

**Overview**

- M12, male, A-coded; 4-poles; TPE-S, 100 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                             |                       | Cable                              |                          |
|------------------------------------|-----------------------|------------------------------------|--------------------------|
| Head A: Connection                 | M12                   | Cable length                       | 100 cm                   |
| Head A: Angle cable outlet         | 0°                    | Acceleration (C-track)             | max. 10 m/s <sup>2</sup> |
| Head A: Gender                     | Male                  | AWG                                | 22                       |
| Head A: Coding                     | A                     | Bending radius (fixed)             | min. 5 × outer diameter  |
| Head A: No. of poles               | 4                     | Torsion speed                      | max. 35 cycles/min       |
| Head A: LED                        | No                    | Bending radius (mobile)            | min. 10 × outer diameter |
| Head A: Width across flats         | AF14                  | Cable weight                       | approx. 29.7 g/m         |
| Head A: Tightening torque          | 0.6 Nm                | Wire 1: Color                      | BN                       |
| Head A: Knurled nut material       | Stainless steel (V4A) | Wire 2: Color                      | BK                       |
| Head A: Body color                 | Blue                  | Wire 3: Color                      | BU                       |
| Labeling sleeve side A             | No                    | Wire 4: Color                      | WH                       |
| Side B                             |                       | Conductor structure                | 42 × 0.1 mm              |
| Head B: Connection                 | Open-ended wires      | Cable diameter                     | 4.7 mm ± 5%              |
| Labeling sleeve side B             | No                    | Conductor: Material                | Copper, bare             |
| Cables                             |                       | External sheath: Material          | TPE-S                    |
| Cable length                       | 100 cm                | Insulation: Material               | PP                       |
| Length tolerance                   | + 5 cm                | No. of bending cycles (C-track)    | approx. 4000000 Cycles   |
| Stripping length                   | 20 mm                 | Nominal voltage                    | 300 V AC                 |
| Shielded                           | No                    | No. of torsion cycles              | approx. 2000000 Cycles   |
| Conductor structure                | 42 × 0.1 mm           | Paired stranding                   | No                       |
| AWG                                | 22                    | Single wire diameter               | 0.1 mm                   |
| External sheath: Material          | TPE-S                 | Cable: Test voltage                | 3 kV                     |
| External sheath: Color             | Blue                  | Torsion stress in °                | ± 180 °/m                |
| Cable diameter                     | 4.7 mm ± 5%           | Total stranding                    | 4 wires strand           |
| Wire cross section                 | 0.34 mm <sup>2</sup>  | Travel speed (C-track)             | max. 3 m/s               |
| Cable                              |                       | Traversing path (horizontal)       | max. 10 m                |
| Cable: Temperature range (mobile)  | - 25 ...+ 105 °C      | Wire cross section                 | 0.34 mm <sup>2</sup>     |
| Cable: Temperature range (fixed)   | - 40 ...+ 105 °C      | Wire processing                    | No                       |
| Operating voltage (only UL listed) | 30 V AC/DC            | Wire diameter incl. isolation      | 1.27 mm ± 5%             |
| Shielded                           | No                    | External sheath: Color             | Blue                     |
| Bending radius (fixed)             | 23.5 mm               | Electrical data                    |                          |
| Number of wires                    | 4                     | Operating voltage                  | max. 250 V AC/DC         |
| Number and diameter of wires       | 4x0.34                | Operating voltage (only UL listed) | 30 V AC/DC               |
| Length tolerance                   | + 5 cm                | Nominal voltage                    | 300 V AC                 |
|                                    |                       | Contact resistance                 | max. 30 mOhm             |
|                                    |                       | Operating current per contact      | max. 4 A                 |

**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**

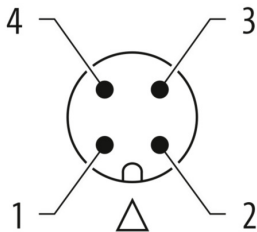
|                                   |   |
|-----------------------------------|---|
| Dragchain capable                 | Yes   |
| Head A: Chemical resistance       | Chemical resistance tested according to ECOLAB. If other media are used, the material resistance must be tested according to the application.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

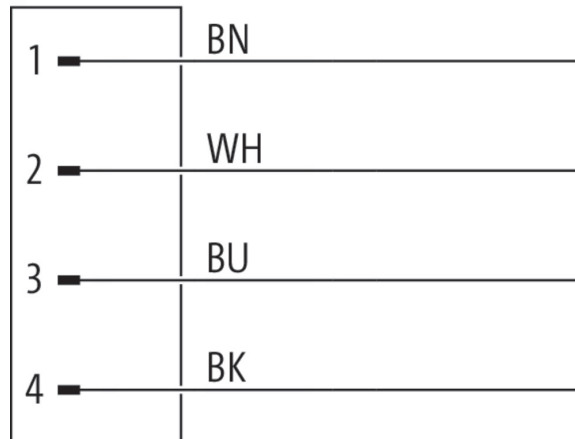
|        |          |
|--------|----------|
| Eclass | 27060311 |
|--------|----------|

**Side A**

**Coding**

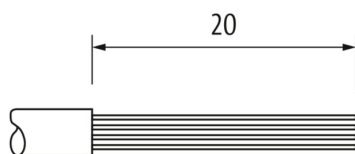


**Connection diagram**



**Side B**

**Technical drawing**



**Dimension drawing**

