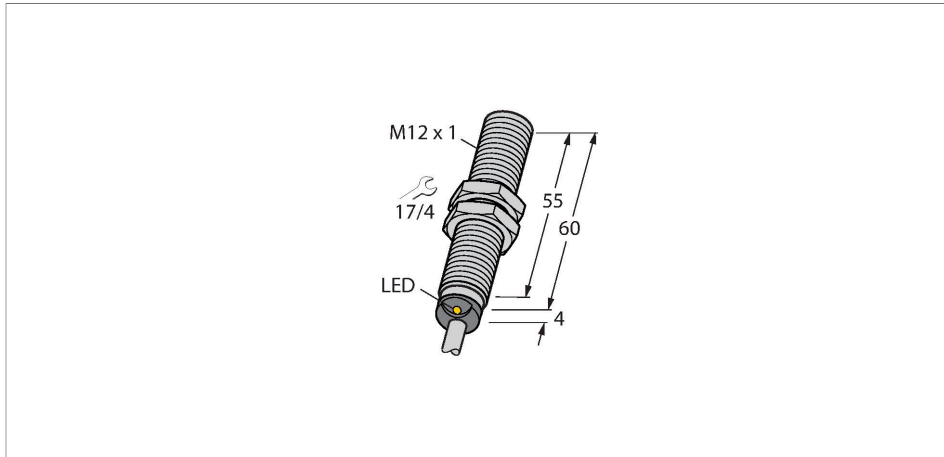


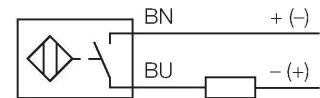
# BI2U-M12E-AD4X Inductive Sensor



## 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
- Cable connection

## Wiring diagram



## Technical data

Type	BI2U-M12E-AD4X
Ident. no.	4405062
Rated switching distance	2 mm
Mounting conditions	Flush
Secured operating distance	≤ (0.81 × S <sub>n</sub> ) 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 <sub>ss</sub>
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 <sub>e</sub>	≤ 5 V
Wire breakage/Reverse polarity protection	Complete
Output function	2-wire, NO contact, 2-wire
Smallest operating current	≥ 3 mA
Switching frequency	0.02 kHz
Design	Threaded barrel, M12 × 1
Dimensions	64 mm
Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, LCP

## Functional principle

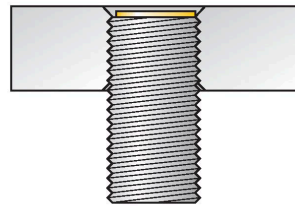
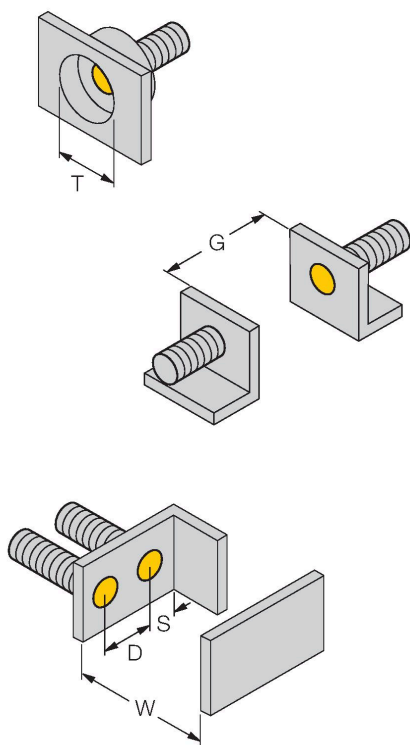
Inductive sensors detect metal objects contactless and wear-free. Due to the patented multi-coil system, *uprox*<sup>®</sup> sensors have distinct advantages compared to conventional sensors. They excel in largest switching distances, maximum flexibility and operational reliability as well as efficient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

## Technical data

End cap	Plastic, EPTR
Max. tightening torque housing nut	10 Nm
Electrical connection	Cable
Cable quality	Ø 5.2 mm, LifYY, PVC, 2 m
Core cross-section	2 x 0.34 mm <sup>2</sup>
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



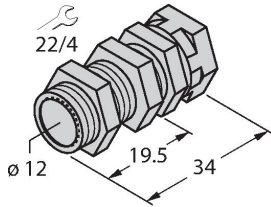
Distance D	24 mm
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Diameter active area	Ø 12 mm
B	

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

QM-12

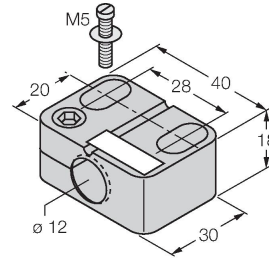
6945101



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

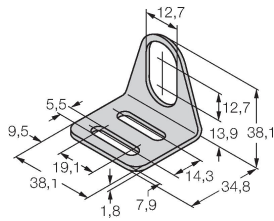
6947212



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

MW12

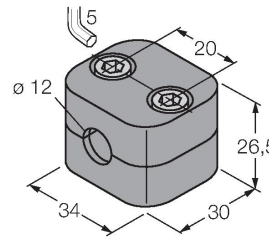
6945003



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

BSS-12

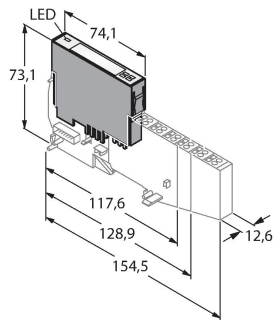
6901321



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.