

## Connection cable

### V1-W-E8-OR1,5M-PUR-A-V1-G

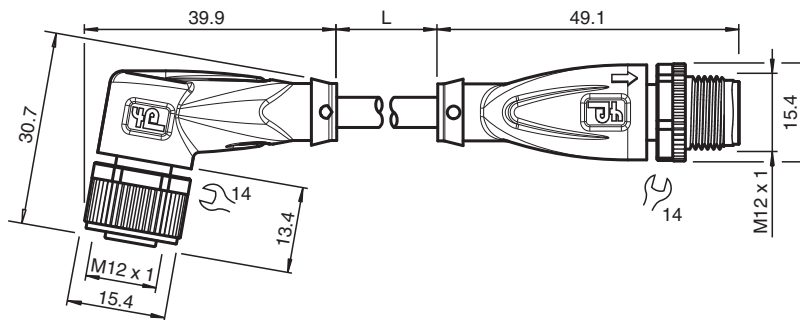


- Improved resistance to weld spatter
- Suitable for drag chains and abrasion resistant
- Suitable for robotic applications / torsion resistant
- Built-in LED, as operating and function indicator
- Degree of protection IP68 / IP69
- Free of paint wetting interfering substances
- Resistant to microbes and hydrolysis
- UL listed for USA and Canada
- Halogen-free
- Specific design protects against loosening and inaccurate installation

Cordset M12 socket angled A-coded LED 4-pin to M12 plug straight A-coded 4-pin, PUR cable weld spatter resistant orange, UL approved, drag chain suitable, torsion resistant



## Dimensions



## Technical Data

### General specifications

|                                   |                          |
|-----------------------------------|--------------------------|
| <b>Connector 1</b>                |                          |
| Connection                        | socket                   |
| Construction type                 | M12                      |
| Style                             | angled                   |
| Locking                           | screw connection         |
| Number of pins                    | 4                        |
| Coding                            | A-coded                  |
| <b>Connector 2</b>                |                          |
| Connection                        | plug                     |
| Construction type                 | M12                      |
| Style                             | straight                 |
| Locking                           | screw connection         |
| Number of pins                    | 4                        |
| Coding                            | A-coded                  |
| <b>Indicators/operating means</b> |                          |
| LED green                         | Operating display        |
| LED yellow                        | Functional display pin 4 |
| LED red                           | Functional display pin 2 |

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

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## Technical Data

### Electrical specifications

|                   |                |                            |
|-------------------|----------------|----------------------------|
| Operating voltage | U <sub>B</sub> | max. 24 V DC -20 % / +25 % |
| 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     |
| Microbial resistance  | DIN EN 50525-2-21 / DIN VDE 0282-10 |
| Hydrolysis resistance | DIN EN 50525-2-21                   |

### Approvals and certificates

|                |                                                    |
|----------------|----------------------------------------------------|
| UL approval    | AWM STYLE 20549 AWM I/II A/B 80°C 300V FT2 (cable) |
| UL File Number | E231213                                            |

### Ambient conditions

|                     |                                |
|---------------------|--------------------------------|
| Ambient temperature |                                |
| Plug connector      | -40 ... 90 °C (-40 ... 194 °F) |
| Cable, fixed        | -40 ... 80 °C (-40 ... 176 °F) |
| Cable, flexing      | -25 ... 80 °C (-13 ... 176 °F) |
| Pollution degree    | 3                              |

### Mechanical specifications

|                        |                                                                 |
|------------------------|-----------------------------------------------------------------|
| Plug connector         |                                                                 |
| 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                  | 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. 50 N / 300 mm                                              |
| Sheath color           | orange (similar to RAL 2003)                                    |
| 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 1.5 m                                                         |
| Cable code             | Li F 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

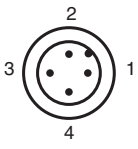
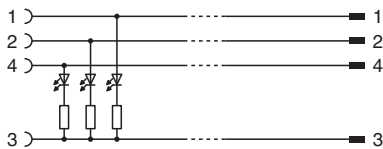
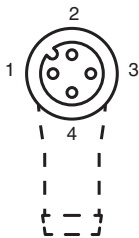
|                  |                             |
|------------------|-----------------------------|
| PWIS free        | yes                         |
| Halogen-free     | yes                         |
| Plug connector   |                             |
| Screw connection | Zinc diecast, nickel-plated |
| Body             | TPU, transparent/black      |

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Technical Data

|                              |                        |
|------------------------------|------------------------|
| Seal                         | FKM                    |
| Contact surface              | gold plated (Au)       |
| Flammability                 | V-2                    |
| Cable                        |                        |
| Sheathing                    | PUR based on polyether |
| Core insulation              | PP                     |
| Weld spatter resistance      | yes                    |
| 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 M12</b>         | plug-in cap M12                                  |
|  | <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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