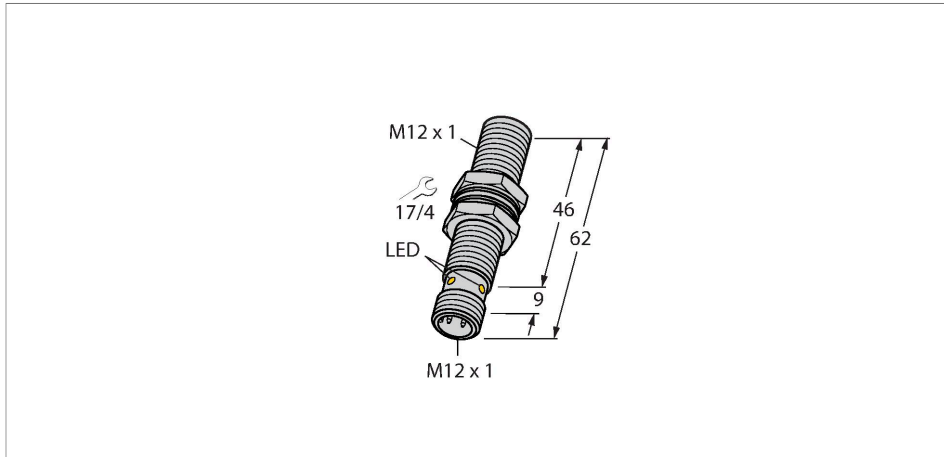


BI2U-M12E-AD4X-H1144

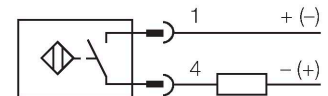
Inductive Sensor



Features

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

Wiring diagram



Technical data

Type	BI2U-M12E-AD4X-H1144
Ident. no.	4405060
Rated switching distance	2 mm
Mounting conditions	Flush
Secured operating distance	≤ (0.81 × S _n) mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
Hysteresis	3...20 %
Ambient temperature	0...+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, M12 × 1
Dimensions	62 mm
Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, LCP

Functional principle

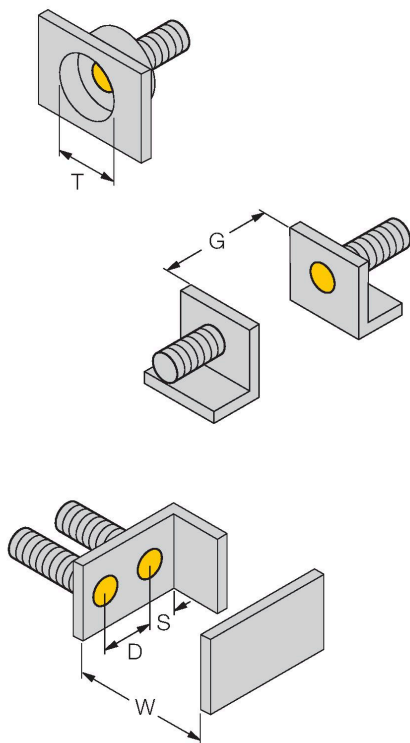
Inductive sensors detect metal objects contactless and wear-free. Due to the patented multi-coil system, *uprox*[®] sensors have distinct advantages compared to conventional sensors. They excel in largest switching distances, maximum flexibility and operational reliability as well as efficient standardization.

Technical data

Max. tightening torque housing nut	10 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



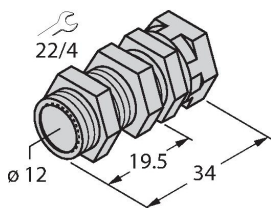
Distance D	24 mm
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Diameter active area B	Ø 12 mm

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.

Accessories

QM-12

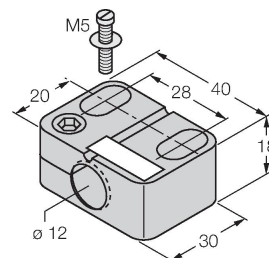
6945101



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

BST-12B

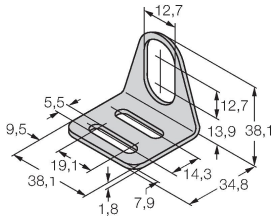
6947212



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

MW12

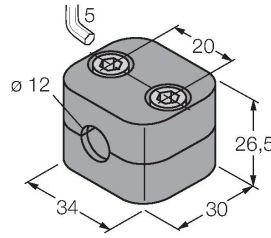
6945003



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

BSS-12

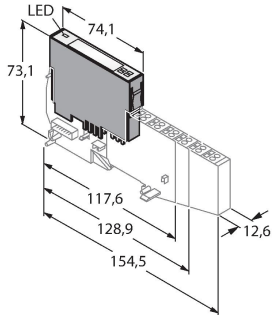
6901321



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.