

## Connection cable

### V1-W-E8-BK20M-PUR-U-V1-G

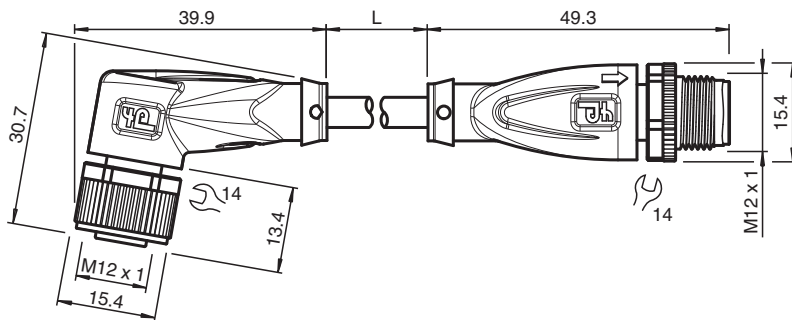


- Built-in LED, as operating and function indicator
- Suitable for drag chains and abrasion resistant
- Suitable for robotic applications / torsion resistant
- Degree of protection IP66 / IP68 / IP69
- Free of paint wetting interfering substances
- Resistant to microbes and hydrolysis
- UV resistant
- UL listed for USA and Canada
- Halogen-free
- Specific design protects against loosening and inaccurate installation

Cordset M12 socket angled A-coded LED 4-pin to M12 plug straight A-coded 4-pin, PUR cable black, UL approved, drag chain suitable, torsion resistant



## Dimensions



## Technical Data

### General specifications

|                                   |                          |
|-----------------------------------|--------------------------|
| <b>Connector 1</b>                |                          |
| Connection                        | socket                   |
| Construction type                 | M12                      |
| Style                             | angled                   |
| Locking                           | screw connection         |
| Number of pins                    | 4                        |
| Coding                            | A-coded                  |
| <b>Connector 2</b>                |                          |
| Connection                        | plug                     |
| Construction type                 | M12                      |
| Style                             | straight                 |
| Locking                           | screw connection         |
| Number of pins                    | 4                        |
| Coding                            | A-coded                  |
| <b>Indicators/operating means</b> |                          |
| LED green                         | Operating display        |
| LED yellow                        | Functional display pin 4 |
| LED red                           | Functional display pin 2 |

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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. 24 V DC -20 % / +25 % |
| 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                         |
| Lead-free            | RoHS directive 2011/65/EU           |

### 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 installation | -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   | integrated                                                                              |
| Tool installation      | straight knurling and hexagon nut SW = 14 mm                                            |
| Mating cycles          | min. 100                                                                                |
| Degree of protection   | IP66 / IP68 / IP69                                                                      |
| Cable                  | according to IEC/EN 60228 (DIN VDE 0295) class 6                                        |
| Sheath diameter        | 4.3 mm                                                                                  |
| Bending radius         | > 10 x cable diameter, movable installation<br>> 5 x cable diameter, fixed installation |
| 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                                                                                       |
| Cable code             | Li 9Y 11Y 4 x 0.34                                                                      |

### Drag chain suitability

|                   |                         |
|-------------------|-------------------------|
| Test temperature  | 25 °C (77 °F)           |
| Drag chain cycles | min. 10000000           |
| Motion velocity   | max. 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              | 535.71 g                |

### Material

|                |     |
|----------------|-----|
| PWIS free      | yes |
| Halogen-free   | yes |
| Lead-free      | yes |
| Plug connector |     |

Technical Data

|                              |                                     |
|------------------------------|-------------------------------------|
| Screw connection             | Zinc diecast, nickel-plated         |
| Body                         | TPU, transparent/black              |
| Seal                         | FKM                                 |
| 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                                 |
| General information          |                                     |
| Cable marking sleeve         | 2x PUR transparent , fixed to cable |

Connection Assignment

