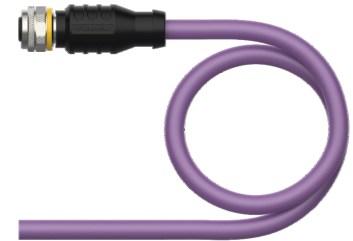
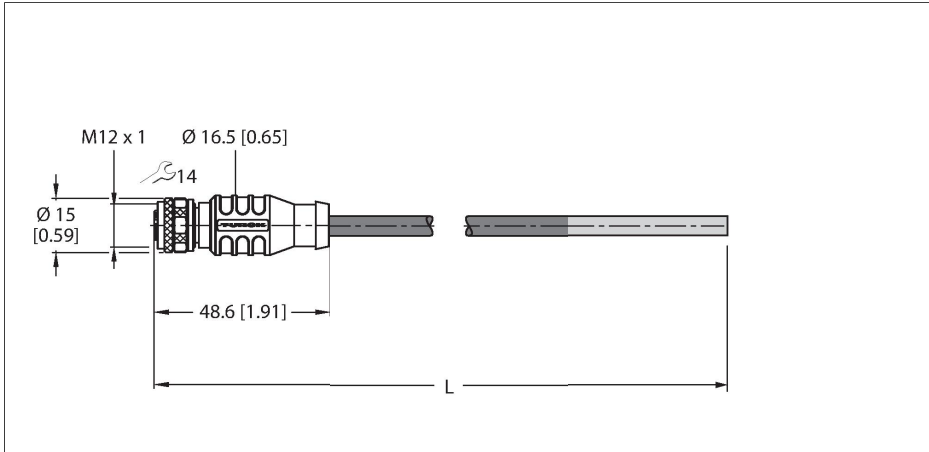


# RKSW451-10M

## PROFIBUS Cable – PUR Cable Jacket



### Technical data

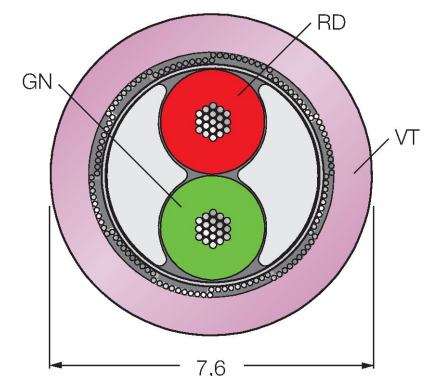
|                                 |                                                            |
|---------------------------------|------------------------------------------------------------|
| Type                            | RKSW451-10M                                                |
| ID                              | 6914115                                                    |
| 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<br>(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                    | 10 m                                                       |
| Cable jacket                    | PUR, Violet                                                |
| Shielding                       | Aluminum foil, tinned copper wire                          |
| Core insulation                 | PE                                                         |
| Core cross-section              | 2 x 0.34 mm <sup>2</sup>                                   |
| 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 mm<sup>2</sup>
- Jacket material: PUR, color: violet
- 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
- M12 female connector, straight, reverse-keyed
- Cable length: 10 m

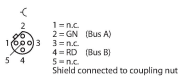
### Cable Cross-Section



### 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/mm²                |
| Max. tensile strength (dynamic)          | ≤ 20 N/mm²                |
| Bending radius (stationary installation) | ≥ 5 x Ø                   |
| Bending radius (flexible use)            | ≥ 10 x Ø                  |
| Bending cycles                           | ≥ 3 million               |
| Admissible acceleration                  | max. 5 m/s²               |
| Admissible travel path, horizontal       | 5 m (at 5 m/s²)           |
| Admissible travel path, vertical         | 2 m (at 5 m/s²)           |
| Admissible traversing speed              | 3.33 m/s                  |
| Ambient temperature (fixed)              | -50...+80 °C              |
| Ambient temperature (mobile)             | -25...+80 °C              |
| Ambient temperature (drag chain)         | -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

