

**Overview**

- M12, male, A-coded; 4-poles; TPE-S, 200 cm, shielded, 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                             |                       | Cable                              |                          |
|------------------------------------|-----------------------|------------------------------------|--------------------------|
| Head A: Connection                 | M12                   | Length tolerance                   | + 10 cm                  |
| Head A: Angle cable outlet         | 0°                    | Cable length                       | 200 cm                   |
| Head A: Gender                     | Male                  | Acceleration (C-track)             | max. 10 m/s <sup>2</sup> |
| Head A: Coding                     | A                     | AWG                                | 22                       |
| Head A: No. of poles               | 4                     | Bending radius (fixed)             | min. 5 × outer diameter  |
| Head A: LED                        | No                    | Torsion speed                      | max. 35 cycles/min       |
| Head A: Width across flats         | AF14                  | Bending radius (mobile)            | min. 10 × outer diameter |
| Head A: Tightening torque          | 0.6 Nm                | Cable weight                       | approx. 45.1 g/m         |
| Head A: Knurled nut material       | Stainless steel (V4A) | Conductor structure                | 42 × 0.1 mm              |
| Head A: Body color                 | Blue                  | Cable diameter                     | 5.6 mm ± 5%              |
| Labeling sleeve side A             | No                    | Conductor: Material                | Copper, bare             |
| <b>Side B</b>                      |                       | External sheath: Material          | TPE-S                    |
| Head B: Connection                 | Open-ended wires      | Insulation: Material               | PP                       |
| Labeling sleeve side B             | No                    | Shielding: Material                | Copper, tinned           |
| <b>Cables</b>                      |                       | No. of bending cycles (C-track)    | approx. 4000000 Cycles   |
| Cable length                       | 200 cm                | Nominal voltage                    | 300 V AC                 |
| Length tolerance                   | + 10 cm               | No. of torsion cycles              | approx. 2000000 Cycles   |
| Stripping length                   | 20 mm                 | Paired stranding                   | No                       |
| Shielded                           | Yes                   | Single wire diameter               | 0.1 mm                   |
| Conductor structure                | 42 × 0.1 mm           | Cable: Test voltage                | 3 kV                     |
| AWG                                | 22                    | Torsion stress in °                | ± 180 °/m                |
| External sheath: Material          | TPE-S                 | Total stranding                    | 4 wires strand           |
| External sheath: Color             | Blue                  | Travel speed (C-track)             | max. 3 m/s               |
| Cable diameter                     | 5.6 mm ± 5%           | Traversing path (horizontal)       | max. 10 m                |
| Wire cross section                 | 0.34 mm <sup>2</sup>  | Wire cross section                 | 0.34 mm <sup>2</sup>     |
| <b>Cable</b>                       |                       | Wire processing                    | No                       |
| Cable: Temperature range (mobile)  | - 25 ... + 105 °C     | Wire diameter incl. isolation      | 1.27 mm ± 5%             |
| Cable: Temperature range (fixed)   | - 40 ... + 105 °C     | External sheath: Color             | Blue                     |
| Operating voltage (only UL listed) | 30 V AC/DC            | <b>Electrical data</b>             |                          |
| Shielded                           | Yes                   | Operating voltage                  | max. 60 V AC/DC          |
| Shielding: Covering                | approx. 85 %          | Operating voltage (only UL listed) | 30 V AC/DC               |
| Bending radius (fixed)             | 28 mm                 | Nominal voltage                    | 300 V AC                 |
| Number of wires                    | 4                     | Contact resistance                 | max. 30 mOhm             |
| Number and diameter of wires       | 4x0.34                | Operating current per contact      | max. 4 A                 |

The product features and technical data specified do not express or imply any warranty. Technical modifications subject to change. 2024-05-22

**Technical data**

**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 ...+ 105 °C |
| Temperature range (fixed)        | - 40 ...+ 105 °C |
| Cable: Temperature range (fixed) | - 40 ...+ 105 °C |

**Environmental conditions**

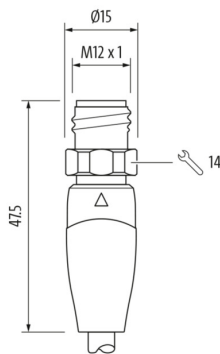
|                                   |   |
|-----------------------------------|---|
| Dragchain capable                 | Yes   |
| Head A: Chemical resistance       | Chemical resistance tested according to ECOLAB. If other media are used, the material resistance must be tested according to the application. |
| 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 |
|--------|----------|

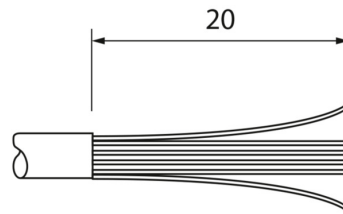
**Side A**

**Technical drawing**

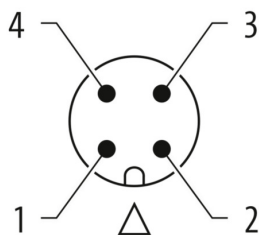


**Side B**

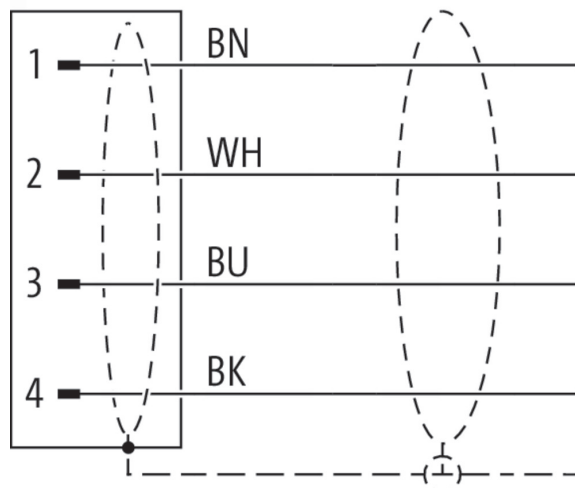
**Technical drawing**



**Coding**



**Connection diagram**



**Dimension drawing**

