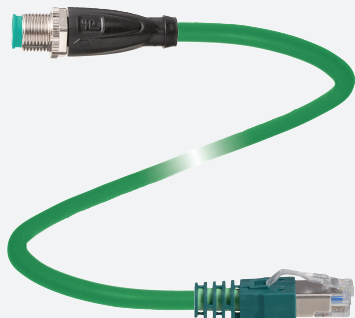




## Connection cable, Ethernet

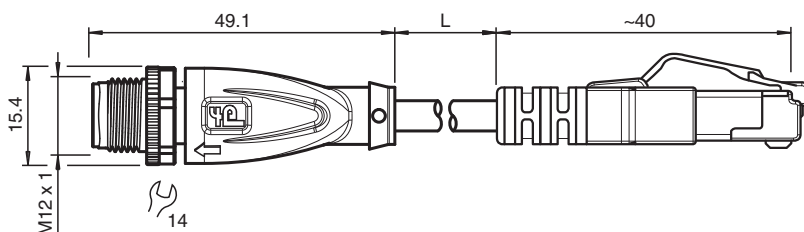
### V1SD-G-GN25M-PUR-E1S-V45-G

- Hard-wearing PUR cable
- Suitable for drag chains and abrasion resistant
- D coding for Ethernet
- Conforms to PROFINET
- CAT5/CAT5e cable
- Degree of protection IP68 / IP69
- Free of paint wetting interfering substances
- Halogen-free
- Specific design protects against loosening and inaccurate installation

Ethernet bus cable M12 plug straight D-coded to RJ45 Ethernet-coded, 4-pin, PUR cable green, Cat5e, shielded, drag chain suitable



## Dimensions



## Technical Data

### General specifications

|                   |  |                        |
|-------------------|--|------------------------|
| Connector 1       |  |                        |
| Connection        |  | plug                   |
| Construction type |  | M12                    |
| Style             |  | straight               |
| Locking           |  | screw connection       |
| Number of pins    |  | 4                      |
| Coding            |  | D-coded                |
| Connector 2       |  |                        |
| Connection        |  | plug                   |
| Construction type |  | RJ45                   |
| Style             |  | straight               |
| Locking           |  | snap locking           |
| Number of pins    |  | 8                      |
| Coding            |  | EtherNet/IP / PROFINET |

### Electrical specifications

|                   |                |                        |
|-------------------|----------------|------------------------|
| Operating voltage | U <sub>B</sub> | max. 48 V AC / 60 V DC |
|-------------------|----------------|------------------------|

### Conformity

|                      |  |                                                                     |
|----------------------|--|---------------------------------------------------------------------|
| Degree of protection |  | EN 60529                                                            |
| Plug connection      |  | connector M12 x 1 : IEC 61076-2-101<br>connector RJ45 : IEC 60603-7 |
| Component category   |  | CAT5 (IEC 11801) , CAT5e (IEC 61156-6)                              |
| Flammability         |  | IEC 60332-1-2 / UL 2556                                             |

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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 **PEPPERL+FUCHS**

## Technical Data

### Ambient conditions

#### Ambient temperature

|                |                                |
|----------------|--------------------------------|
| Connector 1    | -40 ... 90 °C (-40 ... 194 °F) |
| Cable, fixed   | -30 ... 70 °C (-22 ... 158 °F) |
| Cable, flexing | -20 ... 70 °C (-4 ... 158 °F)  |

### Mechanical specifications

#### Connector 1

|                      |                                              |
|----------------------|----------------------------------------------|
| 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                                  |

#### Connector 2

|                      |                               |
|----------------------|-------------------------------|
| Loosening protection | available                     |
| Mating cycles        | min. 100                      |
| Shielding            | shield connected to connector |
| Degree of protection | IP20                          |

#### Cable

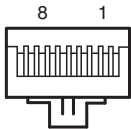
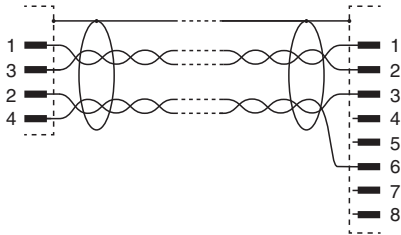
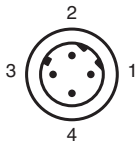
|                        |                                                                           |
|------------------------|---------------------------------------------------------------------------|
|                        | according to IEC/EN 60228 (DIN VDE 0295) class 5                          |
| Sheath diameter        | 6 mm                                                                      |
| Bending radius         | > 10 x cable diameter, moving<br>> 8 x cable diameter, fixed              |
| Sheath stripping force | max. 60 N / 100 mm                                                        |
| Sheath color           | green (similar to RAL 6018)                                               |
| Number of cores        | 4                                                                         |
| Core cross section     | 0.34 mm <sup>2</sup> / 22 AWG                                             |
| Cores color            | Core 1-1: yellow<br>Core 2-3: white<br>Core 3-2: orange<br>Core 4-6: blue |
| Core construction      | 7 x 0.254 mm Ø<br>twisted quad                                            |
| Shield                 | aluminum-lined polyester foil<br>Tinned copper braiding                   |
| Length                 | L 25 m                                                                    |
| Drag chain suitability |                                                                           |
| Drag chain cycles      | max. 1000000                                                              |
| Motion velocity        | max. 3 m/s                                                                |
| Traverse distance      | max. 5 m                                                                  |
| Acceleration           | max. 2 m/s <sup>2</sup>                                                   |

### Material

|                  |                             |
|------------------|-----------------------------|
| PWIS free        | yes                         |
| Halogen-free     | yes                         |
| Connector 1      |                             |
| Screw connection | Zinc diecast, nickel-plated |
| Body             | TPU, black                  |
| Contact surface  | Au                          |
| Flammability     | V-2                         |
| Connector 2      |                             |
| Body             | PA, green                   |
| Flammability     | V-0                         |
| Cable            |                             |
| Sheathing        | PUR based on polyether      |
| Core insulation  | PP                          |
| Flammability     | FT2                         |

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Connection



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-COLOR | Marking rings for M12 connectors, various colors |

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