

# Connection cable, shielded

## V1-G-BK2M-PUR-O1S-V1-W

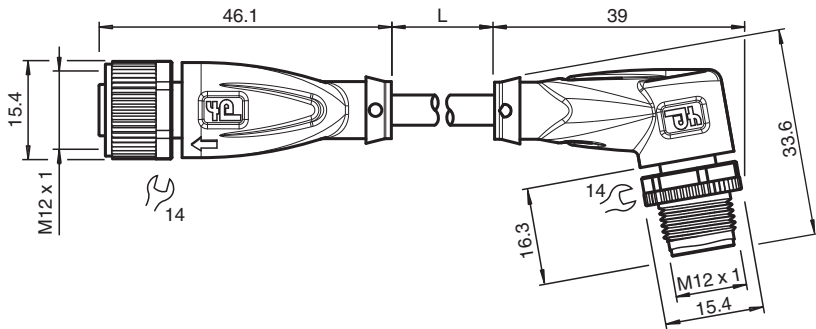


- Suitable for outdoor use (UV- and ozone resistant)
- Suitable for drag chains and abrasion resistant
- Degree of protection IP68 / IP69
- Free of paint wetting interfering substances
- Resistant to microbes and hydrolysis
- Oil resistant
- Resistant to salt water
- UL listed for USA and Canada
- Halogen-free
- Shield connected to screw connection
- Specific design protects against loosening and inaccurate installation

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



### 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                |                |  | 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. 48 V AC / 60 V DC |
| Operating current         | I <sub>B</sub> |  | max. 4 A               |

Release date: 2023-07-13 Date of issue: 2023-07-13 Filename: 240790-100008\_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

| 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 / DIN EN 50267-2-1                               |
| Oil resistance             |   | DIN EN 60811-2-1  |
| Approvals and certificates |   |   |
| UL approval                |   | AWM STYLE 21924/11558 105°C 300V AWM I A/B 105°C 300V FT2 (cable) |
| UL File Number             |   | E231213   |
| Ambient conditions         |   |   |
| Ambient temperature        |   |   |
| Plug connector             |   | -40 ... 90 °C (-40 ... 194 °F)                                    |
| Cable, fixed               |   | -50 ... 105 °C (-58 ... 221 °F)                                   |
| Cable, flexing             |   | -30 ... 105 °C (-22 ... 221 °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  |
| Shielding                  |   | shield connected to screw connection                              |
| Degree of protection       |   | IP68 / IP69   |
| Cable                      |   | according to IEC/EN 60228 (DIN VDE 0295) class 6                  |
| Sheath diameter            |   | 6 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 7021)                                       |
| Number of cores            |   | 4   |
| Core cross section         |   | 0.5 mm <sup>2</sup>   |
| Cores color                |   | Core 1: brown<br>Core 2: white<br>Core 3: blue<br>Core 4: black   |
| Core construction          |   | 28 x 0.15 mm Ø  |
| Shield                     |   | tinned copper braiding, 85 % coverage                             |
| Length                     | L | 2 m   |
| Cable code                 |   | Li 9Y C11Y 4 x 0,50   |
| Drag chain suitability     |   |   |
| Drag chain cycles          |   | min. 2000000  |
| Motion velocity            |   | max. 3 m/s  |
| Traverse distance          |   | max. 10 m   |
| Acceleration               |   | max. 10 m/s <sup>2</sup>  |
| Material                   |   |   |
| PWIS free                  |   | yes   |
| Halogen-free               |   | yes   |
| Plug connector             |   |   |
| Screw connection           |   | Zinc diecast, nickel-plated                                       |
| Body                       |   | TPU, black  |
| Seal                       |   | FKM   |
| Contact surface            |   | gold plated (Au)  |
| Flammability               |   | V-2   |
| Cable                      |   |   |

Release date: 2023-07-13 Date of issue: 2023-07-13 Filename: 240790-100008\_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

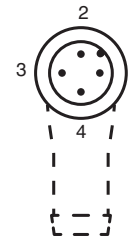
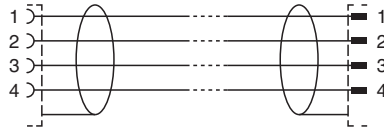
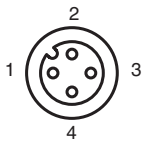
Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

 PEPPERL+FUCHS








**Technical Data**

|                              |                        |
|------------------------------|------------------------|
| Sheathing                    | PUR based on polyether |
| Core insulation              | PP                     |
| Salt water resistance        | yes                    |
| UV 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 |

Release date: 2023-07-13 Date of issue: 2023-07-13 Filename: 240790-100008\_eng.pdf

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