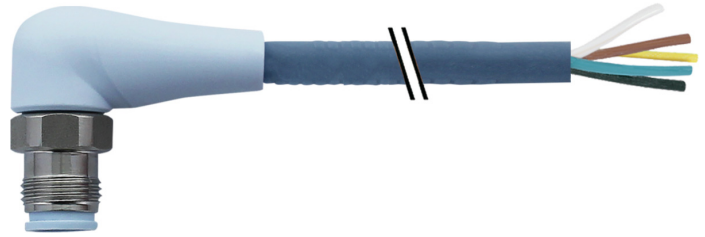


### Overview

- M12, male, A-coded; 5-poles; TPE-S, 2500 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               | Male                  |
| Head A: Coding               | A                     |
| Head A: No. of poles         | 5                     |
| 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                    |
| Head A: Contact layout pin 1 | BN                    |
| Head A: Contact layout pin 2 | WH                    |
| Head A: Contact layout pin 3 | BU                    |
| Head A: Contact layout pin 4 | BK                    |
| Head A: Contact layout pin 5 | GY                    |

#### Side B

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

#### Cables

|                           |                      |
|---------------------------|----------------------|
| Cable length              | 2500 cm              |
| Length tolerance          | $\pm 37.5$ 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            | 5 mm $\pm$ 5%        |
| Wire cross section        | 0.34 mm <sup>2</sup> |
| Cable: Halogen free       | Yes                  |

#### Cable

|                                   |                   |
|-----------------------------------|-------------------|
| Cable: Temperature range (mobile) | - 25 ... + 105 °C |
|-----------------------------------|-------------------|

#### Cable

|                                    |                                   |
|------------------------------------|-----------------------------------|
| Cable: Temperature range (fixed)   | - 40 ... + 105 °C                 |
| Operating voltage (only UL listed) | 30 V AC/DC                        |
| Shielded                           | No                                |
| Bending radius (fixed)             | 25 mm                             |
| Number of wires                    | 5                                 |
| Number and diameter of wires       | 5x0.34                            |
| Length tolerance                   | $\pm 37.5$ cm                     |
| Cable length                       | 2500 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. 35.2 g/m                  |
| Conductor structure                | 42 $\times$ 0.1 mm                |
| Cable diameter                     | 5 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                    | 5 wires strand around core-filler |
| Travel speed (C-track)             | 0                                 |
| 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 | max. 125 V AC/DC |
|-------------------|------------------|

#### Technical data

##### Electrical data

|                                    |              |
|------------------------------------|--------------|
| 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 × 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)          | 0                        |

##### Environmental conditions

|                            |                  |
|----------------------------|------------------|
| Temperature range (mobile) | - 25 ...+ 105 °C |
|----------------------------|------------------|

##### Environmental conditions

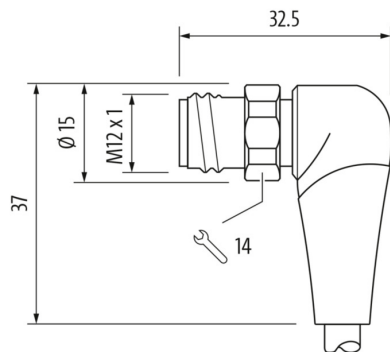
|                                   |                                                                                                                                               |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Temperature range (fixed)         | - 25 ...+ 85 °C                                                                                                                               |
| 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                                                                                                                                           |
| Cable: UV resistance              | Yes                                                                                                                                           |

##### Commercial data

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

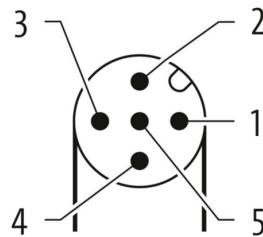
#### Side A

##### Technical drawing



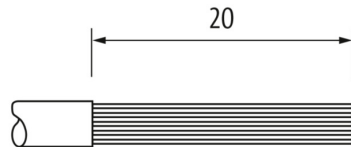
#### Side A

##### Coding

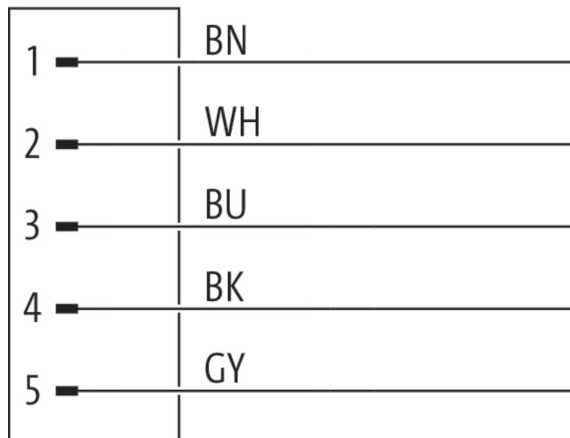


**Side B**

**Technical drawing**



**Connection diagram**



**Dimension drawing**

