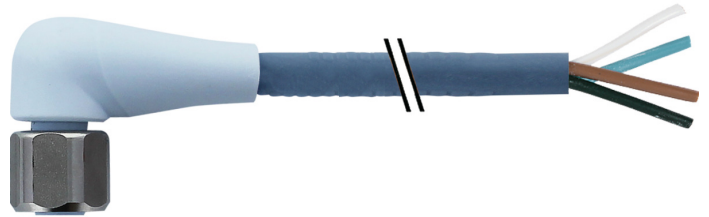


**Overview**

- M12, female, A-coded; 4-poles; TPE-S, 500 cm, free cable end
- Dragchain capable; suitable for robotics  $\pm 180^\circ/\text{m}$ ; suitable for food & beverage
- Head A: IP65, IP68, IP69K
- ECOLAB tested
- Halogen free



**Technical data**

| Side A                             |                       |
|------------------------------------|-----------------------|
| Head A: Connection                 | M12                   |
| Head A: Angle cable outlet         | 90°                   |
| Head A: Gender                     | Female                |
| Head A: Coding                     | A                     |
| Head A: No. of poles               | 4                     |
| Head A: LED                        | Yes                   |
| Head A: LED switching status       | PNP                   |
| Head A: Width across flats         | AF14                  |
| Head A: Tightening torque          | 0.6 Nm                |
| Head A: Knurled nut material       | Stainless steel (V4A) |
| Head A: Body color                 | Transparent           |
| Head A: Gasket material            | EPDM                  |
| Labeling sleeve side A             | No                    |
| Side B                             |                       |
| Head B: Connection                 | Open-ended wires      |
| Labeling sleeve side B             | No                    |
| Cables                             |                       |
| Cable length                       | 500 cm                |
| Length tolerance                   | $\pm 7.5$ cm          |
| Stripping length                   | 20 mm                 |
| Shielded                           | No                    |
| Conductor structure                | 42 $\times$ 0.1 mm    |
| AWG                                | 22                    |
| External sheath: Material          | TPE-S                 |
| External sheath: Color             | Blue                  |
| Cable diameter                     | 4.7 mm $\pm$ 5%       |
| Wire cross section                 | 0.34 mm <sup>2</sup>  |
| Cable                              |                       |
| Cable: Temperature range (mobile)  | - 25 ...+ 105 °C      |
| Cable: Temperature range (fixed)   | - 40 ...+ 105 °C      |
| Operating voltage (only UL listed) | 30 V AC/DC            |
| Shielded                           | No                    |
| Bending radius (fixed)             | 23.5 mm               |
| Number of wires                    | 4                     |

| Cable                              |                                 |
|------------------------------------|---------------------------------|
| Number and diameter of wires       | 4x0.34                          |
| Length tolerance                   | $\pm 7.5$ cm                    |
| Cable length                       | 500 cm                          |
| Acceleration (C-track)             | max. 10 m/s <sup>2</sup>        |
| AWG                                | 22                              |
| Bending radius (fixed)             | min. 5 $\times$ outer diameter  |
| Torsion speed                      | max. 35 cycles/min              |
| Bending radius (mobile)            | min. 10 $\times$ outer diameter |
| Cable weight                       | approx. 29.7 g/m                |
| Wire 1: Color                      | BN                              |
| Wire 2: Color                      | BK                              |
| Wire 3: Color                      | BU                              |
| Wire 4: Color                      | WH                              |
| Conductor structure                | 42 $\times$ 0.1 mm              |
| Cable diameter                     | 4.7 mm $\pm$ 5%                 |
| Conductor: Material                | Copper, bare                    |
| External sheath: Material          | TPE-S                           |
| Insulation: Material               | PP                              |
| No. of bending cycles (C-track)    | approx. 4000000 Cycles          |
| Nominal voltage                    | 300 V AC                        |
| No. of torsion cycles              | approx. 2000000 Cycles          |
| Paired stranding                   | No                              |
| Single wire diameter               | 0.1 mm                          |
| Cable: Test voltage                | 3 kV                            |
| Torsion stress in °                | $\pm 180^\circ/\text{m}$        |
| Total stranding                    | 4 wires strand                  |
| Travel speed (C-track)             | max. 3 m/s                      |
| Traversing path (horizontal)       | max. 10 m                       |
| Wire cross section                 | 0.34 mm <sup>2</sup>            |
| Wire processing                    | No                              |
| Wire diameter incl. isolation      | 1.27 mm $\pm$ 5%                |
| External sheath: Color             | Blue                            |
| Electrical data                    |                                 |
| Operating voltage                  | 24 V DC $\pm$ 25 %              |
| Operating voltage (only UL listed) | 30 V AC/DC                      |
| Nominal voltage                    | 300 V AC                        |

**Technical data**

**Electrical data**

|                               |              |
|-------------------------------|--------------|
| Contact resistance            | max. 30 mOhm |
| Operating current per contact | max. 4 A     |

**Mechanical data**

|                                 |                          |
|---------------------------------|--------------------------|
| Head A: Degree of protection    | IP65, IP68, IP69K        |
| Bending radius (mobile)         | min. 10 × outer diameter |
| Bending radius (fixed)          | min. 5 × outer diameter  |
| No. of bending cycles (C-track) | approx. 4000000 Cycles   |
| Torsion speed                   | max. 35 cycles/min       |
| Torsion stress in °             | ± 180 °/m                |
| No. of torsion cycles           | approx. 2000000 Cycles   |
| Acceleration (C-track)          | max. 10 m/s <sup>2</sup> |
| Travel speed (C-track)          | max. 3 m/s               |

**Environmental conditions**

|                            |                 |
|----------------------------|-----------------|
| Temperature range (mobile) | - 25 ...+ 85 °C |
| Temperature range (fixed)  | - 40 ...+ 85 °C |

**Environmental conditions**

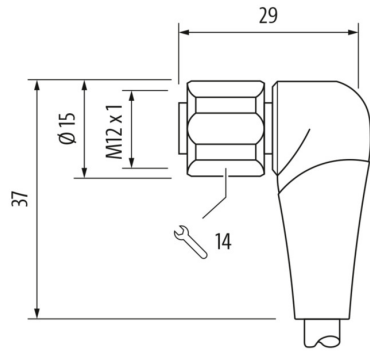
|                                   |   |
|-----------------------------------|---|
| Cable: Temperature range (fixed)  | - 40 ...+ 105 °C  |
| Dragchain capable                 | Yes   |
| Head A: Chemical resistance       | Chemical resistance tested according to ECOLAB. If other media are used, the material resistance must be tested according to the application. |
| Head A: Flame resistance          | HB (UL 94)  |
| Head A: Oil resistance            | ASTM 1 oil, mineral oils, limited to hydraulic oils   |
| Head A: Acid and alkali resistant | ECOLAB tested   |
| Head A: Pollution degree          | 3   |
| Cable: Chemical resistance        | ECOLAB material resistance test passed  |
| Cable: Acid and alkali resistant  | Good (FDA 21 178.3620, 178.3297, 177.1520, EU 10/2011)  |
| Cable: Silicone-free              | Yes   |

**Commercial data**

|        |          |
|--------|----------|
| Eclass | 27060311 |
|--------|----------|

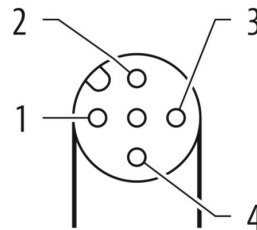
**Side A**

**Technical drawing**



**Side A**

**Coding**



**Side B**

**Technical drawing**



**Connection diagram**



**Dimension drawing**

