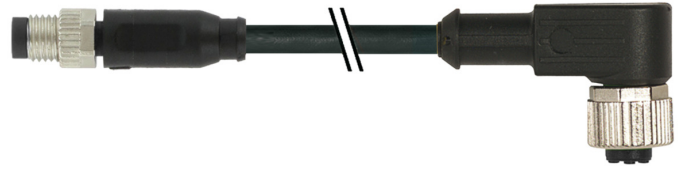


### Overview

- M8, male, A-coded, 4-poles; PUR, 1500 cm; M12, female, 90°, A-coded, 4-poles
- Dragchain capable, suitable for robotics  $\pm 180^\circ/\text{m}$
- Head A: IP65, IP66K, IP67
- Cable: good resistance against chemicals, flames and oils
- Halogen free



### Technical data

#### Side A

|                              |                   |
|------------------------------|-------------------|
| Head A: Connection           | M8                |
| 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   | AF9               |
| Head A: Knurled nut material | Brass, surface Ni |
| Head A: Body color           | Black             |
| Labeling sleeve side A       | Yes               |

#### Side B

|                              |                                       |
|------------------------------|---------------------------------------|
| Head B: Connection           | M12                                   |
| Head B: Angle cable outlet   | 90°                                   |
| Head B: Gender               | Female                                |
| Head B: Coding               | A                                     |
| Head B: No. of poles         | 4                                     |
| Head B: LED                  | No                                    |
| Head B: Width across flats   | AF13                                  |
| Head B: Knurled nut material | Zinc-pressure die casting, surface Ni |
| Head B: Body color           | Black                                 |
| Head B: Gasket material      | FKM                                   |
| Labeling sleeve side B       | Yes                                   |

#### Cables

|                           |                      |
|---------------------------|----------------------|
| Cable length              | 1500 cm              |
| Shielded                  | No                   |
| AWG                       | 24                   |
| External sheath: Material | PUR                  |
| External sheath: Color    | Black                |
| Cable diameter            | 4.5 mm $\pm$ 5%      |
| Wire cross section        | 0.25 mm <sup>2</sup> |

#### Cable

|                                   |                  |
|-----------------------------------|------------------|
| External sheath: Shore hardness   | 90 $\pm$ 5 A     |
| Cable: Temperature range (mobile) | - 25 ... + 80 °C |
| Cable: Temperature range (fixed)  | - 40 ... + 80 °C |

#### Cable

|                                    |                                 |
|------------------------------------|---------------------------------|
| Operating voltage (only UL listed) | 30 V AC/DC                      |
| Shielded                           | No                              |
| Bending radius (fixed)             | 22.5 mm                         |
| Number of wires                    | 4                               |
| Number and diameter of wires       | 4x0,25                          |
| Cable length                       | 1500 cm                         |
| Acceleration (C-track)             | max. 10 m/s <sup>2</sup>        |
| AWG                                | 24                              |
| Bending radius (fixed)             | min. 5 $\times$ outer diameter  |
| Torsion speed                      | max. 35 cycles/min              |
| Bending radius (mobile)            | min. 10 $\times$ outer diameter |
| Cable type                         | 3                               |
| Cable weight                       | approx. 33 g/m                  |
| Wire 1: Color                      | BN                              |
| Wire 2: Color                      | BK                              |
| Wire 3: Color                      | BU                              |
| Wire 4: Color                      | WH                              |
| Cable diameter                     | 4.5 mm $\pm$ 5%                 |
| Conductor: Material                | Copper, bare                    |
| External sheath: Material          | PUR                             |
| Insulation: Material               | PP                              |
| No. of bending cycles (C-track)    | approx. 10000000 Cycles         |
| Nominal voltage                    | 300 V                           |
| No. of torsion cycles              | approx. 2000000 Cycles          |
| Paired stranding                   | No                              |
| Single wire diameter               | 0.1 mm                          |
| Cable: Test voltage                | 2.5 kV                          |
| Torsion stress in °                | $\pm 180^\circ/\text{m}$        |
| Total stranding                    | 4 wires strand                  |
| Travel speed (C-track)             | max. 3 m/s                      |
| Wire cross section                 | 0.25 mm <sup>2</sup>            |
| Wire processing                    | No                              |
| Wire diameter incl. isolation      | 1.25 mm $\pm$ 5%                |
| External sheath: Color             | Black                           |

**Technical data**
**Electrical data**

|                                    |              |
|------------------------------------|--------------|
| Operating voltage (only UL listed) | 30 V AC/DC   |
| Nominal voltage                    | 300 V        |
| Contact resistance                 | max. 30 mOhm |

**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 |
| Cable: Temperature range (fixed) | - 40 ...+ 80 °C |
| Dragchain capable                | Yes             |
| Head A: Chemical resistance      | No              |

**Environmental conditions**

|                                   |                                                                                                                                                                              |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Head A: Flame resistance          | HB (UL 94)                                                                                                                                                                   |
| Head A: Oil resistance            | Good resistance to ASTM 1 oil and mineral oils. Limited resistance to hydraulic oils. If other oils are used, the resistance must be checked in relation to the application. |
| 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            | Good resistance to ASTM 1 oil and mineral oils. Limited resistance to hydraulic oils. If other oils are used, the resistance must be checked in relation to the application. |
| 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)                                                                                                                                                    |
| Cable: Oil resistance             | Good (DIN EN 60811-404)                                                                                                                                                      |
| Cable: Silicone-free              | Yes                                                                                                                                                                          |

**Commercial data**

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