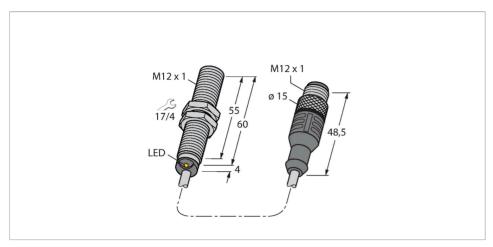


# BI2U-MT12E-AD4X-0.3-RS4.23/XOR Inductive Sensor



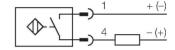
#### Technical data

Type	BI2U-MT12E-AD4X-0.3-RS4.23/XOR
ldent. no.	4405048
Rated switching distance	2 mm
Mounting conditions	Flush
Secured operating distance	≤ (0.81 × Sn) mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
Hysteresis	320 %
Ambient temperature	0+70 °C
Operating voltage	1065 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.	≤ 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 $\times$ 1
Dimensions	64 mm
Housing material	Metal, CuZn, PTFE-coated
Active area material	Plastic, LCP, PTFE-coated

#### **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
- 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

End cap	Plastic, EPTR
Material coupling nut	metal, CuZn, nickel-plated
Max. tightening torque housing nut	7 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 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

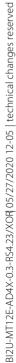
# Mounting instructions

#### 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 B	Ø 12 mm

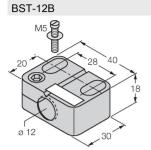
All flush mountable *uprox*\*+ threaded barrel types are also recessed mountable. Safe operation is ensured if the sensor is screwed in by half a turn.





#### Accessories

6947212



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

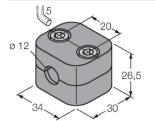
QMT-12

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



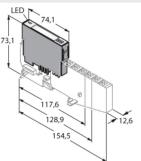


Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene





6945106



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