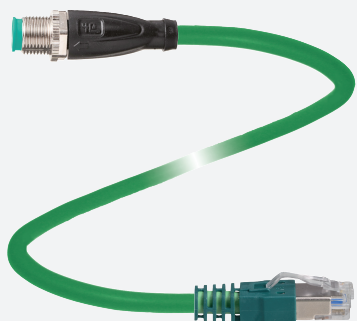




## Connection cable, Ethernet

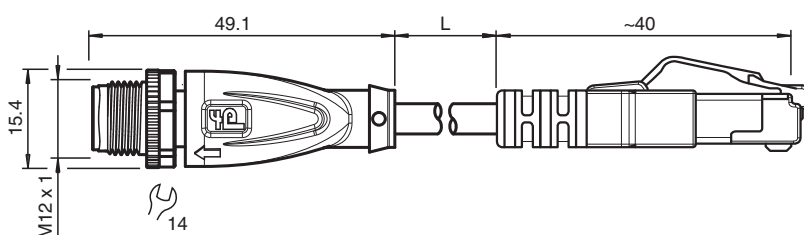
### V1SD-G-GN80M-PUR-E1S-V45-G

- 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

|                    |  |                        |  |
|--------------------|--|------------------------|--|
| <b>Connector 1</b> |  |                        |  |
| Connection         |  | plug                   |  |
| Construction type  |  | M12                    |  |
| Style              |  | straight               |  |
| Locking            |  | screw connection       |  |
| Number of pins     |  | 4                      |  |
| Coding             |  | D-coded                |  |
| <b>Connector 2</b> |  |                        |  |
| 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 |
| Operating current | I <sub>B</sub> | max. 1 A               |

### 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)                              |

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

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## Technical Data

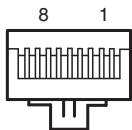
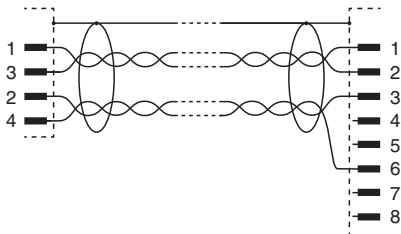
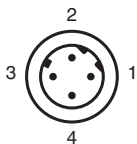
|                                  |   |                                                                                         |
|----------------------------------|---|-----------------------------------------------------------------------------------------|
| Flammability                     |   | IEC 60332-1-2 / UL 2556 / ISO 6722-1 5.22 (UN ECE-R 118.01)                             |
| <b>Ambient conditions</b>        |   |                                                                                         |
| Ambient temperature              |   |                                                                                         |
| Connector 1                      |   | -40 ... 90 °C (-40 ... 194 °F)                                                          |
| Cable, fixed installation        |   | -30 ... 70 °C (-22 ... 158 °F)                                                          |
| Cable, flexing                   |   | -20 ... 70 °C (-4 ... 158 °F)                                                           |
| <b>Mechanical specifications</b> |   |                                                                                         |
| Connector 1                      |   |                                                                                         |
| Tightening torque                |   | 0.6 Nm                                                                                  |
| Loosening protection             |   | integrated                                                                              |
| 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, movable installation<br>> 8 x cable diameter, fixed installation |
| 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 | 80 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>                                                                 |
| Mass                             |   | 4010 g                                                                                  |
| <b>Material</b>                  |   |                                                                                         |
| 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                                                                  |

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|                 |                                      |    |
|-----------------|--------------------------------------|----|
| Cores           | bare copper (Cu)                     |    |
| Core insulation |                                      | PP |
| Flammability    | FT2<br>complies with UN ECE-R 118.01 |    |

Connection Assignment



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