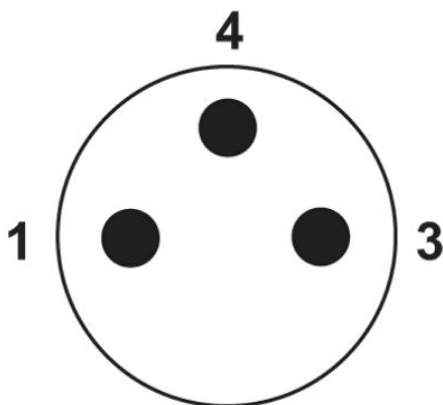
Socket M8 x 1, angled, with LED

Circuit diagram

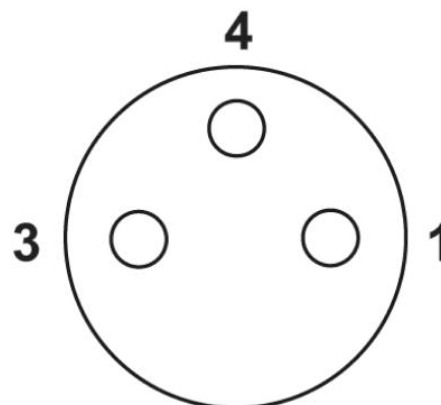


Contact assignment of M8 plugs/sockets

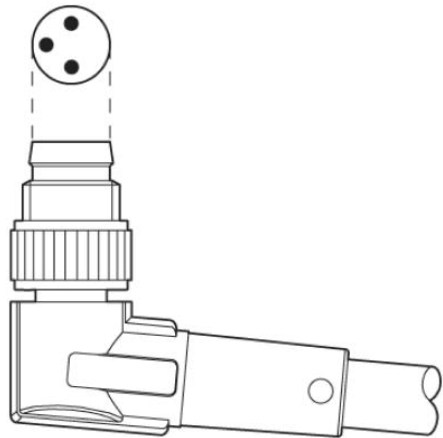
Schematic diagram



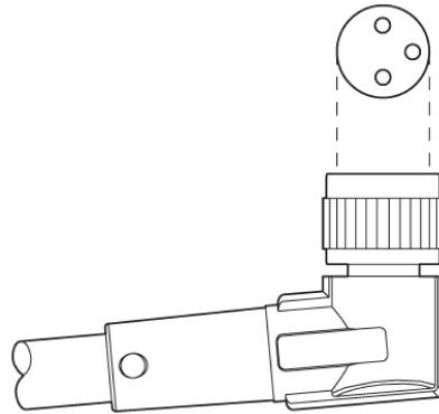
Pin assignment M8 plug, 3-pos., view male side



Pin assignment M8 socket, 3-pos., view female side



Layout of connector pin assignments



Layout of connector pin assignments

**Address**

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