

Overview

- M12, male, A-coded, 4-poles; PUR, 2000 cm; M12, 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


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 | AF13 |
| 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 |

Side B

| | |
|------------------------------|---------------------------------------|
| Head B: Connection | M12 |
| Head B: Angle cable outlet | 0° |
| Head B: Gender | Female |
| Head B: Coding | A |
| Head B: No. of poles | 4 |
| Head B: LED | Yes |
| Head B: LED switching status | PNP |
| Head B: Width across flats | AF13 |
| Head B: Tightening torque | 0.6 Nm |
| Head B: Knurled nut material | Zinc-pressure die casting, surface Ni |
| Head B: Body color | Transparent |
| Head B: Gasket material | FKM |
| Labeling sleeve side B | Yes |

Cables

| | |
|---------------------------|----------------------|
| Cable length | 2000 cm |
| Length tolerance | ± 30 cm |
| Shielded | No |
| Conductor structure | 42 \times 0.1 mm |
| AWG | 22 |
| External sheath: Material | PUR |
| External sheath: Color | Black |
| Cable diameter | 4.5 mm \pm 5% |
| Wire cross section | 0.34 mm ² |

Cable

| | |
|-----------------------------------|---------------------------------|
| External sheath: Shore hardness | 90 \pm 5 A |
| Cable: Temperature range (mobile) | - 25 ...+ 80 °C |
| Cable: Temperature range (fixed) | - 40 ...+ 80 °C |
| Shielded | No |
| Bending radius (fixed) | 22.5 mm |
| Number of wires | 4 |
| Number and diameter of wires | 4x0.34 |
| Length tolerance | ± 30 cm |
| Cable length | 2000 cm |
| Acceleration (C-track) | max. 10 m/s ² |
| 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 type | 3 |
| Cable weight | approx. 36.3 g/m |
| Conductor structure | 42 \times 0.1 mm |
| 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. 1000000 Cycles |
| Nominal voltage | 300 V |
| No. of torsion cycles | approx. 200000 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 |
| Traversing path (horizontal) | max. 10 m |
| Wire cross section | 0.34 mm ² |
| Wire processing | No |
| Wire diameter incl. isolation | 1.25 mm \pm 5% |
| External sheath: Color | Black |

Technical data

Electrical data

| | |
|-------------------------------|----------------|
| Operating voltage | 24 V DC ± 25 % |
| Nominal voltage | 300 V |
| Contact resistance | max. 30 mOhm |
| Operating current per contact | max. 4 A |

Mechanical data

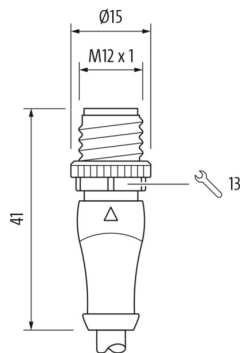
| | |
|---------------------------------|--------------------------|
| Head A: Degree of protection | IP65, IP66K, IP67 |
| Head B: Degree of protection | IP65, IP66K, IP67 |
| Bending radius (mobile) | min. 10 × outer diameter |
| Bending radius (fixed) | min. 5 × outer diameter |
| No. of bending cycles (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 ² |
| 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 |

Side A

Technical drawing



Environmental conditions

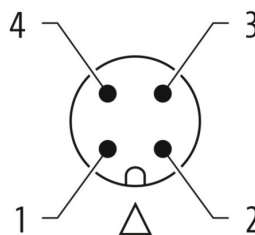
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|-----------------------------------|---|
| Dragchain capable | Yes |
| Head A: Chemical resistance | No |
| Head A: Flame resistance | HB (UL 94) |
| Head A: Oil resistance | ASTM 1 oil, mineral oils, limited to hydraulic oils |
| Head A: Acid and 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 |
|--------|----------|

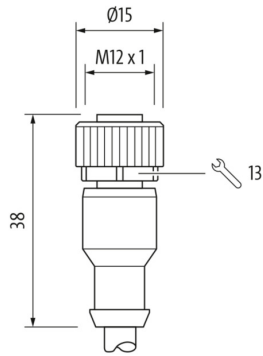
Side A

Coding



Side B

Technical drawing



Dimension drawing



Coding



Connection diagram

