

# Cable connector, shielded

## V31S-GM-BK1M-PUR-U/ABG

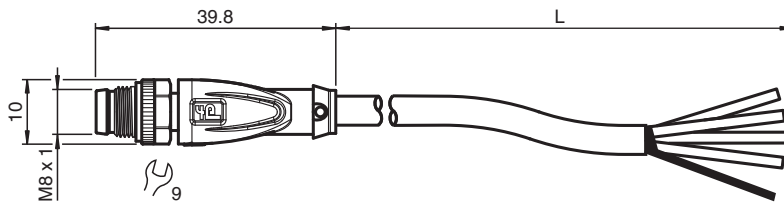


- Suitable for drag chains and abrasion resistant
- Degree of protection IP68
- Resistant to microbes and hydrolysis
- UV resistant
- UL listed for USA and Canada
- Halogen-free
- Specific design protects against loosening and inaccurate installation

Male cordset single-ended M8 straight A-coded, 4-pin, PUR cable black, shielded, UL approved, drag chain suitable



### Dimensions



### Technical Data

#### General specifications

|                   |                  |
|-------------------|------------------|
| Connector 1       |                  |
| Connection        | plug             |
| Construction type | M8               |
| Style             | straight         |
| Locking           | screw connection |
| 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. 3 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          | DIN VDE 0472-815                   |
| Microbial resistance  | EN 50363                           |
| Hydrolysis resistance | EN 50363                           |

#### Approvals and certificates

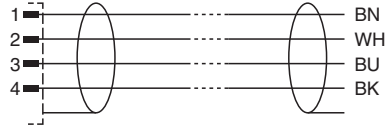
|                |   |
|----------------|---|
| UL approval    | AWM STYLE 20549/10493 80°C 300V FT2 (cable) |
| UL File Number | E231213                                     |

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## Technical Data

| Ambient conditions           |   |   |
|------------------------------|---|---|
| Ambient temperature          |   |   |
| Plug connector               |   | -40 ... 90 °C (-40 ... 194 °F)                                  |
| Cable, fixed                 |   | -40 ... 80 °C (-40 ... 176 °F)                                  |
| Cable, flexing               |   | -25 ... 80 °C (-13 ... 176 °F)                                  |
| Pollution degree             |   | 3   |
| Mechanical specifications    |   |   |
| Plug connector               |   |   |
| Tightening torque            |   | 0.4 Nm  |
| Loosening protection         |   | available   |
| Tool installation            |   | straight knurling and hexagon nut SW = 9 mm                     |
| Mating cycles                |   | min. 100  |
| Shielding                    |   | shield connected to screw connection                            |
| Degree of protection         |   | IP68  |
| Cable                        |   | according to IEC/EN 60228 (DIN VDE 0295) class 6                |
| Sheath diameter              |   | 4.9 mm  |
| Bending radius               |   | > 10 x cable diameter, moving<br>> 5 x cable diameter, fixed    |
| Sheath stripping force       |   | max. 60 N / 100 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   |
| Shield                       |   | tinned copper braiding, 85 % coverage                           |
| Length                       | L | 1 m   |
| Cable code                   |   | Li F 9Y C11Y 4 x 0,34   |
| Drag chain suitability       |   |   |
| Drag chain cycles            |   | min. 2000000  |
| Motion velocity              |   | max. 3 m/s  |
| Traverse distance            |   | max. 5 m  |
| Acceleration                 |   | max. 5 m/s <sup>2</sup>   |
| Material                     |   |   |
| Halogen-free                 |   | yes   |
| Plug connector               |   |   |
| Screw connection             |   | Zinc diecast, nickel-plated                                     |
| Body                         |   | TPU, black  |
| 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   |
| Microbial resistance         |   | yes   |
| Hydrolysis resistance        |   | yes   |
| Flammability                 |   | FT2   |

## Connection



## Accessories

|   |                          |  |
|---|--------------------------|--|
|  | <b>MH V3-SCREWDRIVER</b> | Torque screwdriver (0.4 Nm)                |
|  | <b>MH V3-BIT M8</b>      | plug-in cap for M8                         |
|  | <b>V1/V3-LABELHOLDER</b> | Label holder                               |
|  | <b>V1/V3-LABEL</b>       | Label plate                                |
|  | <b>MH V3-Holder</b>      | Modular universal holder for M8 connectors |