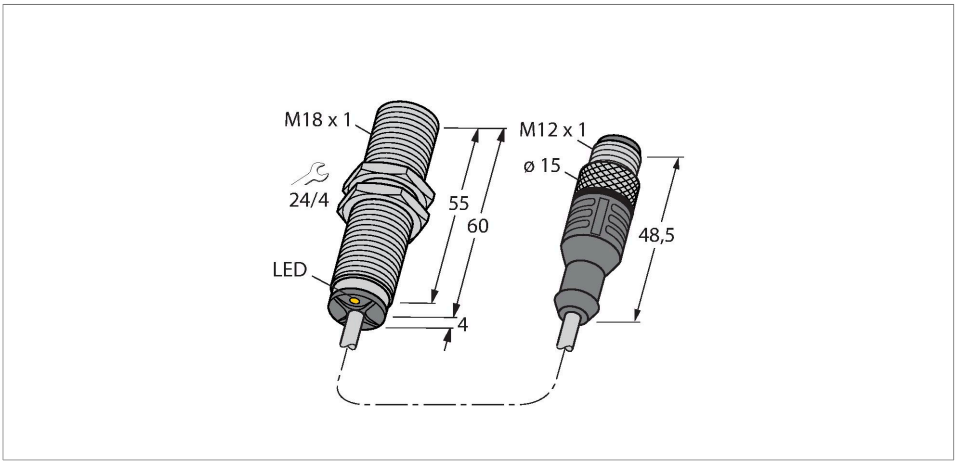
BI5U-MT18M-AD4X-0.3-RS4.23/XOR
Inductive Sensor



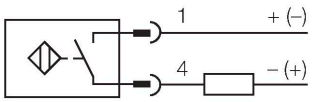
Technical data

Type	BI5U-MT18M-AD4X-0.3-RS4.23/XOR
Ident. no.	4405049
Rated switching distance	5 mm
Mounting conditions	Flush
Secured operating distance	≤ (0.81 × Sn) mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Hysteresis	3…20 %
Ambient temperature	-25…+70 °C
Operating voltage	10…65 VDC
Residual ripple	≤ 10 % U_{ss}
DC rated operational current	≤ 100 mA
Residual current	≤ 0.8 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes / Cyclic
Voltage drop at I_e	≤ 5 V
Wire breakage/Reverse polarity protection	Complete
Output function	2-wire, NO contact, 2-wire
Smallest operating current	≥ 3 mA
Switching frequency	0.01 kHz
Design	Threaded barrel, M18 × 1
Dimensions	64 mm
Housing material	Metal, CuZn, PTFE-coated

Features

- Threaded barrel, M18 x 1
- Brass, PTFE-coated
- Factor 1 for all metals
- Resistant to magnetic fields
- DC 2-wire, 10…65 VDC
- NO contact
- Cable with male end

