

# Female cordset

## V1-G-A2-BK2M-PUR-U

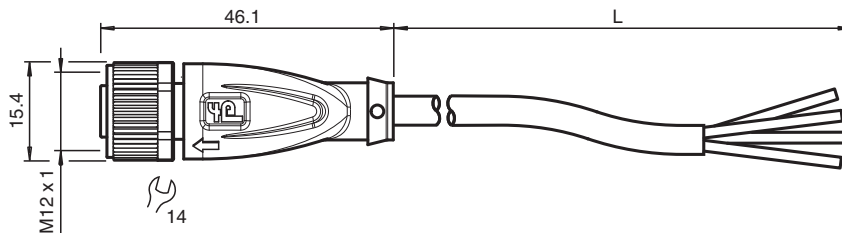


- Built-in LED, as operating and function indicator
- Suitable for drag chains and abrasion resistant
- Suitable for robotic applications / torsion resistant
- Degree of protection IP68 / IP69
- Free of paint wetting interfering substances
- Resistant to microbes and hydrolysis
- UV resistant
- UL listed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

Female cordset single-ended M12 straight A-coded, LED 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             |  | straight         |
| Locking           |  | screw connection |
| Number of pins    |  | 4                |
| Coding            |  | A-coded          |
| Connector 2       |  |                  |
| Connection        |  | cable end        |

#### Indicators/operating means

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

#### 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         |  | IEC 60754-1                         |

#### Approvals and certificates

Release date: 2023-08-30 Date of issue: 2023-08-30 Filename: 217483\_eng.pdf

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

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## Technical Data

|                                                  |   |                                                                 |
|--------------------------------------------------|---|-----------------------------------------------------------------|
| 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                                                          |
| 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. 80 N / 300 mm                                              |
| 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 | 2 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                                                       |
| <b>Material</b>                                  |   |                                                                 |
| PWIS free                                        |   | yes                                                             |
| Halogen-free                                     |   | yes                                                             |
| Plug connector                                   |   |                                                                 |
| Screw connection                                 |   | Zinc diecast, nickel-plated                                     |
| Body                                             |   | TPU, transparent                                                |
| Seal                                             |   | FKM                                                             |
| Contact surface                                  |   | gold plated (Au)                                                |
| Flammability                                     |   | V-2                                                             |
| Cable                                            |   |                                                                 |
| Sheathing                                        |   | PUR based on polyether                                          |
| Core insulation                                  |   | PP                                                              |
| UV resistance                                    |   | yes                                                             |
| Chemical resistance                              |   | good                                                            |
| Oil resistance                                   |   | yes                                                             |
| Cooling lubricant resistance                     |   | yes                                                             |
| Microbial resistance                             |   | yes                                                             |

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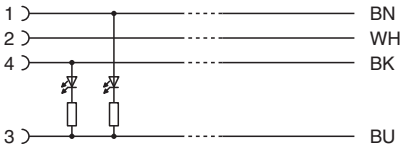
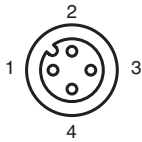
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Technical Data

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