



## Model Number

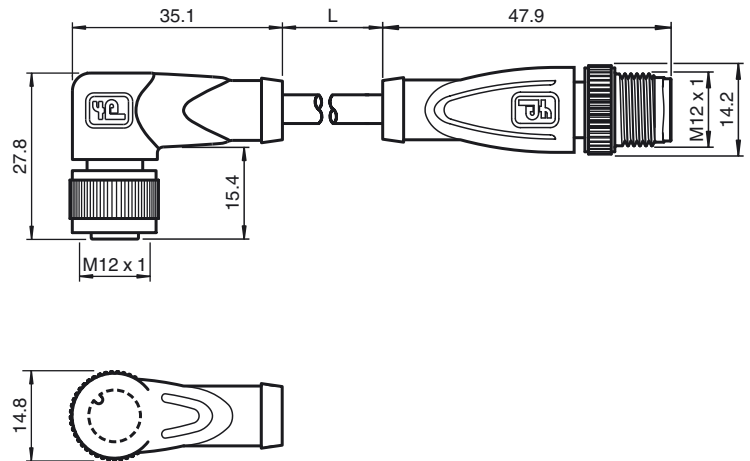
**V1-W-BK5M-PUR-A-V1-G-A2**

Double-ended cordset, M12 to M12,  
LED, PUR cable, 4-pin

## Features

- Built-in LED, as operating and function indicator
- Improved resistance to weld slag
- Suitable for drag chains
- Suitable for robotic applications / torsion resistant
- Flame resistant cable
- Halogen-free
- Resistant to microbes and hydrolysis
- Free from substances that impair paint wetting
- Immunity to vibration, with mechanical latching
- Knurled nut suitable for tool assembly

## Dimensions



## Technical data

### General specifications

|                     |                |
|---------------------|----------------|
| Number of pins      | 4              |
| Connection 1        | socket         |
| Construction type 1 | right angle    |
| Threading 1         | M12            |
| Connection 2        | Male connector |
| Construction type 2 | straight       |
| Threading 2         | M12            |

### Indicators/operating means

|            |                               |
|------------|-------------------------------|
| LED green  | Operating display             |
| LED yellow | Functional display NO contact |

### Electrical specifications

|                   |       |                        |
|-------------------|-------|------------------------|
| Operating voltage | $U_B$ | max. 24 V DC $\pm$ 15% |
| Operating current | $I_B$ | max. 4 A               |
| Volume resistance |       | < 5 m $\Omega$         |

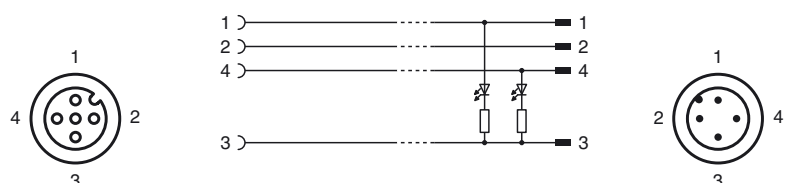
### Ambient conditions

|                     |                                                                                                                                        |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Ambient temperature | Body: -40 ... 90 °C (-40 ... 194 °F)<br>cable, fixed: -40 ... 80 °C (-40 ... 176 °F)<br>cable, flexing: -25 ... 80 °C (-13 ... 176 °F) |
| Pollution degree    | 3                                                                                                                                      |

### Mechanical specifications

|                        |                                                              |
|------------------------|--------------------------------------------------------------|
| Contact elements       | spring-loaded contact socket                                 |
| Pin diameter           | 1 mm                                                         |
| Degree of protection   | IP67                                                         |
| Material               |                                                              |
| Contacts               | CuSn / Au                                                    |
| Contact surface        | Au                                                           |
| Body                   | TPU, transparent/black                                       |
| Cable                  | PUR                                                          |
| Slotted nut            | Diecast zinc                                                 |
| Sleeve connector       | Diecast zinc                                                 |
| Core insulation        | PP                                                           |
| Cable                  | extra-fine wire, flexible                                    |
| Sheath diameter        | $\varnothing$ 4.3 mm                                         |
| Bending radius         | > 10 x cable diameter, moving<br>> 5 x cable diameter, fixed |
| Color                  | black                                                        |
| Number of cores        | 4                                                            |
| Core cross-section     | 0.34 mm <sup>2</sup>                                         |
| Conductor construction | 42 x 0.1 mm $\varnothing$                                    |
| Length                 | L 5 m                                                        |
| Drag chain suitability |                                                              |
| Drag chain cycles      | $\geq$ 5000000 (at max. 60 °C)                               |
| Motion velocity        | $\leq$ 3.3 m/s                                               |

## Electrical connection





|                                                 |                                                               |
|-------------------------------------------------|---------------------------------------------------------------|
| Traverse distance                               | 5 m horizontal                                                |
| Acceleration                                    | $\leq 5 \text{ m/s}^2$                                        |
| Torsion cycles                                  | $\geq 1000000$ (at max. 60 °C)                                |
| Torsional stress                                | $\pm 180 \text{ }^\circ/\text{m}$                             |
| Flammability                                    |                                                               |
| Contact carrier                                 | 94 HB                                                         |
| Housing                                         | 94 V-2                                                        |
| Cable                                           | FT2                                                           |
| <b>Compliance with standards and directives</b> |                                                               |
| Standard conformity                             |                                                               |
| Degree of protection                            | EN 60529:2000                                                 |
| Standards                                       | IEC 61076-2-101:2008                                          |
| Flammability                                    | Body: UL 94<br>Line: UL 1581 Section 1061; IEC 60332-1-2:2004 |
| Halogen-free                                    | IEC 60754-1:1994                                              |

**Accessories****MH V1-SCREWDRIVER**

torque screwdriver (0.6 Nm)

**MH V1-BIT M12**

plug-in cap M12

**V1/V3-LABELHOLDER**

Label holder

**V1/V3-LABEL**

Label plate

**MH V1-Holder**

Modular universal holder for M12 connectors

**V1-CLIP**

Unlocking protector for M12 connector

**V1-MARKING-RING-BLUE**

Marking ring for M12 plug

**V1-MARKING-RING-GREEN**

Marking ring for M12 plug

**V1-MARKING-RING-ORANGE**

Marking ring for M12 plug

**V1-MARKING-RING-RED**

Marking ring for M12 plug

**V1-MARKING-RING-WHITE**

Marking ring for M12 plug

**V1-MARKING-RING-YELLOW**

Marking ring for M12 plug