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Sensor/actuator cable, 8-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket straight M12, A-coded, cable length: 10 m



# RoHS

### Key Commercial Data

| Packing unit           | 1 pc            |
|------------------------|-----------------|
| Minimum order quantity | 50 pc           |
| GTIN                   | 4 046356 518062 |
| GTIN                   | 4046356518062   |

## Technical data

#### Dimensions

| Length of cable                            | 10 m  |
|--|-------|
| Stripping length of the free conductor end | 50 mm |

#### Ambient conditions

| Degree of protection | IP65 |
|----------------------|------|
|                      | IP67 |
|                      | IP68 |

#### General

| Rated current at 40°C | 2 A           |
|-----------------------|---------------|
| Rated voltage         | 30 V AC       |
|                       | 30 V DC       |
| Number of positions   | 8             |
| Insulation resistance | $\geq$ 100 MΩ |
| Coding                | A - standard  |
| Status display        | No            |
| Overvoltage category  | Ш             |

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## Technical data

#### General

| Degree of pollution                           | 3  |
|---|--|
| Insertion/withdrawal cycles                   | ≥ 100  |
| Material                                      | · ·  |
| Flammability rating according to UL 94        | НВ   |
| 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                       |
| Sealing material                              | NBR  |
| Standards and Regulations                     |  |
| Flammability rating according to UL 94        | НВ   |
| Cable   |  |
| Cable type                                    | PUR halogen-free black                             |
| Cable type (abbreviation)                     | PUR  |
| Cable abbreviation                            | Li9Y11Y  |
| UL AWM style                                  | 20549 / 10493 (80°C/300 V)                         |
| Conductor cross section                       | 8x 0.25 mm <sup>2</sup>                            |
| AWG signal line                               | 24   |
| Conductor structure signal line               | 32x 0.10 mm  |
| Core diameter including insulation            | 1.17 mm ±0.02 mm                                   |
| Thickness, insulation                         | ≥ 0.21 mm  |
| Wire colors                                   | white, brown, green, yellow, gray, pink, blue, red |
| Overall twist                                 | 8 wires around filler to the core                  |
| External sheath, color                        | black-gray RAL 7021                                |
| Outer sheath thickness                        | approx. 0.8 mm                                     |
| External cable diameter D                     | 5.9 mm ±0.15 mm                                    |
| Minimum bending radius, fixed installation    | 8 x D  |
| Minimum bending radius, flexible installation | 10 x D   |
| Number of bending cycles                      | 400000   |
| Bending radius                                | 59 mm  |
| Traversing path                               | 10 m   |
| Traversing rate                               | 3 m/s  |
| Acceleration                                  | 10 m/s <sup>2</sup>                                |
| Cable weight                                  | 46 kg/km   |
| Outer sheath, material                        | PUR  |
| Material, filler                              | PE   |
| Material conductor insulation                 | PP   |
| Conductor material                            | Bare Cu litz wires                                 |



## Technical data

#### Cable

| Conductor resistance            | ≤ 78 Ω/km   |
|---------------------------------|---|
| Cable capacity                  | ≤ 70 pF/m   |
| Wave impedance                  | 100 Ω +15 % (with 1 MHz)  |
| Conductor inductance            | approx. 0.6 mH/km (with 1 MHz)                                      |
| Nominal voltage, cable          | ≤ 300 V   |
| Test voltage, cable             | ≥ 3000 V  |
| Special properties              | Flexible cable conduit capable                                      |
|                                 | Silicone-free   |
|                                 | Free of substances which would hinder coating with paint or varnish |
|                                 | flexible  |
| 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                | Highly resistant to acids, alkaline solutions and solvents          |
|                                 | hydrolysis and microbe resistant                                    |
|                                 | partly UV-resistant in accordance with DIN EN ISO 4892-2-A          |
|                                 | Low adhesion  |
|                                 | abrasion-resistant  |
| Ambient temperature (operation) | -40 °C 80 °C (cable, fixed installation)                            |
|                                 | -25 °C 80 °C (cable, flexible installation)                         |

### **Environmental Product Compliance**

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

### Drawings

Schematic diagram

Pin assignment M12 socket, 8-pos., A-coded, view female side

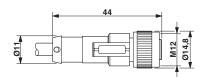
Cable cross section



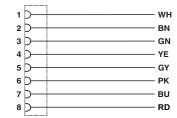
PUR halogen-free black [PUR]



#### Dimensional drawing



## Circuit diagram



M12 x 1 socket, straight

Contact assignment of the M12 socket

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