



### Model Number

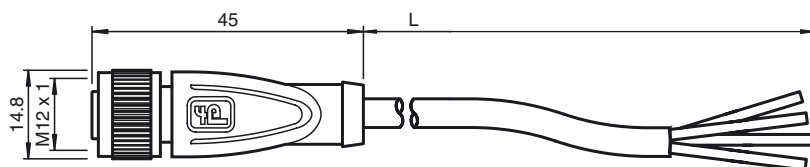
#### V1-G-BK10M-PUR-R1

Single-ended female cordset, M12, PUR cable, 4-pin, robotics

### Features

- Highly flexible—suitable for robotics
- Knurled nut suitable for tool assembly
- Immunity to vibration, with mechanical latching
- Gold plated contacts
- Suitable for drag chains
- Flame resistant cable
- Halogen-free
- Degree of protection IP67 / IP68 / IP69K
- Resistant to microbes and hydrolysis

### Dimensions



### Technical data

#### General specifications

|                |   |
|----------------|---|
| Number of pins | 4 |
|----------------|---|

#### Electrical specifications

|                   |       |                            |
|-------------------|-------|----------------------------|
| Operating voltage | $U_B$ | max. 250 V AC/DC           |
| Test voltage      |       | > 1500 V <sub>eff</sub> AC |
| Operating current | $I_B$ | max. 4 A                   |
| Volume resistance |       | < 5 mΩ                     |

#### Ambient conditions

|                     |                                                                                                                                  |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Ambient temperature | -40 ... 90 °C (-40 ... 194 °F)<br>cable, fixed: -40 ... 80 °C (-40 ... 176 °F)<br>cable, flexing: -25 ... 80 °C (-13 ... 176 °F) |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------|

|                  |   |
|------------------|---|
| Pollution degree | 3 |
|------------------|---|

#### Mechanical specifications

|                        |                                                              |
|------------------------|--------------------------------------------------------------|
| Contact elements       | spring-loaded contact socket                                 |
| Pin diameter           | 1 mm                                                         |
| Degree of protection   | IP67 / IP68 / IP69k                                          |
| Material               |                                                              |
| Contacts               | CuSn / Au                                                    |
| Contact surface        | Au                                                           |
| Body                   | TPU, black                                                   |
| Cable                  | PUR                                                          |
| Slotted nut            | Diecast zinc                                                 |
| Core insulation        | PP                                                           |
| Cable                  | extra-fine wire, flexible                                    |
| Sheath diameter        | Ø 4.3 mm                                                     |
| Bending radius         | > 10 x cable diameter, moving<br>> 5 x cable diameter, fixed |
| Color                  | black (similar to RAL 7021)                                  |
| Number of cores        | 4                                                            |
| Core cross-section     | 0.34 mm <sup>2</sup>                                         |
| Conductor construction | 42 x 0.1 mm Ø                                                |
| Length                 | L                                                            |

|                        |                       |
|------------------------|-----------------------|
| Drag chain suitability |                       |
| Drag chain cycles      | ≥ 10000000            |
| Motion velocity        | ≤ 3 m/s               |
| Acceleration           | ≤ 10 m/s <sup>2</sup> |
| Torsional stress       | ± 360 °/m             |

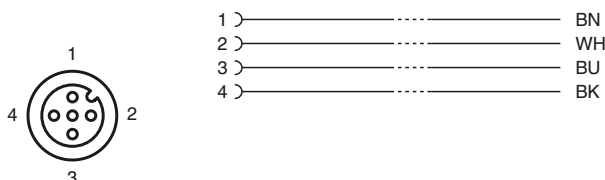
#### Flammability

|                 |        |
|-----------------|--------|
| Contact carrier | 94 HB  |
| Housing         | 94 V-2 |
| Cable           | FT2    |

#### Compliance with standards and directives

|                     |  |
|---------------------|--|
| Standard conformity |  |
|---------------------|--|

### Electrical connection





|                                   |                                                               |
|-----------------------------------|---------------------------------------------------------------|
| Degree of protection              | EN 60529:2000                                                 |
| Standards                         | IEC 61076-2-101:2008                                          |
| Flammability                      | Grip: UL 94<br>Cabling: in accordance with UL FT2             |
| Halogen-free                      | DIN VDE 0472 Part 15 (plastic)<br>DIN EN 50267-2-1 (flue gas) |
| Chemical resistance               | EN 60811-404: 168 h at 100° C                                 |
| <b>Approvals and certificates</b> |                                                               |
| UL approval                       | AWM STYLE 20549 80 °C 300V AWM I A/B 80 °C 300V FT2 (cable)   |