

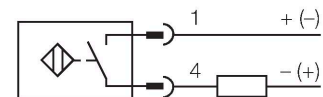
BI10U-M30-AD4X-H1144

Inductive Sensor

Features

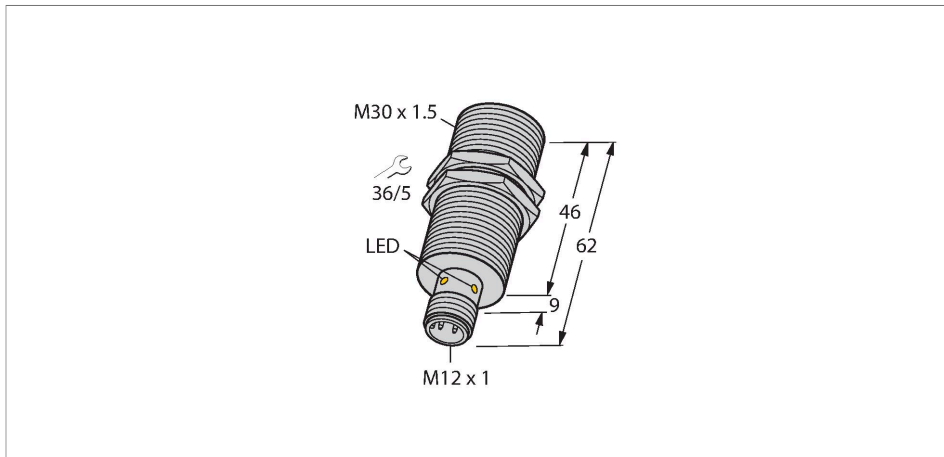
- M30 × 1.5 threaded tube
- Chrome-plated brass
- Factor 1 for all metals
- Resistant to magnetic fields
- DC 2-wire, 10...65 VDC
- NO contact
- M12 x 1 male connector

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

Type	BI10U-M30-AD4X-H1144
Ident. no.	4405072
Rated switching distance	10 mm
Mounting conditions	Flush
Secured operating distance	≤ (0.81 × S _n) 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 _s
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, M30 × 1.5
Dimensions	62 mm
Housing material	Metal, CuZn, Chrome-plated

Technical data

Active area material	Plastic, LCP
Max. tightening torque housing nut	75 Nm
Electrical connection	Connector, M12 × 1
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	60 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	Ø 30 mm
B	

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.

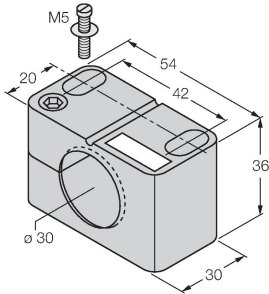
The use of isolating switching amplifiers is possible, because *uprox*[®]+ 2-wire DC sensors operate with 8 VDC low voltage (limited load current 50mA).

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.

Accessories

BST-30B

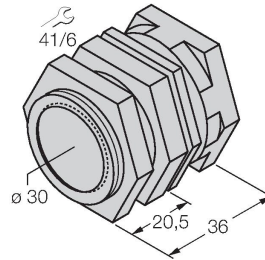
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Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

QM-30

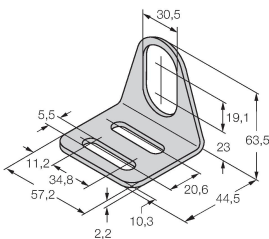
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Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M36 × 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.

MW30

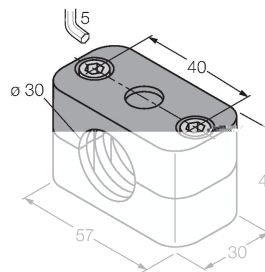
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Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)

BSS-30

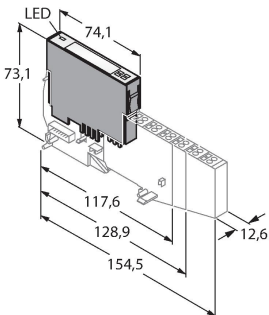
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Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene

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.