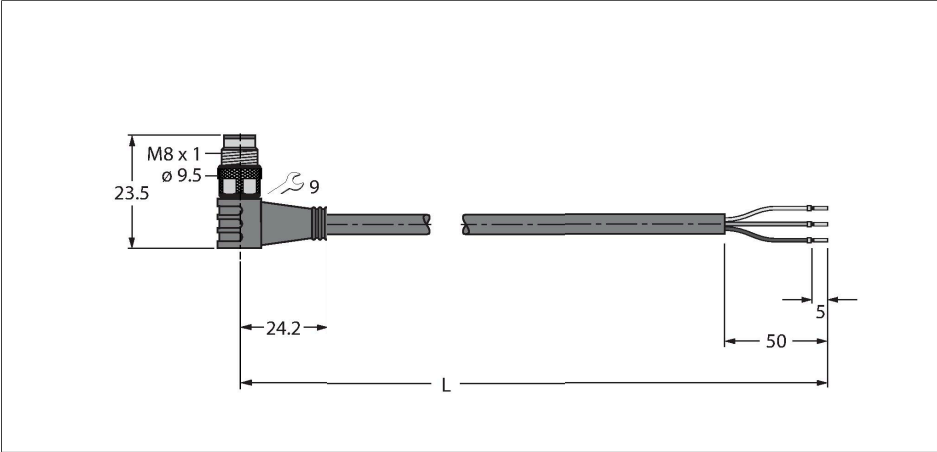


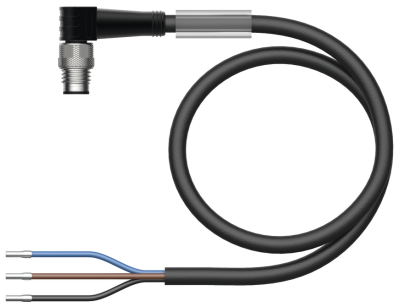
# PSW3M-5/TRL

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



### Technical data

|                                 |                                                              |
|---------------------------------|--------------------------------------------------------------|
| Type                            | PSW3M-5/TRL                                                  |
| ID                              | 6543122                                                      |
| Connector A                     | Male, M8 × 1, Angled                                         |
| Number of pins                  | 3                                                            |
| Contacts                        | Brass, CuZn, Gold-plated                                     |
| Contact carriers                | Plastic, TPU, Black                                          |
| Connector body                  | Plastic, TPU, Black                                          |
| Coupling nut/screw              | Brass, CuZn, Nickel-plated                                   |
| Tightening torque (range)       | 0.5 ... 0.6 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                           |                                                              |
| Cable diameter                  | Ø 4.1 mm ±0.20                                               |
| Cable length                    | 5 m                                                          |
| Cable jacket                    | PUR, Black                                                   |
| Core insulation                 | PP                                                           |
| Core cross-section              | 3 x 0.34 mm <sup>2</sup>                                     |
| Arrangement of strands          | 42 x 0.1 mm                                                  |
| Core colors                     | BN, BU, BK                                                   |
| Electrical properties at +20 °C |                                                              |
| Rated voltage                   | 50 V <sub>AC</sub> /60 V <sub>DC</sub>                       |
| Test voltage                    | 2000 V                                                       |
| Current                         | 4 A                                                          |

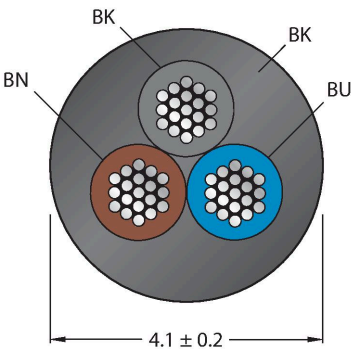


### Features



- Male M8, angled, 3-pin
- Jacket material: PUR
- Jacket color: black
- Suitable for drag chain use
- Torsion resistant (± 360°/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: 5.0 m

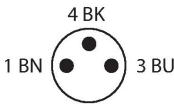
### Cable Cross-Section



### Contact assignment

Technical data

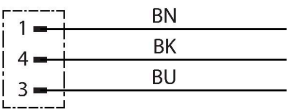
| Mechanical and chemical properties       |                            |
|------------------------------------------|----------------------------|
| Bending radius (stationary installation) | ≥ 5 x Ø                    |
| Bending radius (flexible use)            | ≥ 10 x Ø                   |
| Bending 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        |



Functional principle

Drawing shows design status including hexagon coupling nut (Production start CW11/2016).

Circuit Diagram



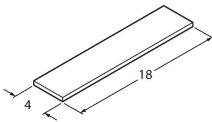
Accessories

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



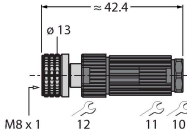
HA5131-06905404

Field-wireable female connector, M8 × 1, straight, 3-pin, insulation piercing connection, cable feedthrough 2.5 to 5.1 mm, core cross-section/terminal capacity 0.14 to 0.34 mm², plastic housing, metal nut

B5133-06901030

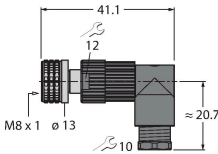
Field-wireable female connector, M8 × 1, straight, 3-pin, screw terminal connection, cable feedthrough 3.5 to 5.0 mm, core cross-section/terminal capacity 0.14 to 0.50 mm², plastic housing, metal nut

H5131-06902700



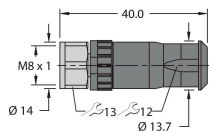
Field-wireable female connector, M8 × 1, straight, 3-pin, pressfit technology, cable feedthrough 4.0 to 5.0 mm, core cross-section/terminal capacity 0.14 to 0.34 mm², plastic housing, metal nut

H5231-06902800



Field-wireable female connector, M8 × 1, angled, 3-pin, pressfit technology, cable feedthrough 4.0 to 5.0 mm, core cross-section/terminal capacity 0.14 to 0.34 mm², plastic housing, metal nut

FW-PRKPM0320-SA-S-0406100002292



Field-wireable female connector, M8 × 1, straight, 3-pin, screw terminal connection, cable feedthrough 4.0 to 5.5 mm, core cross-section/terminal capacity 0.14 to 0.5 mm², plastic housing, metal coupling 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 |