

## Connection cable

### V1-WV4A-BK0,6M-PUR-U-V1-WV4A

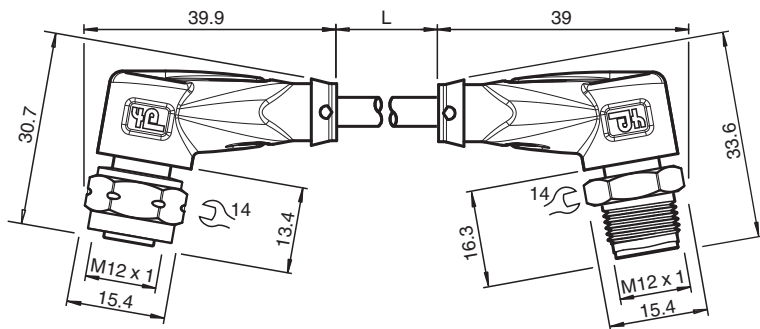


- Suitable for drag chains and abrasion resistant
- Suitable for robotic applications / torsion resistant
- Degree of protection IP68 / IP69
- Free of paint wetting interfering substances
- Resistant to microbes and hydrolysis
- UV resistant
- UL listed for USA and Canada
- Halogen-free
- Screw connection stainless steel
- Specific design protects against loosening and inaccurate installation

Cordset M12 socket angled to M12 plug angled stainless steel 1.4404, 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             |  | angled           |
| Locking           |  | screw connection |
| Number of pins    |  | 4                |
| Coding            |  | A-coded          |
| Connector 2       |  |                  |
| Connection        |  | plug             |
| Construction type |  | M12              |
| Style             |  | angled           |
| Locking           |  | screw connection |
| Number of pins    |  | 4                |
| Coding            |  | A-coded          |

### Electrical specifications

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

### Conformity

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

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## Technical Data

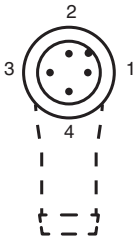
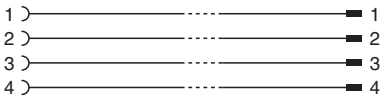
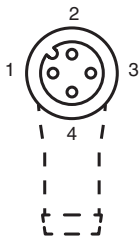
|                                   |   |                                                                 |
|-----------------------------------|---|-----------------------------------------------------------------|
| Degree of protection              |   | EN 60529                                                        |
| Plug connection                   |   | connector M12 x 1 : IEC 61076-2-101                             |
| Flammability                      |   | UL 1581; DIN EN 60332-2-2                                       |
| Halogen-free                      |   | 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>  |   |                                                                 |
| Plug connector                    |   |                                                                 |
| Tightening torque                 |   | 0.6 Nm                                                          |
| Tool installation                 |   | hexagon nut SW = 14 mm                                          |
| Mating cycles                     |   | min. 100                                                        |
| Degree of protection              |   | 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 stripping force            |   | max. 80 N / 300 mm                                              |
| Sheath color                      |   | black (similar to RAL 9005)                                     |
| Number of cores                   |   | 4                                                               |
| Core cross section                |   | 0.34 mm²                                                        |
| 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 | 0.6 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/s²                                                     |
| Torsion cycles                    |   | min. 1000000                                                    |
| Torsional stress                  |   | ± 180 °/m                                                       |
| <b>Material</b>                   |   |                                                                 |
| PWIS free                         |   | yes                                                             |
| Halogen-free                      |   | yes                                                             |
| Plug connector                    |   |                                                                 |
| Screw connection                  |   | Stainless steel 1.4404 / AISI 316L                              |
| Body                              |   | TPU, black                                                      |
| Seal                              |   | FKM                                                             |
| Contact surface                   |   | gold plated (Au)                                                |
| Flammability                      |   | V-2                                                             |
| Cable                             |   |                                                                 |
| Sheathing                         |   | PUR based on polyether                                          |
| Core insulation                   |   | PP                                                              |
| UV resistance                     |   | yes                                                             |

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Technical Data

|                              |      |
|------------------------------|------|
| Chemical resistance          | good |
| Oil resistance               | yes  |
| Cooling lubricant resistance | yes  |
| Microbial resistance         | yes  |
| Hydrolysis resistance        | yes  |
| Flammability                 | FT2  |

Connection



Accessories

|                                                                                     |                                  |                                                                 |
|-------------------------------------------------------------------------------------|----------------------------------|-----------------------------------------------------------------|
|    | <b>MH V1-SCREWDRIVER</b>         | Torque screwdriver (0.6 Nm)                                     |
|   | <b>MH V1-BIT<br/>M12-W14-HEX</b> | Plug-in attachment for M12 with hex stainless steel knurled nut |
|  | <b>V1/V3-LABELHOLDER</b>         | Label holder                                                    |
|  | <b>V1/V3-LABEL</b>               | Label plate                                                     |
|  | <b>MH V1-Holder</b>              | Modular universal holder for M12 connectors                     |
|  | <b>V1-CLIP</b>                   | Unlocking protector for M12 connector                           |
|  | <b>V1-MARKING-RING-COLOR</b>     | Marking rings for M12 connectors, various colors                |

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