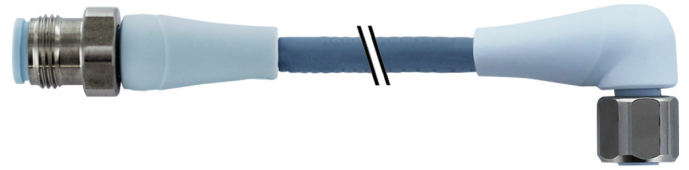


**Overview**

- M12, male, A-coded; 4-poles; TPE-S, 1000 cm; M12, female, A-coded; 4-poles
- Dragchain capable; suitable for robotics  $\pm 180$  °/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               | Male                  |
| Head A: Coding               | A                     |
| Head A: No. of poles         | 4                     |
| Head A: LED                  | No                    |
| 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           | Blue                  |
| Labeling sleeve side A       | No                    |

**Side B**

|                              |                       |
|------------------------------|-----------------------|
| Head B: Connection           | M12                   |
| Head B: Angle cable outlet   | 90°                   |
| Head B: Gender               | Female                |
| Head B: Coding               | A                     |
| Head B: No. of poles         | 4                     |
| Head B: LED                  | No                    |
| Head B: Width across flats   | AF14                  |
| Head B: Tightening torque    | 0.6 Nm                |
| Head B: Knurled nut material | Stainless steel (V4A) |
| Head B: Body color           | Blue                  |
| Head B: Gasket material      | EPDM                  |
| Labeling sleeve side B       | No                    |

**Cables**

|                           |                      |
|---------------------------|----------------------|
| Cable length              | 1000 cm              |
| Shielded                  | No                   |
| Conductor structure       | 42 × 0.1 mm          |
| AWG                       | 22                   |
| External sheath: Material | TPE-S                |
| External sheath: Color    | Blue                 |
| Cable diameter            | 4.7 mm ± 5%          |
| Wire cross section        | 0.34 mm <sup>2</sup> |

**Electrical data**

|                                    |            |
|------------------------------------|------------|
| Operating voltage (only UL listed) | 30 V AC/DC |
|------------------------------------|------------|

**Electrical data**

|                               |              |
|-------------------------------|--------------|
| 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        |
| Head B: 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**

|                                   |  |
|-----------------------------------|--|
| 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            | Good resistance to ASTM 1 oil and mineral oils. Limited resistance to hydraulic oils. If other oils are used, the resistance must be checked in relation to the application. |
| Head A: Acid and alkali resistant | Chemical resistance tested according to ECOLAB. If other media are used, the material resistance must be tested according to the application.                                |
| Head A: Pollution degree          | 3  |
| Head B: Chemical resistance       | Chemical resistance tested according to ECOLAB. If other media are used, the material resistance must be tested according to the application.                                |

**Technical data**

**Environmental conditions**

|                                   |  |
|-----------------------------------|--|
| Head B: Flame resistance          | HB (UL 94)   |
| Head B: Oil resistance            | Good resistance to ASTM 1 oil and mineral oils. Limited resistance to hydraulic oils. If other oils are used, the resistance must be checked in relation to the application. |
| Head B: Acid and alkali resistant | Chemical resistance tested according to ECOLAB. If other media are used, the material resistance must be tested according to the application.                                |

**Environmental conditions**

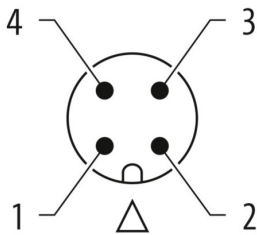
|                                  |   |
|----------------------------------|---|
| Head B: Pollution degree         | 3   |
| Cable: Acid and alkali resistant | Good (analogue FDA 21 178.3620, 178.3297, 177.1520) |
| Cable: Silicone-free             | Yes   |

**Commercial data**

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

**Side A**

**Coding**



**Connection diagram**



**Side B**

**Coding**

