

# Connection cable, shielded

## V1-G-BK2M-PUR-U5/ABG-V1-G

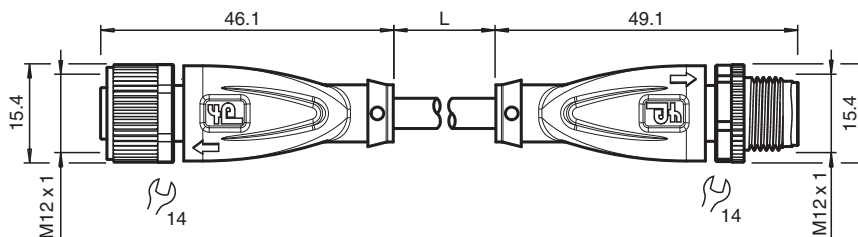


- Degree of protection IP68 / IP69
- Resistant to microbes and hydrolysis
- UV resistant
- UL listed for USA and Canada
- Halogen-free
- Shield connected to screw connection
- Specific design protects against loosening and inaccurate installation

Cordset M12 socket straight to M12 plug straight A-coded, 4-pin, PUR cable black, shielded, UL-approved



### Dimensions



### Technical Data

#### General specifications

|                   |  |                  |
|-------------------|--|------------------|
| Connector 1       |  |                  |
| Connection        |  | socket           |
| Construction type |  | M12              |
| Style             |  | straight         |
| Locking           |  | screw connection |
| Number of pins    |  | 4                |
| Coding            |  | A-coded          |
| Connector 2       |  |                  |
| Connection        |  | plug             |
| Construction type |  | M12              |
| Style             |  | straight         |
| Locking           |  | screw connection |
| Number of pins    |  | 4                |
| Coding            |  | A-coded          |

#### Electrical specifications

|                   |       |                        |
|-------------------|-------|------------------------|
| Operating voltage | $U_B$ | max. 48 V AC / 60 V DC |
| Operating current | $I_B$ | 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         |  | DIN VDE 0472-815 / DIN EN 50267-2-1 |

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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 21924/11558 105°C 300V AWM I A/B 105°C 300V FT2 (cable) |
| UL File Number |  | E231213                                                           |

### Ambient conditions

|                     |  |                                 |
|---------------------|--|---------------------------------|
| Ambient temperature |  |                                 |
| Plug connector      |  | -40 ... 90 °C (-40 ... 194 °F)  |
| Cable, fixed        |  | -50 ... 105 °C (-58 ... 221 °F) |
| Cable, flexing      |  | -30 ... 105 °C (-22 ... 221 °F) |
| Pollution degree    |  | 3                               |

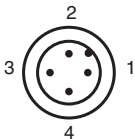
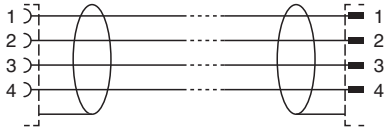
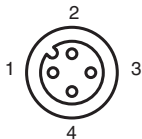
### Mechanical specifications

|                        |   |                                                                 |
|------------------------|---|-----------------------------------------------------------------|
| Plug connector         |   |                                                                 |
| Tightening torque      |   | 0.6 Nm                                                          |
| Loosening protection   |   | available                                                       |
| Tool installation      |   | straight knurling and hexagon nut SW = 14 mm                    |
| Mating cycles          |   | min. 100                                                        |
| Shielding              |   | shield connected to screw connection                            |
| Degree of protection   |   | IP68 / IP69                                                     |
| Cable                  |   | according to IEC/EN 60228 (DIN VDE 0295) class 6                |
| Sheath diameter        |   | 6 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 7021)                                     |
| Number of cores        |   | 4                                                               |
| Core cross section     |   | 0.5 mm <sup>2</sup>                                             |
| Cores color            |   | Core 1: brown<br>Core 2: white<br>Core 3: blue<br>Core 4: black |
| Core construction      |   | 28 x 0.15 mm Ø                                                  |
| Shield                 |   | tinned copper braiding, 85 % coverage                           |
| Length                 | L | 2 m                                                             |
| Cable code             |   | Li 9Y C11Y 4 x 0,50                                             |

### Material

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

Connection



Accessories

|                                                                                     |                              |                                                  |
|-------------------------------------------------------------------------------------|------------------------------|--------------------------------------------------|
|    | <b>MH V1-SCREWDRIVER</b>     | Torque screwdriver (0.6 Nm)                      |
|    | <b>MH V1-BIT M12</b>         | plug-in cap M12                                  |
|    | <b>V1/V3-LABELHOLDER</b>     | Label holder                                     |
|    | <b>V1/V3-LABEL</b>           | Label plate                                      |
|    | <b>MH V1-Holder</b>          | Modular universal holder for M12 connectors      |
|   | <b>V1-CLIP</b>               | Unlocking protector for M12 connector            |
|  | <b>V1-MARKING-RING-COLOR</b> | Marking rings for M12 connectors, various colors |