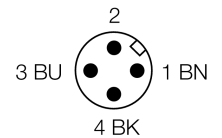


- Threaded barrel, M12 x 1
- Brass, PTFE-coated
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- High switching distance
- Integrated protection against pre-attenuation
- Little metal-free spaces
- 3-wire DC, 10...30 VDC
- NO contact, NPN output
- Male M12 x 1

Type code	NI10U-MT12-AN6X-H1141
Ident no.	1634830
Rated operating distance Sn	10 mm
Mounting condition	non-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	2 kHz
Design	threaded barrel, M12 x 1
Dimensions	52 mm
Housing material	metal, CuZn, PTFE-coated
Material active area	Plastic, LCP, PTFE-coated
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
Switching state	LED yellow

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 over conventional sensors. They excel in largest switching distances, maximum flexibility and operational reliability as well as efficient standardization.

Distance D	48 mm
Distance W	30 mm
Distance T	36 mm
Distance S	18 mm
Distance G	60 mm
Distance N	20 mm

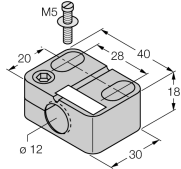
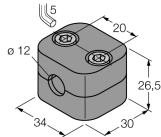
Diameter of the active area B \varnothing 12 mm



All recessed mountable *uprox⁺* threaded barrel sensors can be embedded to the upper edge of the thread. Thus safe operation is guaranteed with a reduced switching distance of max. 20 %.

When installed in an aperture plate a distance of X = 50 mm must be observed.

Accessories

Type code	Ident no.	Description	Dimension drawing
BST-12B	6947212	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	 <p>The drawing shows a perspective view of a rectangular fixing clamp. It has a circular hole on the front face with a diameter of 12 mm. The overall width is 40 mm, the depth is 30 mm, and the height is 18 mm. A dimension of 20 mm is shown from the left edge to the center of the hole. A dimension of 28 mm is shown from the center of the hole to the right edge. An M5 screw is shown above the clamp, indicating its mounting point.</p>
BSS-12	6901321	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	 <p>The drawing shows a perspective view of a cylindrical mounting bracket. It has a circular hole on the front face with a diameter of 12 mm. The overall width is 34 mm, the depth is 30 mm, and the height is 26.5 mm. A dimension of 20 mm is shown from the left edge to the center of the hole. A dimension of 5 mm is shown from the top edge to the center of the hole.</p>