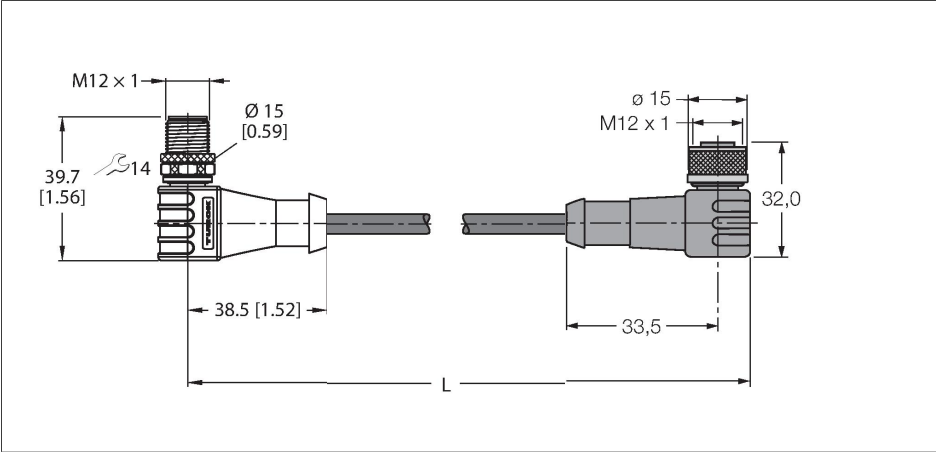


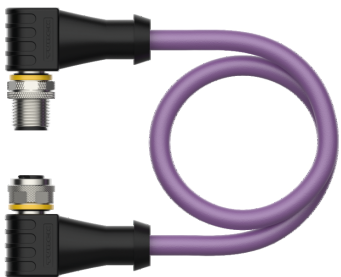
# WSSW-WKSW451-4M

## PROFIBUS Cable – PUR Cable Jacket



### Technical data

|                              |                                                            |
|------------------------------|------------------------------------------------------------|
| Type                         | WSSW-WKSW451-4M                                            |
| ID                           | 6914137                                                    |
| Connector A                  | Male, M12 × 1, Angled, 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                                 |
| 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, Only in screwed condition                            |
| Connector B                  | Female, M12 × 1, Angled, B-coded                           |
| Number of Pins               | 5                                                          |
| Contacts                     | Metal, CuZn, Gold-plated                                   |
| Contact carriers             | Plastic, TPU, Black                                        |
| Connector body               | Plastic, PUR, Black                                        |
| Coupling nut/retaining screw | Brass, CuZn, Nickel-plated                                 |
| Seal                         | Plastic, FPM/FKM                                           |
| Tightening torque            | 0.8 ... 1 Nm (observe max. torque of mating connector!)    |
| Mechanical life              | > 100 Mating cycles                                        |
| Pollution degree             | 3                                                          |
| Protection class             | IP67, Only when screwed together                           |
| Cable                        |                                                            |
| Network protocol             | PROFIBUS-DP, 451                                           |

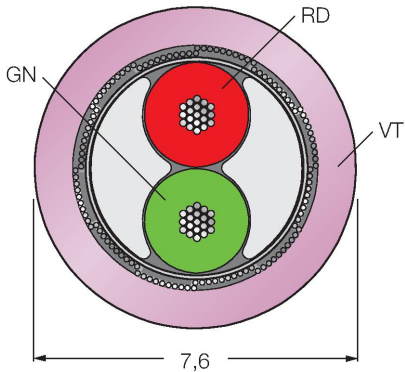


### Features



- 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
- M12 female, angled, reverse-keyed
- M12 male, angled, reverse-keyed
- Cable length: 4.0 m

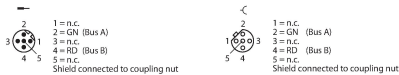
### Cable Cross-Section



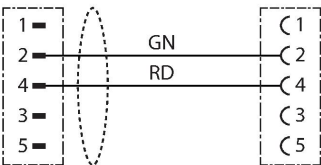
### Contact assignment

Technical data

|                                          |                                   |
|------------------------------------------|-----------------------------------|
| Cable diameter                           | Ø 8.2 mm +0.30                    |
| Cable length                             | 4 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                            |
| 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 <sup>2</sup>            |
| Max. tensile strength (dynamic)          | ≤ 20 N/mm <sup>2</sup>            |
| Bending radius (stationary installation) | ≥ 5 x Ø                           |
| Bending radius (flexible use)            | ≥ 10 x Ø                          |
| Bending cycles                           | ≥ 3 million                       |
| Admissible acceleration                  | max. 5 m/s <sup>2</sup>           |
| Admissible travel path, horizontal       | 5 m (at 5 m/s <sup>2</sup> )      |
| Admissible travel path, vertical         | 2 m (at 5 m/s <sup>2</sup> )      |
| 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                               |



Circuit Diagram



## Technical data

Approvals

UL

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