



- Threaded barrel, M30 x 1.5
- Brass, PTFE-coated
- Factor 1 for all metals
- Resistant to magnetic fields
- Extended temperature range
- High switching frequency
- 3-wire DC, 10...30 VDC
- NO contact, NPN output
- Male M12 x 1

Wiring diagram



Functional principle

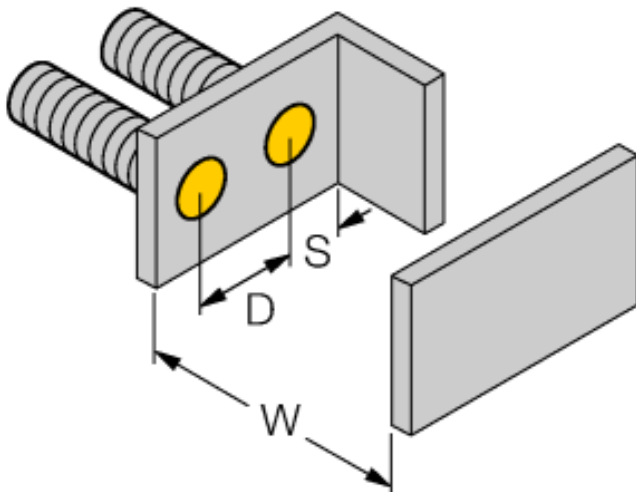
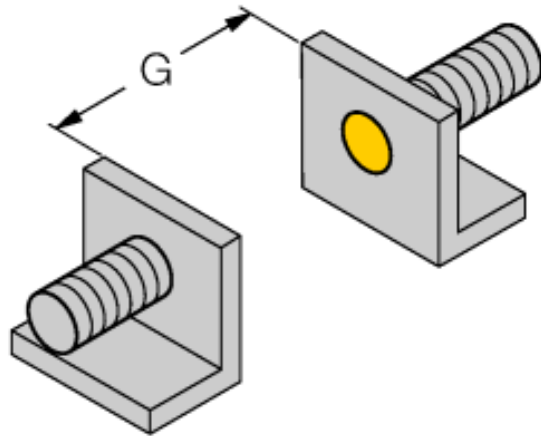
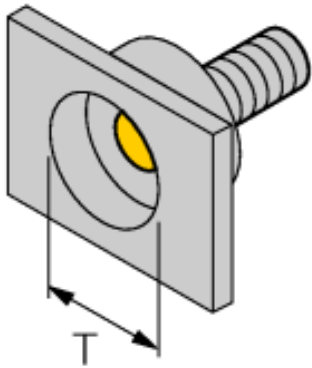
Inductive sensors detect metal objects contactless and wear-free. Due to the patented multicoil system, *uprox®*+ sensors have distinct advantages over conventional sensors. They detect all metals at the same large switching distance and are resistant to magnetic fields.

Type code	BI10U-MT30-AN6X-H1141
Ident no.	1636250
Rated operating distance Sn	10 mm
Mounting condition	flush
Assured sensing range	≤ (0,81 x Sn) mm
Repeatability	≤ 2 % of full scale
Temperature drift	10 %
	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Hysteresis	3...15 %
Ambient temperature	-30...+85 °C
Operating voltage	10...30VDC
Residual ripple	≤ 10 % U _{ss}
DC rated operational current	≤ 200 mA
No-load current I ₀	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I ₀	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, NPN
Protection class	☐
Switching frequency	1 kHz
Design	threaded barrel, M30 x 1.5
Dimensions	62 mm
Housing material	metal, CuZn, PTFE-coated
Material active area	Plastic, PBT, PTFE-coated
Max. tightening torque housing nut	75 Nm
Connection	male, M12 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED yellow

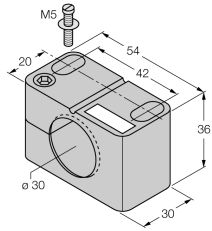
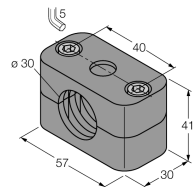
**Inductive sensor
BI10U-MT30-AN6X-H1141**

Distance D	2 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn

Diameter of the active area B	Ø 30 mm
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Accessories

Type code	Ident no.	Description	Dimension drawing
BST-30B	6947216	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	 <p>Technical drawing of the BST-30B fixing clamp. It shows a perspective view of a rectangular component with a circular opening on the front. Dimensions include a total length of 54, a distance of 20 from the left edge to the start of the clamp, a distance of 42 from the start of the clamp to the right edge, a height of 36, and a width of 30. A hole with a diameter of 30 is shown on the front. An M5 screw is shown above the component.</p>
BSS-30	6901319	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	 <p>Technical drawing of the BSS-30 mounting bracket. It shows a perspective view of a rectangular component with a circular opening on the front. Dimensions include a total length of 40, a distance of 5 from the top edge to the start of the bracket, a distance of 30 from the start of the bracket to the right edge, a height of 41, and a width of 57. A hole with a diameter of 30 is shown on the front.</p>