



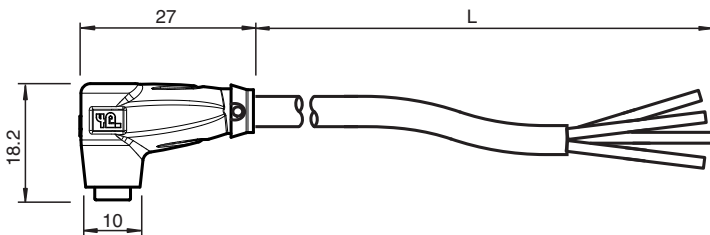
## Female cordset V31-WR-BK5M-PUR-U

- Suitable for drag chains and abrasion resistant
- Suitable for robotic applications / torsion resistant
- Degree of protection IP65
- Free of paint wetting interfering substances
- Resistant to microbes and hydrolysis
- UV resistant
- UL listed for USA and Canada
- Halogen-free
- Snap locking

Female cordset single-ended M8 snap-lock angled 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           | snap locking |
| Number of pins    | 4            |
| Coding            | A-coded      |

##### Connector 2

|            |           |
|------------|-----------|
| Connection | cable end |
|------------|-----------|

#### Electrical specifications

|                   |       |                 |
|-------------------|-------|-----------------|
| Operating voltage | $U_B$ | max. 30 V AC/DC |
| Operating current | $I_B$ | max. 4 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         | IEC 60754-1                        |

#### Approvals and certificates

|                                       |                                                    |
|---------------------------------------|----------------------------------------------------|
| UL approval                           | AWM STYLE 20549 AWM I/II A/B 80°C 300V FT2 (cable) |
| Maximum permissible operating current | max. 3 A                                           |
| UL File Number                        | E231213                                            |

#### Ambient conditions

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

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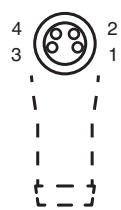
 **PEPPERL+FUCHS**

## Technical Data

|                                  |   |                                                                 |
|----------------------------------|---|-----------------------------------------------------------------|
| Ambient temperature              |   |                                                                 |
| Plug connector                   |   | -25 ... 90 °C (-13 ... 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                   |   |                                                                 |
| Mating cycles                    |   | min. 100                                                        |
| Degree of protection             |   | IP65                                                            |
| 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 | 5 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                   |   |                                                                 |
| Body                             |   | PUR, black                                                      |
| Contact surface                  |   | gold plated (Au)                                                |
| Flammability                     |   | V-2                                                             |
| Cable                            |   |                                                                 |
| Sheathing                        |   | PUR based on polyether                                          |
| Cores                            |   | bare copper (Cu)                                                |
| Core insulation                  |   | PP                                                              |
| UV resistance                    |   | yes                                                             |
| Chemical resistance              |   | good                                                            |
| Oil resistance                   |   | yes                                                             |
| Cooling lubricant resistance     |   | yes                                                             |
| Microbial resistance             |   | yes                                                             |
| Hydrolysis resistance            |   | yes                                                             |
| Flammability                     |   | FT2                                                             |

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Connection Assignment



|   |   |       |       |       |    |
|---|---|-------|-------|-------|----|
| 1 | ⌋ | _____ | ..... | _____ | BN |
| 2 | ⌋ | _____ | ..... | _____ | WH |
| 3 | ⌋ | _____ | ..... | _____ | BU |
| 4 | ⌋ | _____ | ..... | _____ | BK |

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