

Overview

- M12, Female, A-coded, 12-poles; PUR, 300 cm, free cable end
- Dragchain capable; suitable for robotics $\pm 180^\circ/\text{m}$
- Head A: IP65, IP66K, 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 | Female |
| Head A: Coding | A |
| Head A: No. of poles | 12 |
| 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 |
| Head A: Gasket material | FKM |
| Labeling sleeve side A | Yes |

Side B

| | |
|------------------------|------------------|
| Head B: Connection | Open-ended wires |
| Labeling sleeve side B | Yes |

Cables

| | |
|---------------------------|----------------------|
| Cable length | 300 cm |
| Length tolerance | + 10 cm |
| Stripping length | 80 mm |
| Shielded | No |
| Conductor structure | 18 × 0.1 mm |
| AWG | 26 |
| External sheath: Material | PUR |
| External sheath: Color | Black |
| Cable diameter | 6 mm ± 5% |
| Wire cross section | 0.14 mm ² |

Cable

| | |
|-----------------------------------|------------------|
| External sheath: Shore hardness | 92 ± 5 A |
| Cable: Temperature range (mobile) | - 25 ... + 85 °C |
| Cable: Temperature range (fixed) | - 40 ... + 85 °C |
| Shielded | No |
| Bending radius (fixed) | 45 mm |
| Number of wires | 12 |
| Number and diameter of wires | 12x0.14 |
| Length tolerance | + 10 cm |

Cable

| | |
|---------------------------------|---|
| Cable length | 300 cm |
| Acceleration (C-track) | max. 5 m/s ² |
| AWG | 26 |
| Bending radius (fixed) | min. 7.5 × outer diameter |
| Torsion speed | max. 35 cycles/min |
| Bending radius (mobile) | min. 10 × outer diameter |
| Cable weight | approx. 45.1 g/m |
| Conductor structure | 18 × 0.1 mm |
| Cable diameter | 6 mm ± 5% |
| Conductor: Material | Copper, bare |
| External sheath: Material | PUR |
| Insulation: Material | PP |
| No. of bending cycles (C-track) | approx. 2000000 Cycles |
| Nominal voltage | 300 V |
| No. of torsion cycles | approx. 2000000 Cycles |
| Paired stranding | No |
| Single wire diameter | 0.1 mm |
| Cable: Test voltage | 1.5 kV 0 |
| Torsion stress in ° | ± 180 °/m |
| Total stranding | 3 wires strand, above that 9 wires strand |
| Travel speed (C-track) | max. 3.3 m/s |
| Traversing path (horizontal) | max. 5 m |
| Wire cross section | 0.14 mm ² |
| Wire processing | No |
| Wire diameter incl. isolation | 1 mm ± 5% |
| External sheath: Color | Black |

Electrical data

| | |
|-------------------------------|-------------------|
| Operating voltage | max. 30 V AC/DC 0 |
| Nominal voltage | 300 V |
| Contact resistance | max. 30 mOhm |
| Operating current per contact | max. 1.5 A |

Mechanical data

| | |
|---------------------------------|---------------------------|
| Head A: Degree of protection | IP65, IP66K, IP67 |
| Bending radius (mobile) | min. 10 × outer diameter |
| Bending radius (fixed) | min. 7.5 × outer diameter |
| No. of bending cycles (C-track) | approx. 2000000 Cycles |

Technical data

Mechanical data

| | |
|------------------------|-------------------------|
| 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 ² |
| Travel speed (C-track) | max. 3.3 m/s |

Environmental conditions

| | |
|----------------------------------|-----------------|
| Temperature range (mobile) | - 25 ...+ 85 °C |
| Temperature range (fixed) | - 25 ...+ 85 °C |
| Cable: Temperature range (fixed) | - 40 ...+ 85 °C |
| Dragchain capable | Yes |
| Head A: Chemical resistance | No |

Environmental conditions

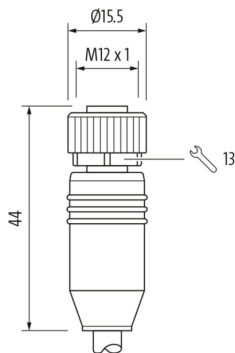
| | |
|-----------------------------------|---|
| Head A: Flame resistance | HB (UL 94) |
| Head A: Oil resistance | ASTM 1 oil, mineral oils, limited to hydraulic oils |
| Head A: Acid and alkali resistant | No |
| Head A: Pollution degree | 3 |
| Cable: Chemical resistance | Good (VDE 0472 part 803) |
| Cable: Flame resistance | Conform VDE 0472 part 804 test type B, IEC 60332-2 |
| Cable: Oil resistance | Good (VDE 0472 part 803) |
| Cable: Silicone-free | Yes |

Commercial data

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

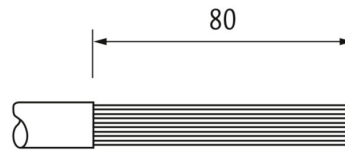
Side A

Technical drawing

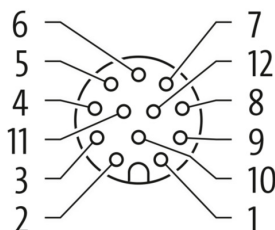


Side B

Technical drawing



Coding



Connection diagram

| | |
|------|-------|
| 1) | BN |
| 2) | BU |
| 3) | WH |
| 4) | GN |
| 5) | PK |
| 6) | YE |
| 7) | BK |
| 8) | GY |
| 9) | RD |
| 10) | VT |
| 11) | GY PK |
| 12) | RD BU |