

**Overview**

- M12, male, A-coded, 4-poles; PUR, 1500 cm; M8, female, A-coded, 4-poles
- Dragchain capable; suitable for robotics  $\pm 180^\circ/\text{m}$
- Head A: IP65, IP66K, IP67; Head B: IP65, IP66K, IP67
- Cable: good resistance against chemicals, flames, oils
- Halogen free



**Technical data**

| Side A                          |                                       | Cable                              |                          |
|---------------------------------|---------------------------------------|------------------------------------|--------------------------|
| Head A: Connection              | M12                                   | Cable: Temperature range (mobile)  | - 25 ...+ 80 °C          |
| Head A: Angle cable outlet      | 0°                                    | Cable: Temperature range (fixed)   | - 40 ...+ 80 °C          |
| Head A: Gender                  | Male                                  | Operating voltage (only UL listed) | 30 V AC/DC               |
| Head A: Coding                  | A                                     | Shielded                           | No                       |
| Head A: No. of poles            | 4                                     | Bending radius (fixed)             | 22.5 mm                  |
| Head A: LED                     | No                                    | Number of wires                    | 4                        |
| Head A: Width across flats      | AF13                                  | Number and diameter of wires       | 4x0.25                   |
| Head A: Tightening torque       | 0.6 Nm                                | Length tolerance                   | $\pm 22.5$ cm            |
| Head A: Knurled nut material    | Zinc-pressure die casting, surface Ni | Cable length                       | 1500 cm                  |
| Head A: Body color              | Black                                 | Acceleration (C-track)             | max. 10 m/s <sup>2</sup> |
| Labeling sleeve side A          | Yes                                   | AWG                                | 24                       |
| Side B                          |                                       | Bending radius (fixed)             | min. 5 × outer diameter  |
| Head B: Connection              | M8                                    | Torsion speed                      | max. 35 cycles/min       |
| Head B: Angle cable outlet      | 0°                                    | Bending radius (mobile)            | min. 10 × outer diameter |
| Head B: Gender                  | Female                                | Cable type                         | 3                        |
| Head B: Coding                  | A                                     | Cable weight                       | approx. 33 g/m           |
| Head B: No. of poles            | 4                                     | Conductor structure                | 32 × 0.1 mm              |
| Head B: LED                     | No                                    | Cable diameter                     | 4.5 mm $\pm$ 5%          |
| Head B: Width across flats      | AF9                                   | Conductor: Material                | Copper, bare             |
| Head B: Tightening torque       | 0.4 Nm                                | External sheath: Material          | PUR                      |
| Head B: Knurled nut material    | Zinc-pressure die casting, surface Ni | Insulation: Material               | PP                       |
| Head B: Body color              | Black                                 | No. of bending cycles (C-track)    | approx. 10000000 Cycles  |
| Head B: Gasket material         | FKM                                   | Nominal voltage                    | 300 V                    |
| Labeling sleeve side B          | Yes                                   | No. of torsion cycles              | approx. 2000000 Cycles   |
| Cables                          |                                       | Paired stranding                   | No                       |
| Cable length                    | 1500 cm                               | Single wire diameter               | 0.1 mm                   |
| Length tolerance                | $\pm 22.5$ cm                         | Cable: Test voltage                | 2.5 kV                   |
| Shielded                        | No                                    | Torsion stress in °                | $\pm 180^\circ/\text{m}$ |
| Conductor structure             | 32 × 0.1 mm                           | Total stranding                    | 4 wires strand           |
| AWG                             | 24                                    | Travel speed (C-track)             | max. 3 m/s               |
| External sheath: Material       | PUR                                   | Traversing path (horizontal)       | max. 10 m                |
| External sheath: Color          | Black                                 | Wire cross section                 | 0.25 mm <sup>2</sup>     |
| Cable diameter                  | 4.5 mm $\pm$ 5%                       | Wire processing                    | No                       |
| Wire cross section              | 0.25 mm <sup>2</sup>                  | Wire diameter incl. isolation      | 1.25 mm $\pm$ 5%         |
| Cable                           |                                       |                                    |                          |
| External sheath: Shore hardness | 90 $\pm$ 5 A                          |                                    |                          |

The product features and technical data specified do not express or imply any warranty. Technical modifications subject to change.

**Technical data**

**Cable**

External sheath: Color      Black

**Electrical data**

Operating voltage            max. 50 V AC / 60 V DC

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

Nominal voltage            300 V

Contact resistance            max. 30 mOhm

Operating current per contact            max. 4 A

**Mechanical data**

Head A: Degree of protection      IP65, IP66K, IP67

Head B: Degree of protection      IP65, IP66K, IP67

Bending radius (mobile)            min. 10 × outer diameter

Bending radius (fixed)            min. 5 × outer diameter

No. of bending cycles (C-track)            approx. 10000000 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 ...+ 80 °C

Temperature range (fixed)            - 25 ...+ 80 °C

**Environmental conditions**

Cable: Temperature range (fixed)      - 40 ...+ 80 °C

Dragchain capable                    Yes

Head A: Chemical resistance            No

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            No

Head A: Pollution degree            3

Head B: Chemical resistance            No

Head B: Flame resistance            HB (UL 94)

Head B: Oil resistance            ASTM 1 oil, mineral oils, limited to hydraulic oils

Head B: Acid and alkali resistant            No

Head B: Pollution degree            3

Cable: Chemical resistance            Good (DIN EN 60811-404)

Cable: Flame resistance            Conform UL 1581 §1090 (H), CSA FT2, IEC 60332-2-2

Cable: Oil resistance            Good (DIN EN 60811-404)

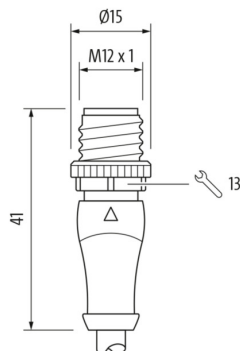
Cable: Silicone-free                    Yes

**Commercial data**

Eclass                                    27060311

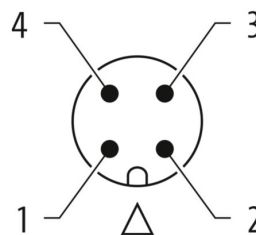
**Side A**

**Technical drawing**



**Side A**

**Coding**



**Side B**

**Technical drawing**



**Dimension drawing**



**Coding**



**Connection diagram**

