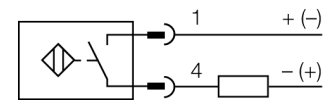


- Threaded barrel, M12 x 1
- Brass, PTFE-coated
- Factor 1 for all metals
- Resistant to magnetic fields
- 2-wire DC, 10...65 VDC
- NO contact
- Male M12 x 1

**Wiring diagram**



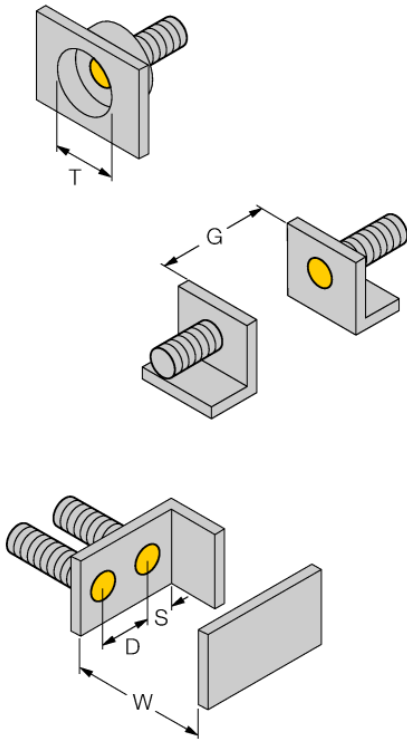
<b>Type code</b>	BI2U-MT12E-AD4X-H1144
Ident no.	4405061
<b>Rated operating distance Sn</b>	2 mm
Mounting condition	flush
Assured sensing range	≤ (0,81 x Sn) mm
Repeatability	≤ 2 % of full scale
Temperature drift	10 %
Hysteresis	3...20 %
Ambient temperature	0...+70 °C
<b>Operating voltage</b>	10...65VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
DC rated operational current	≤ 100 mA
Residual current	≤ 0.8 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I <sub>s</sub>	≤ 5 V
Smallest operating current I <sub>m</sub>	≤ 3 mA
Switching frequency	0.01 kHz
<b>Design</b>	threaded barrel, M12 x 1
Dimensions	62 mm
Housing material	metal, CuZn, PTFE-coated
Material active area	Plastic, LCP, PTFE-coated
End cap	Plastic, EPTR
Max. tightening torque housing nut	7 Nm
Connection	male, M12 x 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
<b>Switching state</b>	LED yellow

**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.

Distance D	24 mm
Distance W	6 mm
Distance T	36 mm
Distance S	18 mm
Distance G	12 mm

**Diameter of the active area B**       $\varnothing$  12 mm



Flush and recessed mounting of all *uprox*®+ threaded barrel sensors. Safe operation is ensured if the sensor is screwed in by half a turn.

Isolating switching amplifiers can be applied because *uprox*®+ 2-wire DC sensors work with 8 VDC low operating voltage (limited load current 50 mA).

The sensors can be operated with the Turck remote I/O fieldbus system BL20. If the sensors are combined with a BL20-4DI-NAMUR slice, events of wire-break or short-circuit can be detected immediately.

### Accessories

Type code	Ident no.	Description	Dimension drawing
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.	
BST-12B	6947212	Fixing clamp for threaded barrel devices, 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 reduce when using quick-mount brackets.	
BSS-12	6901321	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	