

**Overview**

- M12, female, A-coded; 4-poles; TPE-S, 1000 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**

|                              |                       |
|------------------------------|-----------------------|
| Head A: Connection           | M12                   |
| Head A: Angle cable outlet   | 0°                    |
| Head A: Gender               | Female                |
| Head A: Coding               | A                     |
| Head A: No. of poles         | 4                     |
| Head A: LED                  | No                    |
| Head A: Width across flats   | SW14                  |
| Head A: Tightening torque    | 0.6 Nm                |
| Head A: Knurled nut material | Stainless steel (V4A) |
| Head A: Body color           | Blue                  |
| Labeling sleeve side A       | No                    |

**Side B**

|                        |                  |
|------------------------|------------------|
| Head B: Connection     | Open-ended wires |
| Labeling sleeve side B | No               |

**Cables**

|                           |                      |
|---------------------------|----------------------|
| Cable length              | 1000 cm              |
| Length tolerance          | $\pm 15$ cm          |
| Stripping length          | 20 mm                |
| Shielded                  | Yes                  |
| Conductor structure       | 42 $\times$ 0.1 mm   |
| AWG                       | 22                   |
| External sheath: Material | TPE-S                |
| External sheath: Color    | Blue                 |
| Cable diameter            | 5.6 mm $\pm$ 5%      |
| Wire cross section        | 0.34 mm <sup>2</sup> |

**Electrical data**

|                                    |                 |
|------------------------------------|-----------------|
| Operating voltage                  | max. 60 V AC/DC |
| Operating voltage (only UL listed) | 30 V AC/DC      |
| Nominal voltage                    | 300 V AC        |
| Contact resistance                 | max. 30 mOhm    |
| Operating current per contact      | max. 4 A        |

**Mechanical data**

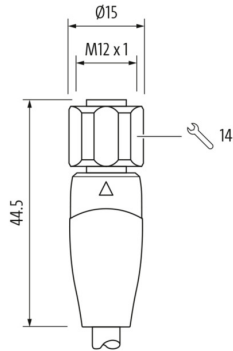
|                                 |                                 |
|---------------------------------|---------------------------------|
| Head A: Degree of protection    | IP65, IP68, IP69K               |
| Bending radius (mobile)         | min. 10 $\times$ outer diameter |
| Bending radius (fixed)          | min. 5 $\times$ outer diameter  |
| No. of bending cycles (C-track) | approx. 4000000 Cycles          |
| Torsion speed                   | max. 35 cycles/min              |
| Torsion stress in $^\circ$      | $\pm 180^\circ/\text{m}$        |
| 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 $^\circ\text{C}$  |
| Temperature range (fixed)         | - 40 ...+ 105 $^\circ\text{C}$  |
| Cable: Temperature range (fixed)  | - 40 ...+ 105 $^\circ\text{C}$  |
| 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   |

**Side A**

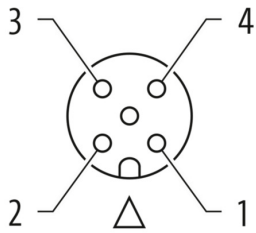
**Technical drawing**



**Connection diagram**



**Coding**



**Dimension drawing**



**Side B**

**Technical drawing**

