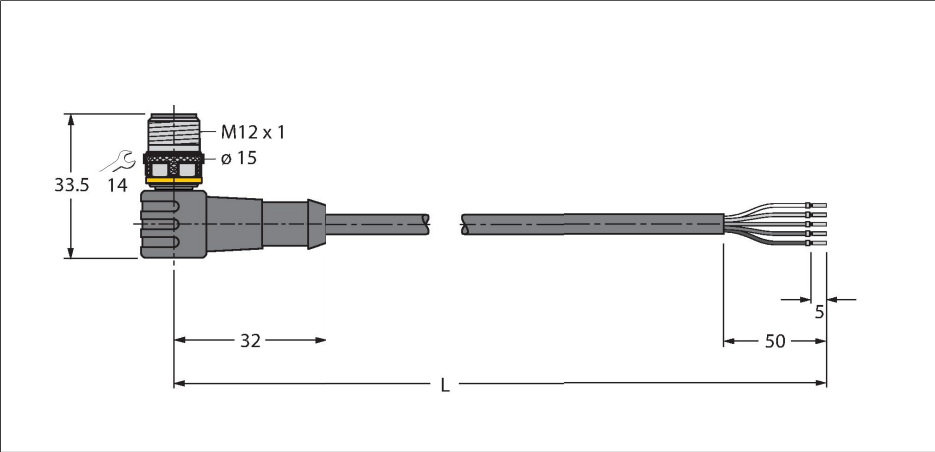


# WSC4.5T-2/TRL

## Actuator and Sensor Cable Suitable for Use with Robots – Connection Cable



### Technical data

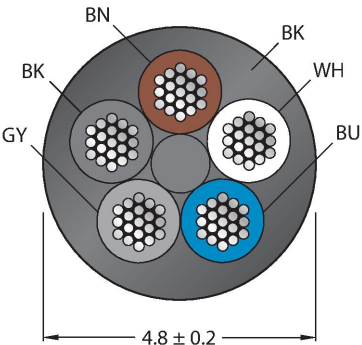
|                                          |                                        |
|------------------------------------------|----------------------------------------|
| Type                                     | WSC4.5T-2/TRL                          |
| ID                                       | 6543093                                |
| Connector A                              | Male, M12 × 1, Angled, A-coded         |
| Number of pins                           | 5                                      |
| Contacts                                 | Brass, CuZn, Gold-plated               |
| Contact carriers                         | Plastic, TPU, Black                    |
| Connector body                           | Plastic, TPU, Black                    |
| Coupling nut/screw                       | Brass, CuZn, Nickel-plated             |
| Mechanical lifespan                      | > 100 Mating cycles                    |
| Pollution degree                         | 3                                      |
| Protection class                         | IP67, IP69K, Only in screwed condition |
| Cable                                    |                                        |
| Cable diameter                           | Ø 4.8 mm ±0.20                         |
| Cable length                             | 2 m                                    |
| Cable jacket                             | PUR, Black                             |
| Core insulation                          | PP                                     |
| Core cross-section                       | 5 x 0.34 mm²                           |
| Arrangement of strands                   | 42 x 0.1 mm                            |
| Core colors                              | BN, WH, BU, BK, GY                     |
| Electrical properties at +20 °C          |                                        |
| Rated voltage                            | 60 V                                   |
| Test voltage                             | 2000 V                                 |
| Current                                  | 4 A                                    |
| Mechanical and chemical properties       |                                        |
| Bending radius (stationary installation) | ≥ 5 x Ø                                |
| Bending radius (flexible use)            | ≥ 10 x Ø                               |

### Features

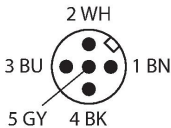


- Male M12, angled, 5-pin
- Jacket material: PUR
- Jacket color: black
- Suitable for drag chain use
- Torsion resistant ( $\pm 360^\circ/\text{m}$ )
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- Flame retardant
- Resistant to hydrolysis and microbes
- Protection class: IP67, IP69K
- Cable length: 2.0 m

