

## Overview

- M12, male, A-coded; 4-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   | 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     | 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            | $4.7 \text{ mm} \pm 5\%$ |
| Wire cross section        | $0.34 \text{ mm}^2$      |

### Electrical data

|                                    |                  |
|------------------------------------|------------------|
| Operating voltage                  | max. 250 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 °             | $\pm 180^\circ/\text{m}$        |
| No. of torsion cycles           | approx. 2000000 Cycles          |
| Acceleration (C-track)          | max. $10 \text{ m/s}^2$         |
| Travel speed (C-track)          | max. 3 m/s                      |

### Environmental conditions

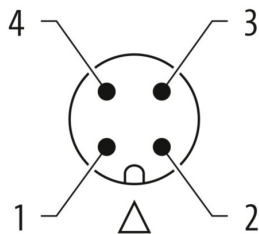
|                                   |                                                                                                                                               |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Temperature range (mobile)        | - 25 ...+ 105 °C                                                                                                                              |
| Temperature range (fixed)         | - 40 ...+ 105 °C                                                                                                                              |
| Cable: Temperature range (fixed)  | - 40 ...+ 105 °C                                                                                                                              |
| 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

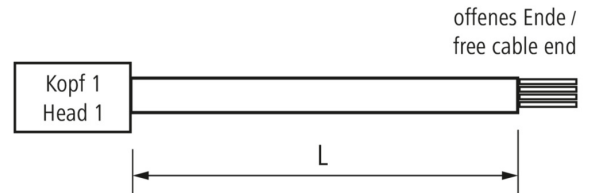
|        |          |
|--------|----------|
| Eclass | 27060311 |
|--------|----------|

## Side A

### Coding

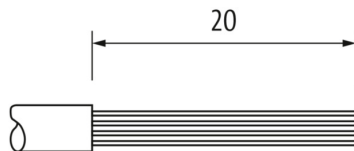


## Dimension drawing



## Side B

### Technical drawing



## Connection diagram

