



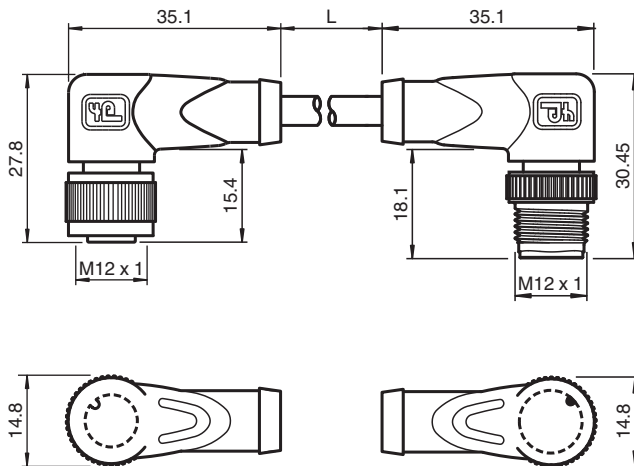
## Connection cable V1-W-BK5M-PUR-U-V1-W

- Suitable for drag chains and abrasion resistant
- Suitable for robotic applications / torsion resistant
- Degree of protection IP67 / IP68 / IP69
- Free from substances that impair paint wetting
- Resistant to microbes and hydrolysis
- cURus approval
- UV resistant
- Halogen-free
- Knurled nut suitable for tool assembly
- Immunity to vibration, with mechanical latching

Cordset M12 socket angled to M12 plug angled A-coded, 4-pin, PUR cable black, UL-approved, drag chain suitable, torsion resistant



### Dimensions



### Technical Data

#### General specifications

|                   |                  |
|-------------------|------------------|
| Connector 1       |                  |
| Connection        | socket           |
| Construction type | M12              |
| Style             | right angle      |
| Locking           | screw connection |
| Number of pins    | 4                |
| Coding            | A-coded          |
| Connector 2       |                  |
| Connection        | Male connector   |
| Construction type | M12              |
| Style             | right angle      |
| Locking           | screw connection |
| Number of pins    | 4                |
| Coding            | A-coded          |
| UL File Number    | E231213          |

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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**PEPPERL+FUCHS**

## Technical Data

### Electrical specifications

|                   |                |                  |
|-------------------|----------------|------------------|
| Operating voltage | U <sub>B</sub> | max. 250 V AC/DC |
| Operating current | I <sub>B</sub> | max. 4 A         |

### Conformity

|                      |  |                                     |
|----------------------|--|-------------------------------------|
| Degree of protection |  | EN 60529                            |
| Plug connection      |  | connector M12 x 1 : IEC 61076-2-101 |
| Flammability         |  | UL 1581; DIN EN 60332-2-2           |
| Halogen-free         |  | DIN VDE 0472-815<br>IEC 60754-1     |

### Approvals and certificates

|             |  |                                                    |
|-------------|--|----------------------------------------------------|
| UL approval |  | AWM STYLE 20549 AWM I/II A/B 80°C 300V FT2 (cable) |
|-------------|--|----------------------------------------------------|

### Ambient conditions

|                     |  |                                |
|---------------------|--|--------------------------------|
| 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                              |

### Mechanical specifications

|                        |   |                                                                 |
|------------------------|---|-----------------------------------------------------------------|
| Plug connector         |   |                                                                 |
| Tightening torque      |   | 0.6 Nm                                                          |
| Loosening protection   |   | available                                                       |
| Tool installation      |   | straight knurling                                               |
| Mating cycles          |   | min. 100                                                        |
| Degree of protection   |   | IP67 / IP68 / IP69                                              |
| Cable                  |   | according to IEC/EN 60228 (DIN VDE 0295) class 6                |
| Sheath diameter        |   | 4.3 mm                                                          |
| Bending radius         |   | > 10 x cable diameter, moving<br>> 5 x cable diameter, fixed    |
| Sheath color           |   | black (similar to RAL 9005)                                     |
| Number of cores        |   | 4                                                               |
| Core cross-section     |   | 0.34 mm <sup>2</sup>                                            |
| Cores color            |   | Core 1: brown<br>Core 2: white<br>Core 3: blue<br>Core 4: black |
| Core construction      |   | 42 x 0.1 mm Ø                                                   |
| Length                 | L | 5 m                                                             |
| Cable code             |   | Li 9Y 11Y 4 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                                                       |

### Material

|                          |  |                                 |
|--------------------------|--|---------------------------------|
| LABS free                |  | yes                             |
| Halogen-free             |  | yes                             |
| Plug connector           |  |                                 |
| Knurled screw connection |  | Zinc die-casting, nickel-plated |
| Body                     |  | TPU, black                      |
| Contact surface          |  | Au                              |
| Flammability             |  | V-2                             |
| Cable                    |  |                                 |
| Sheathing                |  | PUR based on polyether          |

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Technical Data

|                              |      |
|------------------------------|------|
| 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 Assignment

