

Overview

- M12, male, D-coded; 4-poles; TPE-S, 200 cm, shielded, free cable end
- Dragchain capable; suitable for robotics $\pm 180^\circ/\text{m}$; suitable for food & beverage
- Head A: IP65, IP68, IP69K
- Halogen free



Technical data

Side A

| | |
|------------------------------|-----------------------|
| Head A: Connection | M12 |
| Head A: Angle cable outlet | 0° |
| Head A: Gender | Male |
| Head A: Coding | D |
| Head A: No. of poles | 4 |
| Head A: LED | No |
| Head A: Width across flats | AF14 |
| Head A: Tightening torque | 0.6 Nm |
| Head A: Knurled nut material | Stainless steel (V4A) |
| Head A: Body color | Blue |
| Labeling sleeve side A | No |

Side B

| | |
|------------------------|------------------|
| Head B: Connection | Open-ended wires |
| Labeling sleeve side B | No |

Cables

| | |
|---------------------------|----------------------|
| Cable length | 200 cm |
| Length tolerance | + 10 cm |
| Stripping length | 20 mm |
| Shielded | Yes |
| Conductor structure | 7 × 0.25 mm |
| AWG | 22 |
| External sheath: Material | TPE-S |
| External sheath: Color | Blue |
| Cable diameter | 6.5 mm ± 5% |
| Wire cross section | 0.34 mm ² |

Cable

| | |
|-----------------------------------|------------------|
| Cable: Temperature range (mobile) | - 20 ... + 80 °C |
| Cable: Temperature range (fixed) | - 40 ... + 80 °C |
| Shielded | Yes |
| Shielding: Covering | approx. 85 % |
| Bending radius (fixed) | 32.5 mm |
| Number of wires | 4 |
| Number and diameter of wires | 4x0.34 |
| Length tolerance | + 10 cm |
| Cable length | 200 cm |

Cable

| | |
|---------------------------------|-----------------------------------|
| Acceleration (C-track) | max. 2 m/s ² |
| AWG | 22 |
| Bending radius (fixed) | min. 5 × outer diameter |
| Torsion speed | max. 35 cycles/min |
| Bending radius (mobile) | min. 15 × outer diameter |
| Cable weight | approx. 61.6 g/m |
| Conductor structure | 7 × 0.25 mm |
| Cable diameter | 6.5 mm ± 5% |
| Conductor: Material | Copper, bare |
| External sheath: Material | TPE-S |
| Insulation: Material | PP |
| Shielding: Material | Copper, tinned |
| No. of bending cycles (C-track) | approx. 2000000 Cycles |
| Nominal voltage | 300 V AC |
| No. of torsion cycles | approx. 2000000 Cycles |
| Paired stranding | No |
| Single wire diameter | 0.25 mm |
| Cable: Test voltage | 3 kV AC |
| Torsion stress in ° | ± 180 °/m |
| Total stranding | 4 wires strand around core-filler |
| Travel speed (C-track) | max. 3.3 m/s |
| Traversing path (horizontal) | max. 5 m |
| Wire cross section | 0.34 mm ² |
| Wire processing | No |
| Wire diameter incl. isolation | 1.55 mm ± 5% |
| External sheath: Color | Blue |
| Protocols | CAT5e |

Electrical data

| | |
|-------------------------------|--------------|
| Operating voltage | max. 60 V DC |
| Nominal voltage | 300 V AC |
| Contact resistance | max. 30 mOhm |
| Operating current per contact | max. 4 A |

Mechanical data

| | |
|------------------------------|--------------------------|
| Head A: Degree of protection | IP65, IP68, IP69K |
| Bending radius (mobile) | min. 15 × outer diameter |
| Bending radius (fixed) | min. 5 × outer diameter |

Technical data

Mechanical data

| | |
|---------------------------------|-------------------------|
| No. of bending cycles (C-track) | approx. 2000000 Cycles |
| Torsion speed | max. 35 cycles/min |
| Torsion stress in ° | ± 180 °/m |
| No. of torsion cycles | approx. 2000000 Cycles |
| Acceleration (C-track) | max. 2 m/s ² |
| Travel speed (C-track) | max. 3.3 m/s |

Environmental conditions

| | |
|----------------------------------|---|
| Temperature range (mobile) | - 20 ...+ 80 °C |
| Temperature range (fixed) | - 40 ...+ 80 °C |
| Cable: Temperature range (fixed) | - 40 ...+ 80 °C |
| Dragchain capable | Yes |
| Head A: Chemical resistance | Chemical resistance tested according to ECOLAB. If other media are used, the material resistance must be tested according to the application. |

Environmental conditions

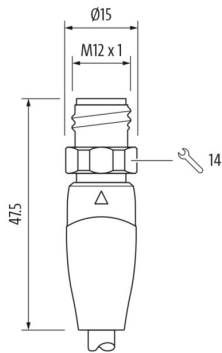
| | |
|-----------------------------------|--|
| Head A: Flame resistance | HB (UL 94) |
| Head A: Oil resistance | ASTM 1 oil, mineral oils, limited to hydraulic oils |
| Head A: Acid and alkali resistant | ECOLAB tested |
| Head A: Pollution degree | 3 |
| Cable: Acid and alkali resistant | Good (FDA 21 178.3620, 178.3297, 177.1520, EU 10/2011) |
| Cable: Silicone-free | Yes |

Commercial data

| | |
|--------|----------|
| Eclass | 27061801 |
|--------|----------|

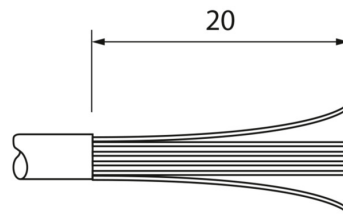
Side A

Technical drawing

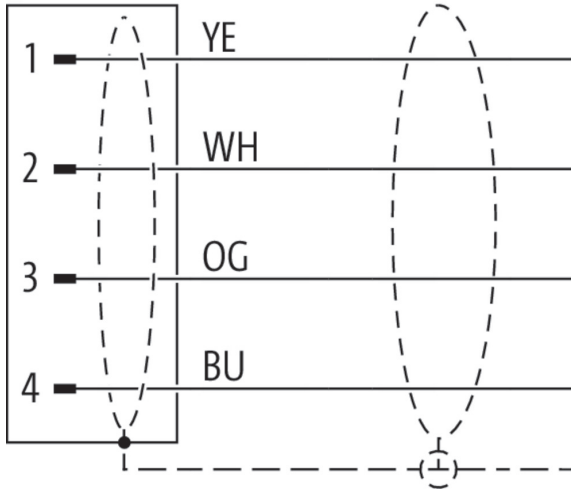


Side B

Technical drawing



Connection diagram



Dimension drawing

