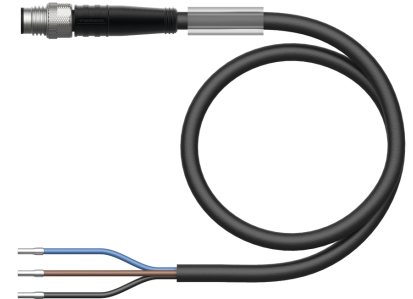
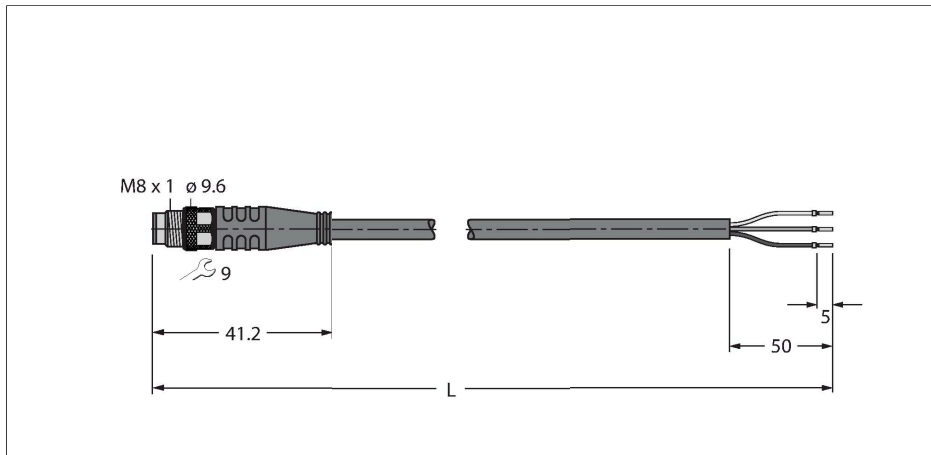


PSG3M-2/TRL

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



Technical data

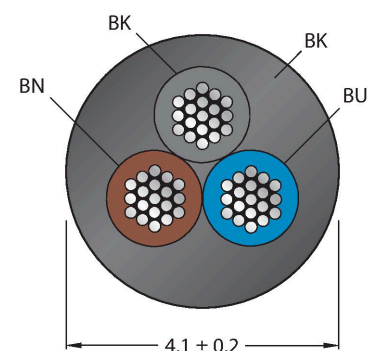
Type	PSG3M-2/TRL
ID	6543118
Connector A	Male, M8 × 1, Straight
Number of pins	3
Contacts	Brass, CuZn, Gold-plated
Contact carriers	Plastic, TPU, Black
Connector body	Plastic, TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Tightening torque (range)	0.5 ... 0.6 Nm (observe max. torque of mating 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	2 m
Cable jacket	PUR, Black
Core insulation	PP
Core cross-section	3 x 0.34 mm ²
Arrangement of strands	42 x 0.1 mm
Core colors	BN, BU, BK
Electrical properties at +20 °C	
Rated voltage	50 V _{AC} /60 V _{DC}
Test voltage	2000 V
Current	4 A

Features



- Male M8, straight, 3-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

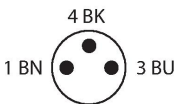
Cable Cross-Section



Contact assignment

Technical data

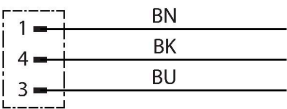
Mechanical and chemical properties	
Bending radius (stationary installation)	≥ 5 x Ø
Bending radius (flexible use)	≥ 10 x Ø
Bending cycles	≥ 10 million
Admissible travel path, horizontal	5 m (at 5 m/s²)
Admissible travel path, vertical	2 m (at 5 m/s²)
Torsional stress	± 360 °/m
Torsion cycles	Max. 5 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 CE UKCA



Functional principle

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

Circuit Diagram



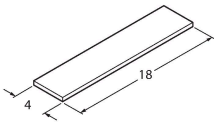
Accessories

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



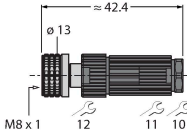
HA5131-06905404

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

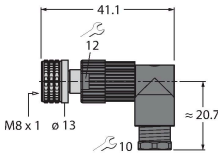
Field-wireable female connector, M8 × 1, straight, 3-pin, screw terminal connection, cable feedthrough 3.5 to 5.0 mm, core cross-section/terminal capacity 0.14 to 0.50 mm², plastic housing, metal nut

H5131-06902700



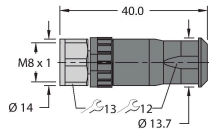
Field-wireable female connector, M8 × 1, straight, 3-pin, pressfit technology, cable feedthrough 4.0 to 5.0 mm, core cross-section/terminal capacity 0.14 to 0.34 mm², plastic housing, metal nut

H5231-06902800



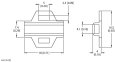
Field-wireable female connector, M8 × 1, angled, 3-pin, pressfit technology, cable feedthrough 4.0 to 5.0 mm, core cross-section/terminal capacity 0.14 to 0.34 mm², plastic housing, metal nut

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