

## Overview

- M12, male, L-coded; 5-poles; PUR, 1000 cm, free cable end
- Dragchain capable; suitable for robotics  $\pm 180^\circ/\text{m}$
- Head A: IP65, IP67
- Cable: good resistance against chemicals, flames, oils
- Halogen free



## Technical data

### Side A

|                              |                                       |
|------------------------------|---------------------------------------|
| Head A: Connection           | M12                                   |
| Head A: Angle cable outlet   | 0°                                    |
| Head A: Gender               | Male                                  |
| Head A: Coding               | L                                     |
| Head A: No. of poles         | 5                                     |
| Head A: LED                  | No                                    |
| Head A: Width across flats   | AF17                                  |
| Head A: Tightening torque    | 0.6 Nm                                |
| Head A: Knurled nut material | Zinc-pressure die casting, surface Ni |
| Head A: Body color           | Black                                 |
| Labeling sleeve side A       | Yes                                   |
| 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 | Yes              |

### Cables

|                           |                     |
|---------------------------|---------------------|
| Cable length              | 1000 cm             |
| Length tolerance          | $\pm 15$ cm         |
| Stripping length          | 100 mm              |
| Shielded                  | No                  |
| Conductor structure       | 84 $\times$ 0.15 mm |
| AWG                       | 16                  |
| External sheath: Material | PUR                 |
| External sheath: Color    | Black               |
| Cable diameter            | 8.7 mm $\pm$ 5%     |
| Wire cross section        | 1.5 mm <sup>2</sup> |
| Cable: Halogen free       | Yes                 |

### Cable

|                                   |                 |
|-----------------------------------|-----------------|
| Cable: Temperature range (mobile) | - 20 ...+ 80 °C |
|-----------------------------------|-----------------|

### Cable

|                                    |                                   |
|------------------------------------|-----------------------------------|
| Cable: Temperature range (fixed)   | - 50 ...+ 80 °C                   |
| Operating voltage (only UL listed) | 30 V AC/DC                        |
| Shielded                           | No                                |
| Bending radius (fixed)             | 65.25 mm                          |
| Number of wires                    | 5                                 |
| Number and diameter of wires       | 5x1.5                             |
| Length tolerance                   | $\pm 15$ cm                       |
| Cable length                       | 1000 cm                           |
| Acceleration (C-track)             | max. 5 m/s <sup>2</sup>           |
| AWG                                | 16                                |
| Bending radius (fixed)             | min. 7.5 $\times$ outer diameter  |
| Torsion speed                      | max. 35 cycles/min                |
| Bending radius (mobile)            | min. 10 $\times$ outer diameter   |
| Cable type                         | 3                                 |
| Cable weight                       | approx. 129.8 g/m                 |
| Conductor structure                | 84 $\times$ 0.15 mm               |
| Cable diameter                     | 8.7 mm $\pm$ 5%                   |
| Conductor: Material                | Copper, bare                      |
| External sheath: Material          | PUR                               |
| Insulation: Material               | PP                                |
| No. of bending cycles (C-track)    | approx. 5000000 Cycles            |
| Nominal voltage                    | 1000 V AC                         |
| No. of torsion cycles              | approx. 2000000 Cycles            |
| Paired stranding                   | No                                |
| Single wire diameter               | 0.15 mm                           |
| Cable: Test voltage                | 10 kV                             |
| Torsion stress in °                | $\pm 180^\circ/\text{m}$          |
| Total stranding                    | 5 wires strand around core-filler |
| Travel speed (C-track)             | max. 3.3 m/s                      |
| Traversing path (horizontal)       | max. 5 m                          |
| Wire cross section                 | 1.5 mm <sup>2</sup>               |
| Wire processing                    | No                                |
| Wire diameter incl. isolation      | 2.3 mm $\pm$ 5%                   |
| External sheath: Color             | Black                             |

### Electrical data

|                   |              |
|-------------------|--------------|
| Operating voltage | max. 63 V DC |
|-------------------|--------------|

