

## Connection cable

### V11S-G-BK1M-PUR-U-V11-G-Y1

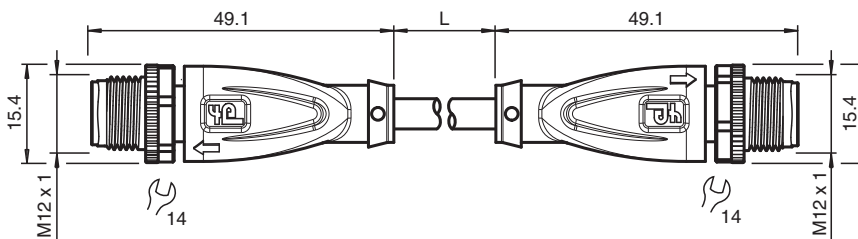


- Suitable for drag chains and abrasion resistant
- Suitable for robotic applications / torsion resistant
- Degree of protection IP68 / IP69
- Free of paint wetting interfering substances
- Resistant to microbes and hydrolysis
- UV resistant
- UL listed for USA and Canada
- Halogen-free
- Specific design protects against loosening and inaccurate installation

Cordset M12 plug straight to M12 plug straight A-coded, 3-pin, PUR cable black, UL approved, drag chain suitable, torsion resistant



## Dimensions



## Technical Data

### General specifications

|                   |  |                  |  |
|-------------------|--|------------------|--|
| Connector 1       |  |                  |  |
| Connection        |  | plug             |  |
| Construction type |  | M12              |  |
| Style             |  | straight         |  |
| Locking           |  | screw connection |  |
| Number of pins    |  | 3                |  |
| Coding            |  | A-coded          |  |
| Connector 2       |  |                  |  |
| Connection        |  | plug             |  |
| Construction type |  | M12              |  |
| Style             |  | straight         |  |
| Locking           |  | screw connection |  |
| Number of pins    |  | 3                |  |
| Coding            |  | A-coded          |  |

### Electrical specifications

|                   |                |                  |
|-------------------|----------------|------------------|
| Operating voltage | U <sub>B</sub> | max. 250 V AC/DC |
| Operating current | I <sub>B</sub> | max. 4 A         |

### 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         | IEC 60754-1                         |

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

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## Technical Data

### Approvals and certificates

|                |  |                                                    |
|----------------|--|----------------------------------------------------|
| UL approval    |  | AWM STYLE 20549 AWM I/II A/B 80°C 300V FT2 (cable) |
| UL File Number |  | E231213                                            |

### 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      |   | 0.6 Nm                                                       |
| Loosening protection   |   | available                                                    |
| Tool installation      |   | straight knurling and hexagon nut SW = 14 mm                 |
| Mating cycles          |   | min. 100                                                     |
| Degree of protection   |   | IP68 / IP69                                                  |
| 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 | 1 m                                                          |
| Cable code             |   | Li F 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                                                    |
| Mass                   |   | 0.34 g                                                       |

### Material

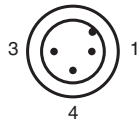
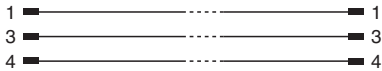
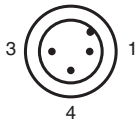
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|------------------------------|--|-----------------------------|
| PWIS free                    |  | yes                         |
| Halogen-free                 |  | yes                         |
| Plug connector               |  |                             |
| 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                        |
| Oil resistance               |  | yes                         |
| Cooling lubricant resistance |  | yes                         |

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Technical Data

|                       |     |
|-----------------------|-----|
| Microbial resistance  | yes |
| Hydrolysis resistance | yes |
| Flammability          | FT2 |

Connection Assignment



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