

## Female cordset

### V15-G-BK1,8M-PUR-U

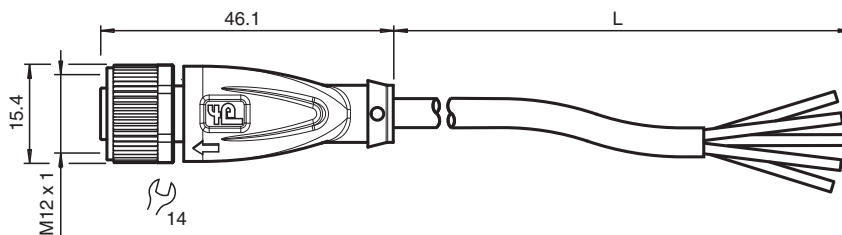


- Suitable for drag chains and abrasion resistant
- Suitable for robotic applications / torsion resistant
- Degree of protection IP68 / IP69
- Free of paint wetting interfering substances
- Resistant to microbes and hydrolysis
- UV resistant
- UL listed for USA and Canada
- Halogen-free
- Specific design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

Female cordset single-ended M12 straight A-coded, 5-pin, PUR cable black, UL approved, drag chain suitable, torsion resistant



## Dimensions



## Technical Data

### General specifications

|                   |  |                  |
|-------------------|--|------------------|
| Connector 1       |  |                  |
| Connection        |  | socket           |
| Construction type |  | M12              |
| Style             |  | straight         |
| Locking           |  | screw connection |
| Number of pins    |  | 5                |
| Coding            |  | A-coded          |
| Connector 2       |  |                  |
| Connection        |  | cable end        |

### Electrical specifications

|                   |                |                        |
|-------------------|----------------|------------------------|
| Operating voltage | U <sub>B</sub> | max. 48 V AC / 60 V 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         |  | IEC 60754-1                         |

### 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 |  |  |
|---------------------|--|--|

Release date: 2023-09-04 Date of issue: 2023-09-04 Filename: 239998-100049\_eng.pdf

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

**PEPPERL+FUCHS**

## Technical Data

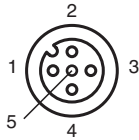
|                                  |   |                                                                                 |
|----------------------------------|---|---------------------------------------------------------------------------------|
| Plug connector                   |   | -40 ... 90 °C (-40 ... 194 °F)                                                  |
| Cable, fixed                     |   | -40 ... 80 °C (-40 ... 176 °F)                                                  |
| Cable, flexing                   |   | -25 ... 80 °C (-13 ... 176 °F)                                                  |
| Pollution degree                 |   | 3                                                                               |
| <b>Mechanical specifications</b> |   |                                                                                 |
| 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                  |   | 4.8 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                  |   | 5                                                                               |
| 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<br>Core 5: grey |
| Core construction                |   | 42 x 0.1 mm Ø                                                                   |
| Length                           | L | 1.8 m                                                                           |
| Cable code                       |   | Li F 9Y 11Y 5 x 0,34                                                            |
| <b>Drag chain suitability</b>    |   |                                                                                 |
| 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                                                                             |
| <b>Plug connector</b>            |   |                                                                                 |
| Screw connection                 |   | Zinc diecast, nickel-plated                                                     |
| Body                             |   | TPU, 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                                                                             |

Release date: 2023-09-04 Date of issue: 2023-09-04 Filename: 239998-100049\_eng.pdf

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.comUSA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.comGermany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.comSingapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com
 **PEPPERL+FUCHS**

Connection



|   |   |       |    |
|---|---|-------|----|
| 1 | ⌋ | ..... | BN |
| 2 | ⌋ | ..... | WH |
| 3 | ⌋ | ..... | BU |
| 4 | ⌋ | ..... | BK |
| 5 | ⌋ | ..... | GY |

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 |

Release date: 2023-09-04 Date of issue: 2023-09-04 Filename: 239998-100049\_eng.pdf