

# Connection cable

## V3-GM-BK0,3M-PUR-R1-V3-GM

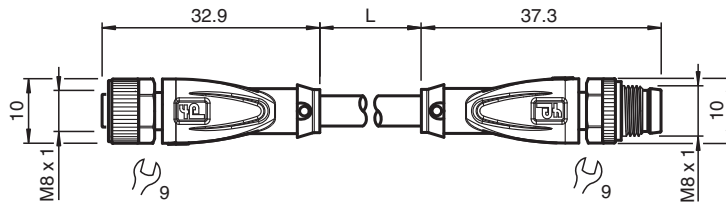


- Highly flexible - suitable for robotics
- Suitable for drag chains and abrasion resistant
- Suitable for robotic applications / torsion resistant
- Degree of protection IP68
- Free of paint wetting interfering substances
- Resistant to microbes and hydrolysis
- Oil resistant
- Resistant to salt water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

Cordset M8 socket straight to M8 plug straight A-coded, 3-pin, PUR cable black, UL approved, drag chain suitable, torsion resistant, oil and salt water resistant, robotics



### Dimensions



### Technical Data

#### General specifications

|                                  |       |                                    |  |
|----------------------------------|-------|------------------------------------|--|
| <b>Connector 1</b>               |       |                                    |  |
| Connection                       |       | socket                             |  |
| Construction type                |       | M8                                 |  |
| Style                            |       | straight                           |  |
| Locking                          |       | screw connection                   |  |
| Number of pins                   |       | 3                                  |  |
| Coding                           |       | A-coded                            |  |
| <b>Connector 2</b>               |       |                                    |  |
| Connection                       |       | plug                               |  |
| Construction type                |       | M8                                 |  |
| Style                            |       | straight                           |  |
| Locking                          |       | screw connection                   |  |
| Number of pins                   |       | 3                                  |  |
| Coding                           |       | A-coded                            |  |
| <b>Electrical specifications</b> |       |                                    |  |
| Operating voltage                | $U_B$ | max. 48 V AC / 60 V DC             |  |
| Operating current                | $I_B$ | max. 3 A                           |  |
| <b>Conformity</b>                |       |                                    |  |
| Degree of protection             |       | EN 60529                           |  |
| Plug connection                  |       | connector M8 x 1 : IEC 61076-2-104 |  |

Release date: 2023-06-29 Date of issue: 2023-06-29 Filename: 295363\_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

**PF** PEPPERL+FUCHS

## Technical Data

|                                   |   |  |
|-----------------------------------|---|--|
| Flammability                      |   | UL 758 / 1581  |
| Halogen-free                      |   | DIN VDE 0472-815<br>DIN EN 50267-2-1                               |
| Microbial resistance              |   | DIN EN 50525-2-21 / DIN VDE 0282-10                                |
| Hydrolysis resistance             |   | DIN EN 50525-2-21  |
| Oil resistance                    |   | DIN EN 60811-2-1   |
| <b>Approvals and certificates</b> |   |  |
| UL approval                       |   | AWM STYLE 20549 80 °C 300V AWM I 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                    |   | -25 ... 80 °C (-13 ... 176 °F)                                     |
| Pollution degree                  |   | 3  |
| <b>Mechanical specifications</b>  |   |  |
| Plug connector                    |   |  |
| Tightening torque                 |   | 0.4 Nm   |
| Loosening protection              |   | available  |
| Tool installation                 |   | straight knurling and hexagon nut SW = 9 mm                        |
| Mating cycles                     |   | min. 100   |
| Degree of protection              |   | IP68   |
| 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                      |   | black (similar to RAL 7021)  |
| Number of cores                   |   | 4  |
| Core cross section                |   | 0.34 mm <sup>2</sup>   |
| Cores color                       |   | Core 1: brown<br>Core 2: not used<br>Core 3: blue<br>Core 4: black |
| Core construction                 |   | 42 x 0.1 mm Ø  |
| Length                            | L | 0.3 m  |
| Cable code                        |   | Li 9Y 11YM 4 x 0.34  |
| <b>Drag chain suitability</b>     |   |  |
| Drag chain cycles                 |   | min. 10000000  |
| Motion velocity                   |   | max. 3 m/s   |
| Traverse distance                 |   | max. 10 m  |
| Acceleration                      |   | max. 10 m/s <sup>2</sup>   |
| Torsion cycles                    |   | min. 10000000  |
| Torsional stress                  |   | ± 360 °/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   |

Release date: 2023-06-29 Date of issue: 2023-06-29 Filename: 295363\_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

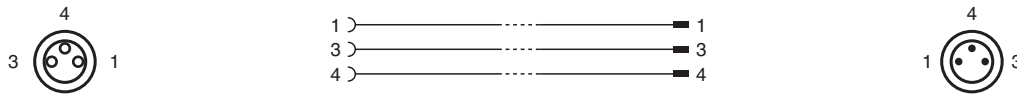
 Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

 **PEPPERL+FUCHS**








## Technical Data

|                       |     |
|-----------------------|-----|
| Core insulation       | PP  |
| Salt water resistance | yes |
| Oil 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: 2023-06-29 Date of issue: 2023-06-29 Filename: 295363\_eng.pdf