## Technical data

### Electrical data

|                                    |              |
|------------------------------------|--------------|
| Operating voltage (only UL listed) | 30 V AC/DC   |
| Nominal voltage                    | 1000 V AC    |
| Contact resistance                 | max. 30 mOhm |
| Operating current per contact      | max. 12 A    |

### Mechanical data

|                                 |                           |
|---------------------------------|---------------------------|
| Head A: Degree of protection    | IP65, IP67                |
| Bending radius (mobile)         | min. 10 × outer diameter  |
| Bending radius (fixed)          | min. 7.5 × outer diameter |
| No. of bending cycles (C-track) | approx. 5000000 Cycles    |
| Torsion speed                   | max. 35 cycles/min        |
| Torsion stress in °             | ± 180 °/m                 |
| No. of torsion cycles           | approx. 2000000 Cycles    |
| Acceleration (C-track)          | max. 5 m/s <sup>2</sup>   |
| Travel speed (C-track)          | max. 3.3 m/s              |

### Environmental conditions

|                            |                 |
|----------------------------|-----------------|
| Temperature range (mobile) | - 20 ...+ 80 °C |
|----------------------------|-----------------|

### Environmental conditions

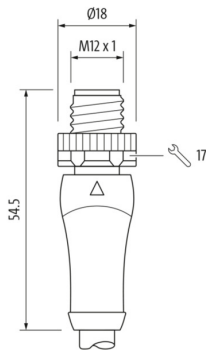
|                                   |                                                           |
|-----------------------------------|-----------------------------------------------------------|
| Temperature range (fixed)         | - 25 ...+ 80 °C                                           |
| Cable: Temperature range (fixed)  | - 50 ...+ 80 °C                                           |
| Dragchain capable                 | Yes                                                       |
| Head A: Chemical resistance       | No                                                        |
| Head A: Flame resistance          | V-2 (UL 94)                                               |
| Head A: Acid and alkali resistant | No                                                        |
| Head A: Pollution degree          | 3                                                         |
| Cable: Chemical resistance        | Good (DIN EN 60811-404)                                   |
| Cable: Flame resistance           | Conform UL 1581 VW-1, CSA FT1, IEC 60332-1, IEC 60332-2-2 |
| Cable: Oil resistance             | Good (DIN EN 60811-404)                                   |
| Cable: Silicone-free              | Yes                                                       |
| Cable: UV resistance              | Yes                                                       |

### Commercial data

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

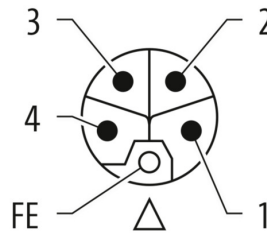
## Side A

### Technical drawing



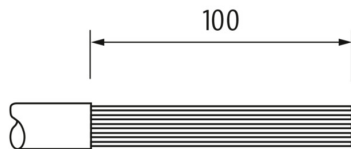
## Side A

### Coding

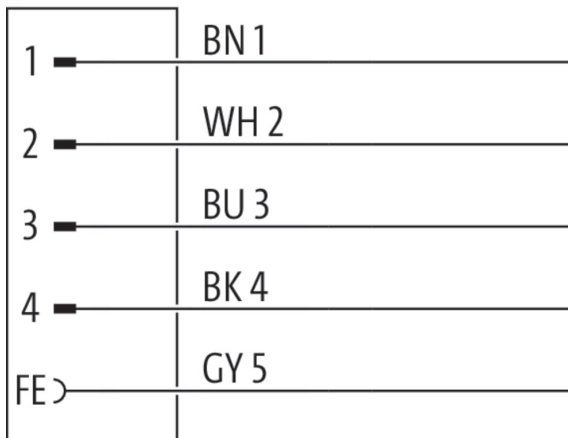


**Side B**

**Technical drawing**



**Connection diagram**



**Dimension drawing**

