

# Connection cable

## V31-WM-BK0,6M-PUR-U-V31-GM

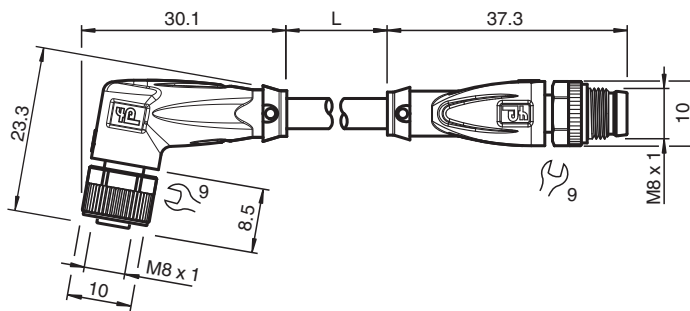


- Suitable for drag chains and abrasion resistant
- Suitable for robotic applications / torsion resistant
- Degree of protection IP68
- Free of paint wetting interfering substances
- Resistant to microbes and hydrolysis
- UV resistant
- UL listed for USA and Canada
- Halogen-free
- Specific design protects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

Cordset M8 socket angled to M8 plug straight A-coded, 4-pin, PUR cable black, UL-approved, drag chain suitable, torsion resistant



### Dimensions



### Technical Data

| General specifications    |                |                                    |
|---------------------------|----------------|------------------------------------|
| Connector 1               |                |                                    |
| Connection                |                | socket                             |
| Construction type         |                | M8                                 |
| Style                     |                | angled                             |
| Locking                   |                | screw connection                   |
| Number of pins            |                | 4                                  |
| Coding                    |                | A-coded                            |
| Connector 2               |                |                                    |
| Connection                |                | plug                               |
| Construction type         |                | M8                                 |
| Style                     |                | straight                           |
| Locking                   |                | screw connection                   |
| Number of pins            |                | 4                                  |
| Coding                    |                | A-coded                            |
| Electrical specifications |                |                                    |
| Operating voltage         | U <sub>B</sub> | max. 30 V AC/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 |

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

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## Technical Data

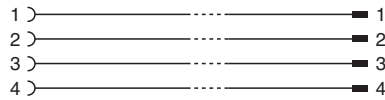
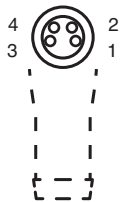
|                                   |   |   |
|-----------------------------------|---|---|
| Flammability                      |   | UL 1581; DIN EN 60332-2-2                                       |
| Halogen-free                      |   | IEC 60754-1   |
| <b>Approvals and certificates</b> |   |   |
| 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                 |   | 0.4 Nm  |
| Loosening protection              |   | available   |
| Tool installation                 |   | straight knurling and hexagon nut SW = 9 mm                     |
| Mating cycles                     |   | min. 100  |
| Degree of protection              |   | IP68  |
| Cable                             |   |   |
| 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 | 0.6 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, black  |
| 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  |

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|                              |     |
|------------------------------|-----|
| Oil resistance               | yes |
| Cooling lubricant resistance | yes |
| Microbial resistance         | yes |
| Hydrolysis resistance        | yes |
| Flammability                 | FT2 |

## Connection



## 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 |