Wiring diagram



Functional principle

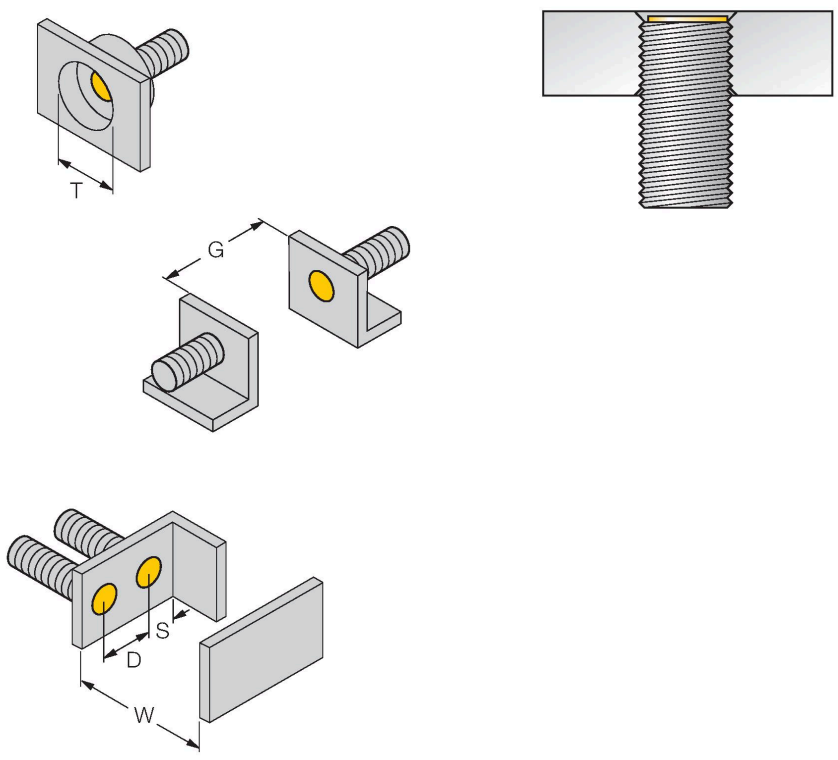
Inductive sensors detect metal objects contactless and wear-free. Due to the patented multi-coil system, *uprox*®+ sensors have distinct advantages compared to conventional sensors. They excel in largest switching distances, maximum flexibility and operational reliability as well as efficient standardization.

Technical data

Active area material	Plastic, LCP, PTFE-coated
Material coupling nut	metal, CuZn, nickel-plated
Max. tightening torque housing nut	15 Nm
Electrical connection	Cable with connector, M12 × 1
Cable quality	Ø 5.2 mm, LifXX, PVC, 0.3 m
Core cross-section	2 x 0.34 mm²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED, Yellow

Mounting instructions

Mounting instructions/Description



Distance D	36 mm
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Diameter active area B	Ø 18 mm

All flush mountable *uprox*®+ threaded barrel types are also recessed mountable. Safe operation is ensured if the sensor is screwed in by half a turn.

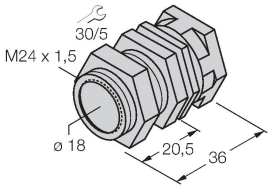
The use of isolating switching amplifiers is possible, because *uprox*®+ 2-wire DC sensors operate with 8 VDC low voltage (limited load current 50 mA).

The sensors can be operated with the Turck remote I/O fieldbus system BL20. If the sensors are combined with a BL20-4DI-NAMUR slice, events of wire-break or short-circuit can be detected immediately.

BI5U-MT18M-AD4X-0.3-RS4.23/XOR 05/27/2020 12-05 | technical changes reserved

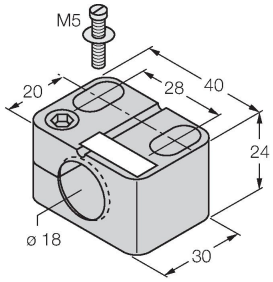
Accessories

QMT-18	6945104



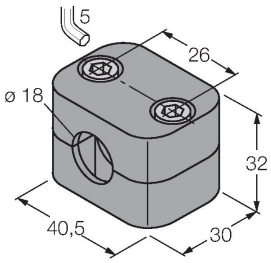
Quick-mount bracket with dead-stop; material: brass, PTFE-coated; Male thread M24 × 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.

BST-18B	6947214



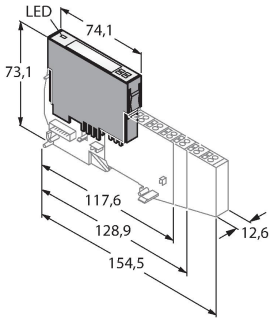
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

BSS-18	6901320



Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene

BL20-4DI-NAMUR	6827212



4 digital inputs acc. to EN 60947-5-6 For NAMUR sensors, de-energized contacts or uprox®+ 2-wire DC sensors.