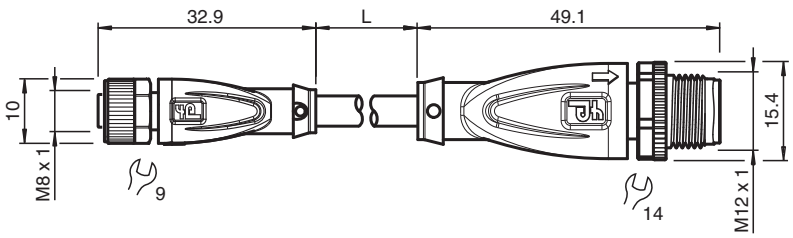
# Connection cable

## V31-GM-20M-PUR-V1-G

- Degree of protection IP68
- Resistant to microbes and hydrolysis
- Halogen-free
- Specific design protects against loosening and inaccurate installation

Cordset M8 socket straight to M12 plug straight A-coded, 4-pin, PUR cable grey

## Dimensions




## Technical Data

| | | |
|---|---|---|
| **General specifications** | | |
| Connector 1 | | |
| Connection | | socket |
| Construction type | | M8 |
| 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. 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<br>connector M12 x 1 : IEC 61076-2-101 |
| Halogen-free | | IEC 60754-1 |
| **Ambient conditions** | | |

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## Technical Data

| | | |
|---|---|---|
| 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** | | |
| Connector 1 | | |
| Tightening torque | | 0.4 Nm |
| Loosening protection | | available |
| Tool installation | | straight knurling and hexagon nut SW = 9 mm |
| Mating cycles | | min. 100 |
| Degree of protection | | IP68 |
| Connector 2 | | |
| 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 5 |
| Sheath diameter | | 4.3 mm |
| Bending radius | | > 15 x cable diameter, moving<br>> 8 x cable diameter, fixed |
| Sheath stripping force | | max. 60 N / 500 mm |
| Sheath color | | grey (similar to RAL 7001) |
| Number of cores | | 4 |
| Core cross section | | 0.25 $mm^2$ |
| Cores color | | Core 1: brown<br>Core 2: white<br>Core 3: blue<br>Core 4: black |
| Core construction | | 14 x 0.15 mm Ø |
| Length | L | 20 m |
| Cable code | | Li 9Y 11Y 4 x 0,25 |
| Drag chain suitability | | |
| Drag chain cycles | | max. 50 / day |
| Motion velocity | | max. 0.3 m/s |
| **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 |
| Chemical resistance | | good |
| Microbial resistance | | yes |
| Hydrolysis resistance | | yes |

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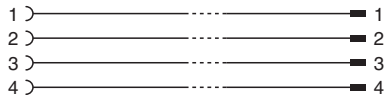
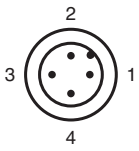
## Connection




## Accessories

| | | |
|---|---|---|
| | **MH V1-SCREWDRIVER** | Torque screwdriver (0.6 Nm) |
| | **MH V1-BIT M12** | plug-in cap M12 |
| | **MH V1-Holder** | Modular universal holder for M12 connectors |
| | **V1-CLIP** | Unlocking protector for M12 connector |
| | **V1-MARKING-RING-COLOR** | Marking rings for M12 connectors, various colors |
| | **V1/V3-LABELHOLDER** | Label holder |
| | **V1/V3-LABEL** | Label plate |
| | **MH V3-SCREWDRIVER** | Torque screwdriver (0.4 Nm) |
| | **MH V3-BIT M8** | plug-in cap for M8 |
| | **MH V3-Holder** | Modular universal holder for M8 connectors |

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