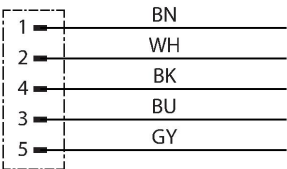
### Cable Cross-Section



### Contact assignment



### Circuit Diagram



Technical data

|                                    |                            |
|------------------------------------|----------------------------|
| Bending cycles                     | ≥ 10 million               |
| Admissible travel path, horizontal | 5 m (at 5 m/s²)            |
| Admissible travel path, vertical   | 2 m (at 5 m/s²)            |
| Torsional stress                   | ± 360 °/m                  |
| Torsion cycles                     | Max. 5 million             |
| Torsion speed                      | 20 Cycles/min              |
| Ambient temperature (fixed)        | -50...+80 °C               |
| Ambient temperature (mobile)       | -25...+80 °C               |
| Halogen-free                       | Acc. to IEC 60754-1-2      |
| LABS free                          | Acc. to PV3.10.7           |
| Oil-resistant                      | Acc. to EN 60811-2-1       |
| Flame-retardant                    | Acc. to IEC 60332-2-2, FT2 |
| Approvals                          | cULus<br>CE<br>UKCA        |

Accessories

TORQUE-WRENCH-SET-AS6936170

Torque wrench set; handles with adjustable torque 0.4-1.0 Nm, torque wrench for M8 (SW9), fork wrench for M12 (SW 14)

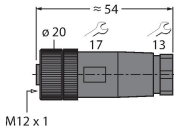
BLANK-LABEL-FOR-CORDSETS-TEL-TXL6936206

Label for TEL and TXL cables, length: 18 mm, height: 4 mm, material: polycarbonate (PC), color: white, halogen-free and flame-retardant



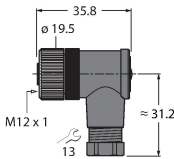
B8151-06904601

Field-wireable female connector, M12 × 1, straight, 5-pin, screw terminal connection, cable feedthrough 4.0 to 6.0 mm, core cross-section/terminal capacity 0.14 to 0.75 mm², plastic housing, plastic nut



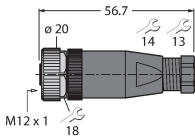
B8251-06904602

Field-wireable female connector, M12 × 1, angled, 5-pin, screw terminal connection, cable feedthrough 4.0 to 6.0 mm, core cross-section/terminal capacity 0.14 to 0.75 mm², plastic housing, plastic nut



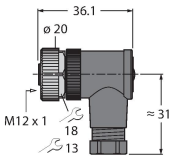
BM8151-06935888

Field-wireable female connector, M12 × 1, straight, 5-pin, screw terminal connection, cable feedthrough 4.0 to 6.0 mm, core cross-section/terminal capacity 0.25 to 0.75 mm², plastic housing, metal nut



BM8251-06935890

Field-wireable female connector, M12 × 1, angled, 5-pin, screw terminal connection, cable feedthrough 4.0 to 6.0 mm, core cross-section/terminal capacity 0.25 to 0.75 mm², plastic housing, metal nut



FW-ERKPM0526-SA-P-0408

100002534

Field-wireable female connector, M12 × 1, straight, 5-pin, push-in connection, cable feedthrough 4.0 to 8.0 mm, core cross-section/terminal capacity 0.14 to 0.75 mm², plastic housing, metal coupling nut



FW-ERKPM0516-SA-S-0408

100002285

Field-wireable female connector, M12 × 1, straight, 5-pin, screw terminal connection, cable feedthrough 4.0 to 8.0 mm, core cross-section/terminal capacity 0.25 to 1.5 mm², plastic housing, metal nut



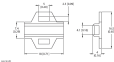
FW-EWKPM0516-SA-S-0408

100002287

Field-wireable female connector, M12 × 1, angled, 5-pin, screw terminal connection, cable feedthrough 4.0 to 8.0 mm, core cross-section/terminal capacity 0.25 to 1.5 mm², plastic housing, metal nut



Accessories

| Dimension drawing                                                                   | Type                  | ID        |                                                                                                                                                                            |
|-------------------------------------------------------------------------------------|-----------------------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | LABEL-HOLDER-FLEX-PVC | 100048170 | PVC label holder for identification of extension cables (TEL/TXL product series); for cable diameters: min. 5 mm; dimensions 4 × 18 mm; delivery unit: 50 pcs. per package |