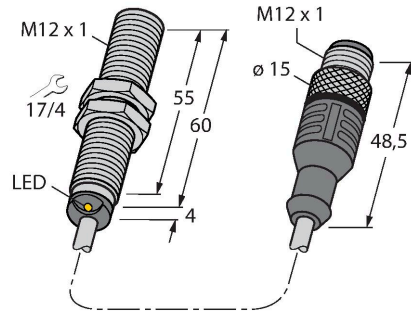


BI2U-MT12E-AD4X-0.3-RS4.23/XOR

Inductive Sensor

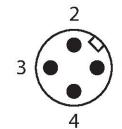
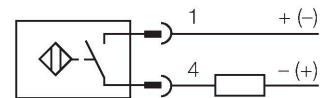


Features

- 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
- Cable with male end

Technical data

Type	BI2U-MT12E-AD4X-0.3-RS4.23/XOR
ID	4405048
General data	
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 %
Electrical data	
Operating voltage U_B	10...65 VDC
Ripple U_{ss}	$\leq 10 \%$ U_{Bmax}
DC rated operating current I_o	≤ 100 mA
Residual current	≤ 0.8 mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at I_o	≤ 5 V
Wire break/reverse polarity protection	Complete
Output function	2-wire, NO contact, 2-wire
DC field stability	300 mT
AC field stability	300 mT _{ss}
Smallest operating current	≥ 3 mA
Switching frequency	0.01 kHz



Functional principle

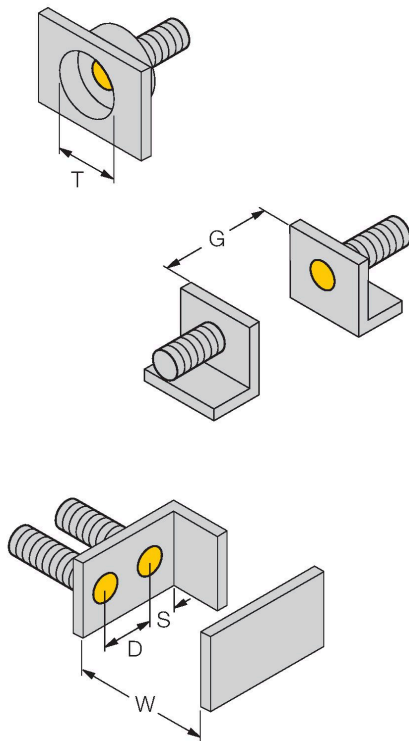
Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox+ sensors have significant advantages due to their patented multi-coil system. They excel thanks to their optimum switching distances, maximum flexibility and operational reliability as well as efficient standardization.

Technical data

Mechanical data	
Design	Threaded barrel, M12 x 1
Dimensions	64 mm
Housing material	Metal, CuZn, PTFE-coated
Active area material	Plastic, LCP, PTFE-coated
End cap	Plastic, EPTR
Material coupling nut	metal, CuZn, nickel-plated
Max. tightening torque of housing nut	7 Nm
Electrical connection	Cable with connector, M12 × 1
Cable quality	Ø 5.2 mm, Orange, LifXX, PVC, 0.3 m
Core cross-section	2 x 0.34 mm ²
Environmental conditions	
Ambient temperature	0...+70 °C
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

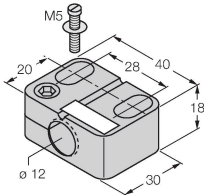
All flush mountable uprox+ threaded barrel types are also recessed mountable. Safe operation is ensured if the sensor is screwed in by half a turn.

Accessories

BST-12B

6947212

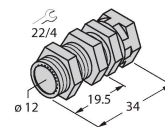
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6



QMT-12

6945106

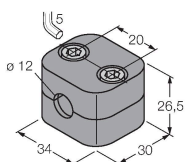
Quick-mount bracket with dead-stop; material: brass, PTFE-coated; Male thread M16 x 1. Note: The switching distance of the proximity switches may change when using quick-mount brackets.



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.

