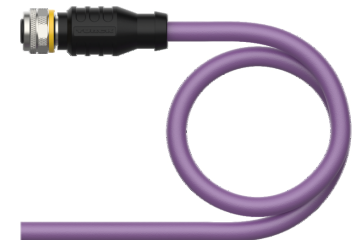
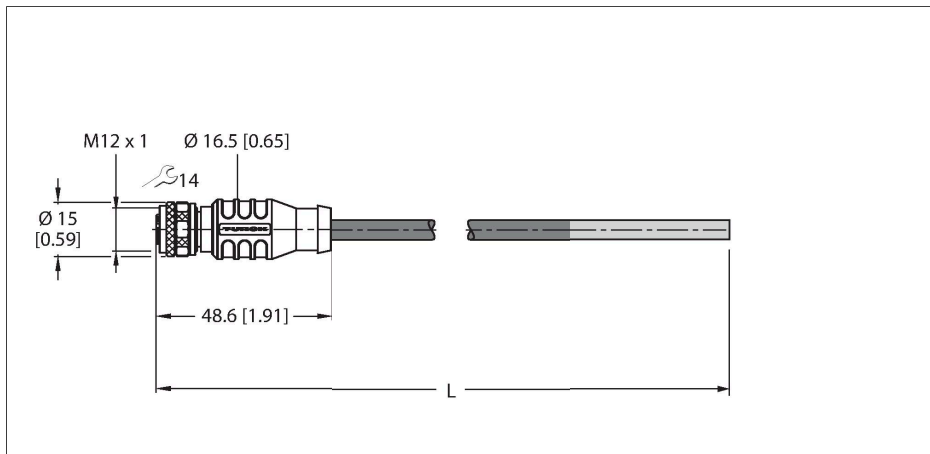


RKSW451-1M

PROFIBUS Cable – PUR Cable Jacket



Technical data

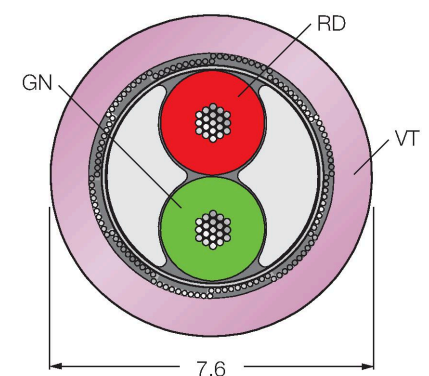
| | |
|--|--|
| Type | RKSW451-1M |
| ID | 6915609 |
| Connector A | Female, M12 × 1, Straight, B-coded |
| Number of Pins | 5 |
| Contacts | Metal, CuZn, Gold-plated |
| Contact carriers | Plastic, TPU, Black |
| Connector body | Plastic, TPU, Black |
| Coupling nut/screw | Brass, CuZn, Nickel-plated |
| Seal | Plastic, FPM/FKM |
| Tightening torque (range) | 0.8 ... 1 Nm (observe max. torque of mating connector!) |
| Mechanical lifespan | > 100 Mating cycles |
| Pollution degree | 3 |
| Protection class | IP67, IP69K, Only in screwed condition |
| Cable | |
| Network protocol | PROFIBUS-DP, 451 |
| Cable diameter | Ø 8.2 mm +0.30 |
| Cable length | 1 m |
| Cable jacket | PUR, Violet |
| Shielding | Aluminum foil, tinned copper wire |
| Core insulation | PE |
| Core cross-section | 2 x 0.34 mm ² |
| Arrangement of strands | 19 x 0.15 mm |
| Core colors | GN, RD |
| Electrical properties at +20 °C | |
| Rated voltage | 60 V |
| Test voltage | 2000 V |

Features



- PROFIBUS cable: 2 × 0.34 mm²
- Jacket material: PUR, color: purple
- Jacket diameter: 8.2 mm
- Suitable for drag chain use
- Resistant to chemicals, UV radiation and oils
- Flame retardant acc. to DIN EN 60332-2-2, VDE 0482-332-2-2, IEC 60332-2-2, CSA FT-2
- Halogen free acc. to DIN EN 50267-2-1, VDE 0482-267-2-1, IEC 60754-1
- Free from silicone, PVC and LABS
- Resistant to microbes and hydrolysis
- RoHS compliant
- UL approved
- End open
- Cable length: 1.0 m

Cable Cross-Section



Contact assignment

Technical data

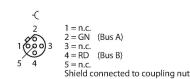
| | |
|----------------------|---------------------------|
| Current | 4 A |
| DC resistance (loop) | 110 Ω/km |
| Nom. impedance | 160 Ω (16 MHz) |
| Nom. capacitance | 28 pF/m |
| Nom. Inductance | 0.78 mH/km |
| Damping | < 43.60 dB/km at 16.0 MHz |

Mechanical and chemical properties

| | |
|---|------------------------------|
| Max. tensile strength (static) | ≤ 50 N/mm ² |
| Max. tensile strength (dynamic) | ≤ 20 N/mm ² |
| Bending radius (stationary installation) | ≥ 5 x Ø |
| Bending radius (flexible use) | ≥ 10 x Ø |
| Bending cycles | ≥ 3 million |
| Admissible acceleration | max. 5 m/s ² |
| Admissible travel path, horizontal | 5 m (at 5 m/s ²) |
| Admissible travel path, vertical | 2 m (at 5 m/s ²) |
| Admissible traversing speed | 3.33 m/s |
| Ambient temperature range (stationary) | -50...+80 °C |
| Ambient temperature range (In motion) | -25...+80 °C |
| Ambient temperature during drag chain operation | -25...+60 °C |

Other Features

| | |
|------------------------------|-----|
| Qualified for drag chain use | yes |
| Halogen-free | yes |
| Silicone-free | yes |
| LABS free | yes |
| PVC-free | yes |
| Resistant to chemicals | yes |
| UV resistance | yes |
| Oil-resistant | yes |
| Flame-retardant | yes |
| Approvals | UL |



Circuit Diagram

