

# Connection cable

## V3-WM-E2-BK1M-PUR-U-V11-G

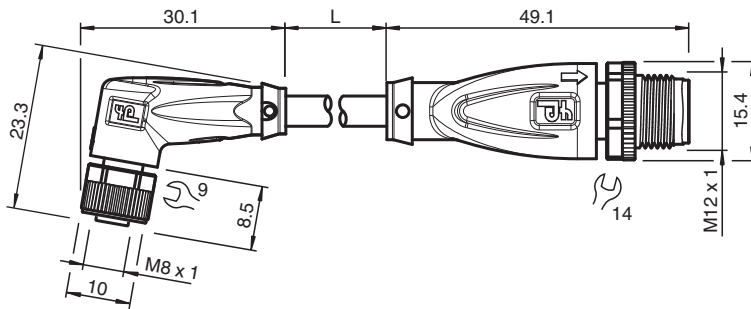


- Suitable for drag chains and abrasion resistant
- Suitable for robotic applications / torsion resistant
- Degree of protection IP68
- Free of paint wetting interfering substances
- Resistant to microbes and hydrolysis
- Built-in LED, as operating and function indicator
- UV resistant
- UL listed for USA and Canada
- Halogen-free
- Specific design protects against loosening and inaccurate installation

Cordset M8 socket angled A-coded LED 3-pin to M12 plug straight A-coded 3-pin, PUR cable black, UL approved, drag chain suitable, torsion resistant



### Dimensions



### Technical Data

#### General specifications

|                   |                  |
|-------------------|------------------|
| Connector 1       |                  |
| Connection        | socket           |
| Construction type | M8               |
| Style             | angled           |
| Locking           | screw connection |
| Number of pins    | 3                |
| Coding            | A-coded          |
| Connector 2       |                  |
| Connection        | plug             |
| Construction type | M12              |
| Style             | straight         |
| Locking           | screw connection |
| Number of pins    | 3                |
| Coding            | A-coded          |

#### Indicators/operating means

|            |                          |
|------------|--------------------------|
| LED green  | Operating display        |
| LED yellow | Functional display pin 4 |

#### Electrical specifications

|                   |       |                            |
|-------------------|-------|----------------------------|
| Operating voltage | $U_B$ | max. 24 V DC -20 % / +25 % |
|-------------------|-------|----------------------------|

Release date: 2024-02-21 | Date of issue: 2024-02-21 | Filename: 70172733\_eng.pdf

## Technical Data

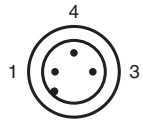
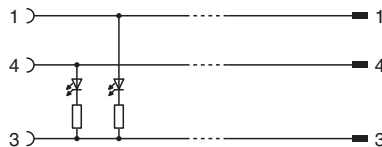
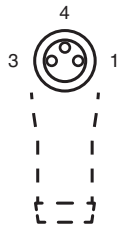
|                                   |       |   |
|-----------------------------------|-------|---|
| Operating current                 | $I_B$ | max. 4 A  |
| <b>Conformity</b>                 |       |   |
| Degree of protection              |       | EN 60529  |
| Plug connection                   |       | connector M8 x 1 : IEC 61076-2-104<br>connector M12 x 1 : IEC 61076-2-101 |
| Flammability                      |       | UL 1581; DIN EN 60332-2-2   |
| Halogen-free                      |       | IEC 60754-1   |
| <b>Approvals and certificates</b> |       |   |
| UL approval                       |       | AWM STYLE 20549 AWM I/II A/B 80°C 300V FT2 (cable)                        |
| UL File Number                    |       | E231213   |
| <b>Ambient conditions</b>         |       |   |
| Ambient temperature               |       |   |
| Plug connector                    |       | -40 ... 90 °C (-40 ... 194 °F)  |
| Cable, fixed                      |       | -40 ... 80 °C (-40 ... 176 °F)  |
| Cable, flexing                    |       | -20 ... 80 °C (-4 ... 176 °F)   |
| Pollution degree                  |       | 3   |
| <b>Mechanical specifications</b>  |       |   |
| Connector 1                       |       |   |
| Tightening torque                 |       | 0.4 Nm  |
| Loosening protection              |       | available   |
| Tool installation                 |       | straight knurling and hexagon nut SW = 9 mm                               |
| Mating cycles                     |       | min. 100  |
| Degree of protection              |       | IP68  |
| Connector 2                       |       |   |
| Tightening torque                 |       | 0.6 Nm  |
| Loosening protection              |       | available   |
| Tool installation                 |       | straight knurling and hexagon nut SW = 14 mm                              |
| Mating cycles                     |       | min. 100  |
| Degree of protection              |       | IP68 / IP69   |
| Cable                             |       |   |
| Sheath diameter                   |       | 4.3 mm  |
| Bending radius                    |       | > 10 x cable diameter, moving<br>> 5 x cable diameter, fixed              |
| Sheath stripping force            |       | max. 80 N / 300 mm  |
| Sheath color                      |       | black (similar to RAL 9005)   |
| Number of cores                   |       | 3   |
| Core cross section                |       | 0.34 mm <sup>2</sup>  |
| Cores color                       |       | Core 1: brown<br>Core 3: blue<br>Core 4: black                            |
| Core construction                 |       | 42 x 0.1 mm Ø   |
| Length                            | L     | 1 m   |
| Cable code                        |       | Li F 9Y 11Y 3 x 0,34  |
| Drag chain suitability            |       |   |
| Drag chain cycles                 |       | min. 5000000  |
| Motion velocity                   |       | max. 3.3 m/s  |
| Traverse distance                 |       | max. 5 m  |
| Acceleration                      |       | max. 5 m/s <sup>2</sup>   |
| Torsion cycles                    |       | min. 1000000  |
| Torsional stress                  |       | ± 180 °/m   |
| <b>Material</b>                   |       |   |
| PWIS free                         |       | yes   |
| Halogen-free                      |       | yes   |
| Plug connector                    |       |   |

Release date: 2024-02-21 Date of issue: 2024-02-21 Filename: 70172733\_eng.pdf

**Technical Data**

|                              |                             |
|------------------------------|-----------------------------|
| Screw connection             | Zinc diecast, nickel-plated |
| Body                         | TPU, transparent/black      |
| Seal                         | FKM                         |
| Contact surface              | gold plated (Au)            |
| Flammability                 | V-2                         |
| <b>Cable</b>                 |                             |
| Sheathing                    | PUR based on polyether      |
| Core insulation              | PP                          |
| UV resistance                | yes                         |
| Chemical resistance          | good                        |
| Oil resistance               | yes                         |
| Cooling lubricant resistance | yes                         |
| Microbial resistance         | yes                         |
| Hydrolysis resistance        | yes                         |
| Flammability                 | FT2                         |

**Connection**



Release date: 2024-02-21 | Date of issue: 2024-02-21 | Filename: 70172733\_eng.pdf