

Connection cable, Ethernet

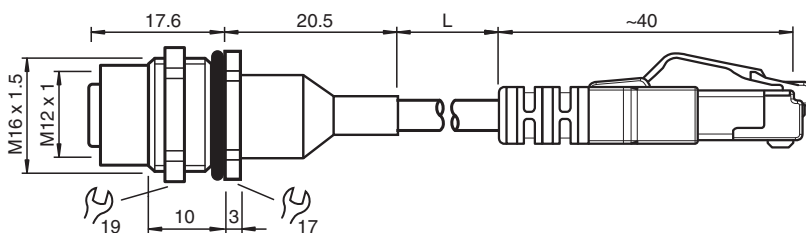
V1D-M16H-GN1,5M-PUR-E1S-V45-G

- Hard-wearing PUR cable
- Suitable for drag chains and abrasion resistant
- Industrial Ethernet
- D coding for Ethernet
- Conforms to PROFINET
- CAT5/CAT5e cable
- Free of paint wetting interfering substances
- Halogen-free
- Rear/screw mounting
- Image is generic for this device type and may deviate from the specific variant

Ethernet bus cable receptacle M12 socket 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 | socket |
| Construction type | M12 |
| Style | straight |
| Locking | screw connection |
| Number of pins | 4 |
| Coding | D-coded |
| Customization | Receptacles |

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_B | max. 48 V AC / 60 V DC |
|-------------------|-------|------------------------|

Conformity

| | |
|----------------------|---|
| Degree of protection | EN 60529 |
| Plug connection | connector M12 x 1 : IEC 61076-2-101 connector RJ45 : IEC 60603-7 |
| Component category | CAT5 (IEC 11801) , CAT5e (IEC 61156-6) |

Release date: 2024-03-17 Date of issue: 2024-03-17 Filename: 70170170_eng.pdf

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

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

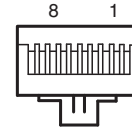
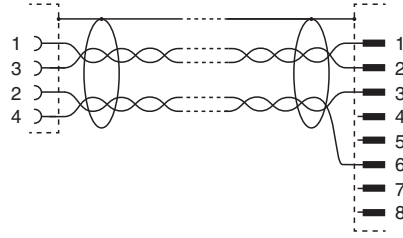
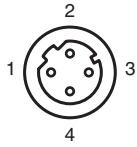
PEPPERL+FUCHS

Technical Data

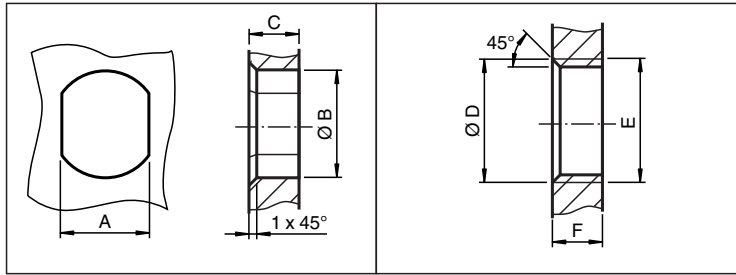
| | | |
|----------------------------------|---|---|
| Flammability | | IEC 60332-1-2 / UL 2556 / ISO 6722-1 5.22 (UN ECE-R 118.01) |
| Ambient conditions | | |
| Ambient temperature | | |
| Connector 1 | | -40 ... 90 °C (-40 ... 194 °F) |
| Cable, fixed | | -30 ... 70 °C (-22 ... 158 °F) , UL: -20 ... 70 °C (-4 ... 158 °F) |
| Cable, flexing | | -20 ... 70 °C (-4 ... 158 °F) |
| Mechanical specifications | | |
| Connector 1 | | |
| Tightening torque | | 0.6 Nm |
| Tool installation | | Rear mounting M16 , SW = 17 mm and SW = 19 mm |
| Mating cycles | | min. 100 |
| Shielding | | shield connected to connector |
| Degree of protection | | IP67 |
| 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 > 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 ² / 22 AWG |
| Cores color | | Core 1-1: yellow Core 2-3: white Core 3-2: orange Core 4-6: blue |
| Core construction | | 7 x 0.254 mm Ø twisted quad |
| Shield | | aluminum-lined polyester foil Tinned copper braiding |
| Length | L | 1.5 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 ² |
| Material | | |
| PWIS free | | yes |
| Halogen-free | | yes |
| Connector 1 | | |
| Screw connection | | Zinc diecast, nickel-plated |
| Seal | | FKM |
| 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 complies with UN ECE-R 118.01 |

Release date: 2024-03-17 Date of issue: 2024-03-17 Filename: 70170170_eng.pdf

Connection



Mounting



| | A | B | C | D | E | F |
|--------|----------------------|------------------------|----------|----------------------|---------|----------|
| M8 | 7.1 ^{+0.1} | Ø 8.2 ^{+0.1} | 2 - 4 mm | - | M8x0.5 | 2 - 4 mm |
| M12 | 11 ^{+0.1} | Ø 12.2 ^{+0.1} | < 4 mm | - | M12x1 | < 4.5 mm |
| M16 | 13.5 ^{+0.1} | Ø 16.1 | < 4.5 mm | Ø 17 ^{+0.2} | M16x1.5 | > 2.5 mm |
| M20 | 13.5 ^{+0.1} | Ø 20.1 | - | Ø 20 ^{+0.2} | M20x1.5 | < 6 mm |
| PG9 | 13.5 ^{+0.1} | Ø 15.3 ^{+0.1} | < 4.5 mm | Ø 16 | PG9 | > 2.5 mm |
| PG13.5 | 18.8 ^{+0.1} | Ø 20.5 ^{+0.1} | - | Ø 22 ^{±0.1} | PG13.5 | - |

Release date: 2024-03-17 Date of issue: 2024-03-17 Filename: 70170170_eng.pdf