

**M12 0° / RJ45 MALE 0° ETHERNET**

659 PUR 2x2xAWG22 shielded gn 13.0

Male straight – male straight

M12 – RJ45, 4-pole

D-coded

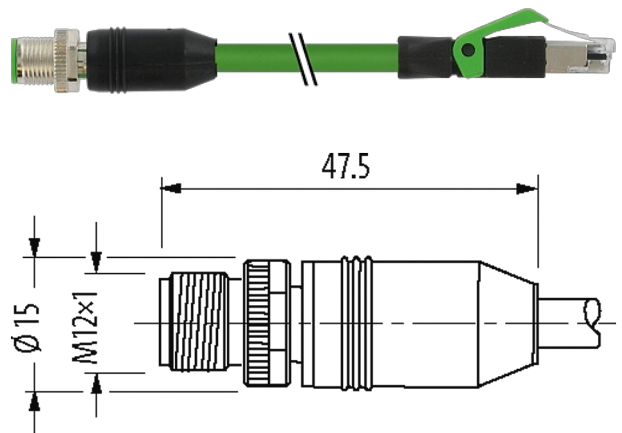
shielded

Ethernet CAT5

Further cable lengths on request.

Plastic housings with good resistance against chemicals and oils.

The resistance to aggressive media should be individually tested for your application. Further details on request.

**Illustration**

Product may differ from Image

**Approvals**

\* only for products with UL/CSA approved cable

**More Info**

EtherNet/IP

**Form**

Form 44711

**Cables**

|                            |                              |
|----------------------------|------------------------------|
| No./diameter of wires      | 2 x 2 x 0.34 mm <sup>2</sup> |
| Wire isolation             | PE (wh, ye, bl, or)          |
| C-track properties         | 2 Mio.                       |
| Material (jacket)          | PUR (UL/CSA)                 |
| Outer Ø                    | 7.4 mm ±5%                   |
| Bend radius (moving)       | 12 x outer Ø                 |
| Temperature range (fixed)  | -40...+80 °C                 |
| Temperature range (mobile) | -30...+70 °C                 |

|                                 |  |
|---------------------------------|--|
| Cable identification            | 659  |
| Approval (cable)                | UL (AWM-Style 20234/10988), CSA; CE            |
| Cable weight [g/m]              | 89,10  |
| Material (wire)                 | Cu wire, bare                                  |
| Resistor (core)                 | max. 55 $\Omega$ /km (20 °C)                   |
| Diameter (core)                 | 2 x 2 x 0.34 mm <sup>2</sup>                   |
| AWG                             | similar to AWG 22                              |
| Material (wire isolation)       | PE   |
| Wire-Ø incl. isolation          | 1.4 mm $\pm$ 5%                                |
| Color/numbering of wires        | wh, ye, bl, or                                 |
| Shield                          | yes  |
|                                 | min. 85%                                       |
| Material (jacket)               | PUR  |
| Outer-Ø (jacket)                | 7.4 mm $\pm$ 5%                                |
| Color (jacket)                  | green  |
| chemical resistance             | good resistance to oil, gasoline and chemicals |
| thermal resistance              | flame retardant                                |
| Nominal voltage                 | 600 V  |
| Temperature range (fixed)       | -40...+80 °C                                   |
| Temperature range (mobile)      | -30...+70 °C                                   |
| Bend radius (fixed)             | 5 x outer Ø                                    |
| Bend radius (moving)            | 12 x outer Ø                                   |
| No. of bending cycles (C-track) | max. 2 Mio. (25 °C)                            |
| Traversing distance (C-track)   | max. 5 m (horizontal)                          |
| Travel speed (C-track)          | max. 3.3 m/s                                   |
| Acceleration (C-track)          | max. 2 m/s <sup>2</sup>                        |
| Jacket Color                    | green  |

#### Technical Data

|   |  |
|---|--|
| Operating voltage                         | max. 60 V DC   |
| Operating voltage (only UL listed)        | max. 30 V DC   |
| Rated surge voltage                       | 1.0 kV   |
| Operating current per contact             | max. 1.5 A (20 °C)   |
| Material group                            | IEC 60664-1, category I  |
| Transfer parameters                       | CAT5, Class D (ISO/IEC 11801:2002), (EN 50173-1)                 |
| Transfer rate                             | up to 100 Mbit/s full duplex                                     |
| Coding                                    | M12, D-coded   |
| Locking of ports                          | Screw thread (M12x1 mm) recommended torque 0.6 Nm, self-securing |
| Compression gland                         | M12 (SW13)   |
| Protection                                | IP67 (M12) - IP20 (RJ45)   |
| Locking material                          | Zinc die casting, matte nickel plated                            |
| Material                                  | PUR  |
| suitable for corrugated tube (internal Ø) | without  |

#### General data

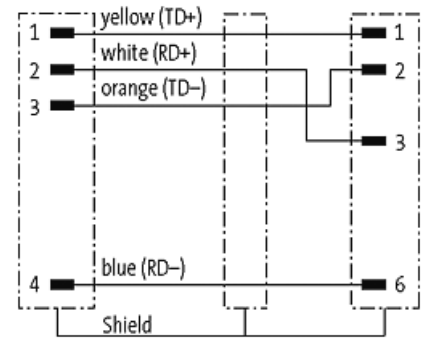
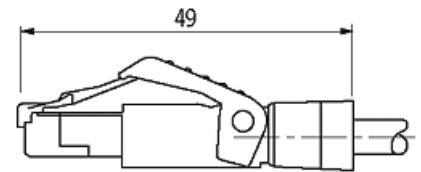
|                   |  |
|-------------------|--|
| Standards         | DIN EN 61076-2-101 (M12)                 |
| Pollution Degree  | 3  |
| Temperature range | -25...+85 °C, depending on cable quality |

#### Commercial data

|                       |          |
|-----------------------|----------|
| country of origin     | DE       |
| customs tariff number | 85444290 |

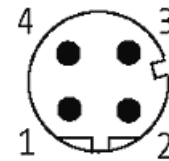
|                |               |
|----------------|---------------|
| EAN            | 4048879731447 |
| eClass         | 27061801      |
| Packaging unit | 1             |

**Sketch**



Male

Male



Product may differ from Image