

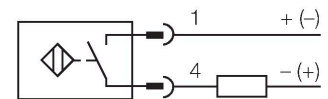
# BI2U-MT12E-AD4X-H1144

## Inductive Sensor

### Features

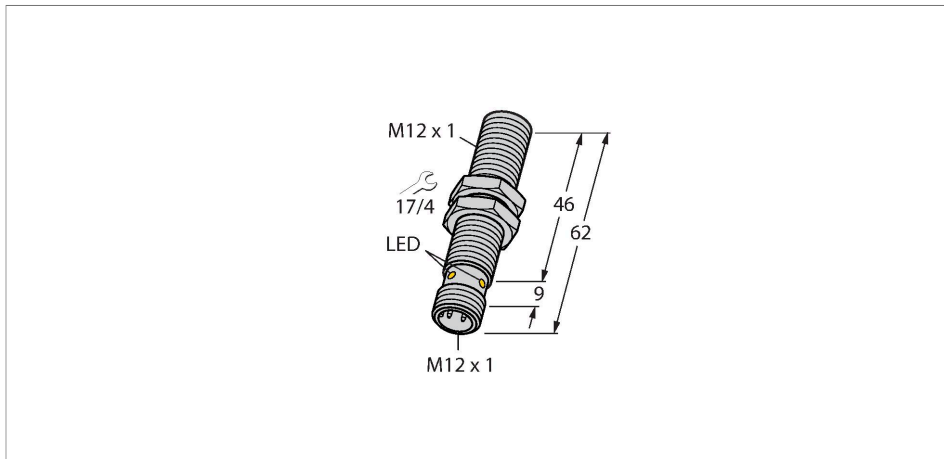
- Threaded barrel, M12 x 1
- Brass, PTFE-coated
- Factor 1 for all metals
- Resistant to magnetic fields
- DC 2-wire, 10...65 VDC
- NO contact
- M12 x 1 male connector

### Wiring diagram



### Functional principle

Inductive sensors detect metal objects contactless and wear-free. Due to the patented multi-coil system, *uprox*<sup>®</sup>+ 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

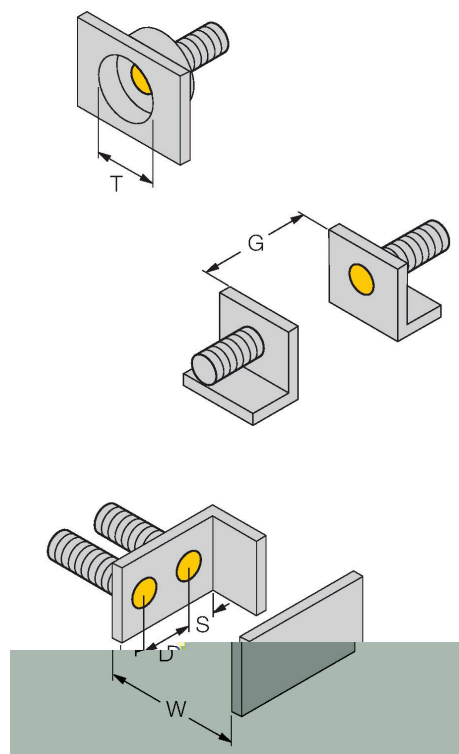
Type	BI2U-MT12E-AD4X-H1144
Ident. no.	4405061
Rated switching distance	2 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2\%$ of full scale
Temperature drift	$\leq \pm 10\%$
Hysteresis	3...20 %
Ambient temperature	0...+70 °C
Operating voltage	10...65 VDC
Residual ripple	$\leq 10\% U_{ss}$
DC rated operational current	$\leq 100$ mA
Residual current	$\leq 0.8$ mA
Isolation test voltage	$\leq 0.5$ kV
Short-circuit protection	yes / Cyclic
Voltage drop at $I_e$	$\leq 5$ V
Wire breakage/Reverse polarity protection	Complete
Output function	2-wire, NO contact, 2-wire
Smallest operating current	$\geq 3$ mA
Switching frequency	0.01 kHz
Design	Threaded barrel, M12 x 1
Dimensions	62 mm
Housing material	Metal, CuZn, PTFE-coated
Active area material	Plastic, LCP, PTFE-coated

## Technical data

End cap	Plastic, EPTR
Max. tightening torque housing nut	7 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



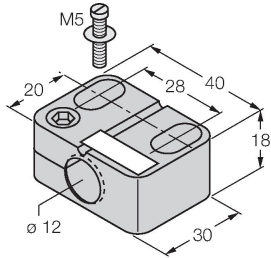
Distance D	24 mm
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Diameter active area	Ø 12 mm
B	

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

## Accessories

**BST-12B**

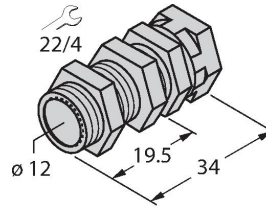
6947212



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

**QMT-12**

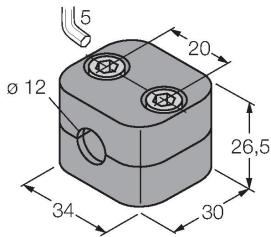
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Quick-mount bracket with dead-stop; material: brass, PTFE-coated; Male thread M16 × 1. Note: The switching distance of the proximity switches may change when using quick-mount brackets.

**BSS-12**

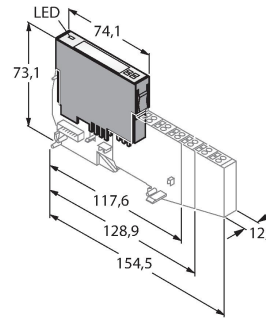
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Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene

**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.