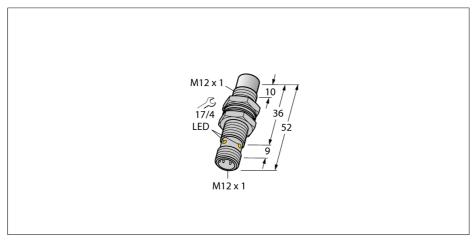


## Inductive sensor NI10U-MT12-AP6X-H1141





Type code	NI10U-MT12-AP6X-H1141		
Ident no.	1634810		
Rated operating distance Sn	10 mm		
Mounting condition	non-flush		
Assured sensing range	≤ (0,81 x Sn) mm		
Repeatability	≤ 2 % of full scale		
Temperaturdrift	10 %		
	$\leq$ ± 15 %, $\leq$ -25 °C v $\geq$ +70 °C		
Hysteresis	315 %		
Ambient temperature	-30+85 °C		
Operation velters	1030VDC		
Operating voltage			
Residual ripple	≤ 10 % U <sub>ss</sub>		
DC rated operational current	≤ 200 mA		
No-load current I <sub>o</sub>	≤ 15 mA		
Residual current	≤ 0.1 mA		
Rated insulation voltage	≤ 0.5 kV		
Short-circuit protection	yes/ cyclic		
Voltage drop at I <sub>e</sub>	≤ 1.8 V		
Wire breakage / Reverse polarity protection	yes/ complete		
Output function	3-wire, NO contact, PNP		
Protection class			
Switching frequency	2 kHz		
Design	threaded barrel, M12 x 1		
Dimensions	52 mm		
Housing material	Metal, CuZn, PTFE-coated		

- Threaded barrel, M12 x 1
- Brass, PTFE-coated
- Factor 1 for all metals
- Protection class IP68
- Magnetic field immune
- High switching distance
- Integrated predamping protection
- Limited metal-free spaces
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M12 x 1 connector

### 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 highest switching distances, maximum flexibility and operational reliability as well as efficient standardization.

Material active face

Vibration resistance

Shock resistance

Protection class

Switching state

Connection

MTTF

Max. tightening torque housing nut

874 years acc. to SN 29500 (Ed. 99) 40  $^{\circ}\text{C}$ 

Plastic, LCP, PTFE-coated

male, M12 x 1

55 Hz (1 mm)

30 g (11 ms)

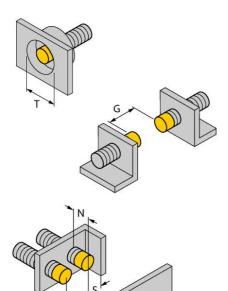
• yellow

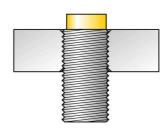


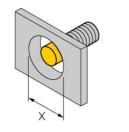
## Inductive sensor NI10U-MT12-AP6X-H1141



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	Ø 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	M5 28 40 18 18 18 18
BSS-12	6901321	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	e 12 20 20 26.5 34 30

# Wiring accessories

Type code	ldent no.	Description	Dimension drawing
RKC4T-2/TXL	6625500	Connection cable, female M12, straight, 3-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com	