



## Connection cable

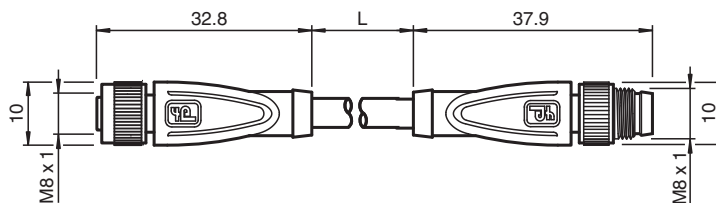
### V3-GM-BK2M-PUR-U-V3-GM

- Suitable for drag chains and abrasion resistant
- Suitable for robotic applications / torsion resistant
- Degree of protection IP67
- Free of paint wetting interfering substances
- Resistant to microbes and hydrolysis
- UV resistant
- cURus approval
- Halogen-free
- Knurled nut suitable for tool assembly
- Immunity to vibration, with mechanical latching

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



## 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          |
| UL File Number     | E231213          |

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

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## Technical Data

### Electrical specifications

|                   |                |                        |
|-------------------|----------------|------------------------|
| Operating voltage | U <sub>B</sub> | max. 48 V AC / 60 V DC |
| Operating current | I <sub>B</sub> | max. 3 A               |

### Conformity

|                      |  |                                    |
|----------------------|--|------------------------------------|
| Degree of protection |  | EN 60529                           |
| Plug connection      |  | connector M8 x 1 : IEC 61076-2-104 |
| Flammability         |  | UL 1581; DIN EN 60332-2-2          |
| Halogen-free         |  | DIN VDE 0472-815<br>IEC 60754-1    |

### Approvals and certificates

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

### Ambient conditions

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

### Mechanical specifications

|                        |   |                                                              |
|------------------------|---|--------------------------------------------------------------|
| Plug connector         |   |                                                              |
| Tightening torque      |   | 0.4 Nm                                                       |
| Loosening protection   |   | available                                                    |
| Tool installation      |   | straight knurling                                            |
| Mating cycles          |   | min. 100                                                     |
| Degree of protection   |   | IP67                                                         |
| 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        |   | 3                                                            |
| Core cross-section     |   | 0.34 mm <sup>2</sup>                                         |
| Cores color            |   | Core 1: brown<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 3 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

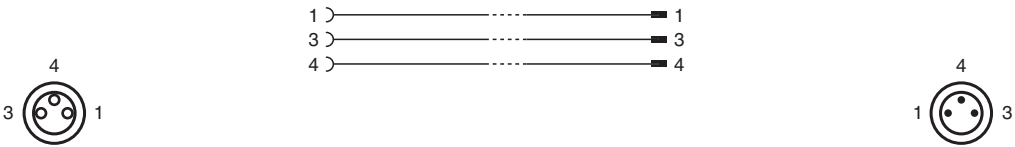
|                  |  |                             |
|------------------|--|-----------------------------|
| PWIS free        |  | yes                         |
| Halogen-free     |  | yes                         |
| Plug connector   |  |                             |
| Screw connection |  | Zinc diecast, nickel-plated |
| Body             |  | TPU, black                  |
| Contact surface  |  | Au                          |
| Flammability     |  | V-2                         |
| Cable            |  |                             |

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Technical Data

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

Connection Assignment



Accessories

|                                                                                     |                          |                                            |
|-------------------------------------------------------------------------------------|--------------------------|--------------------------------------------|
|   | <b>MH V3-SCREWDRIVER</b> | torque screwdriver (0.4 Nm)                |
|  | <b>MH V3-BIT M8</b>      | plug-in cap for M8                         |
|  | <b>V1/V3-LABELHOLDER</b> | Label holder                               |
|  | <b>V1/V3-LABEL</b>       | Label plate                                |
|  | <b>MH V3-Holder</b>      | Modular universal holder for M8 connectors |