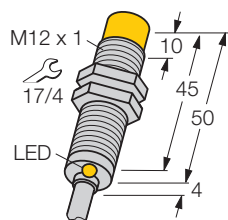


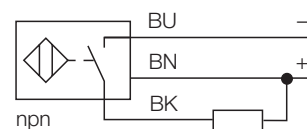
Inductive sensor

Ni8U-EM12-AN6X



- threaded barrel, M12 x 1
- stainless steel, 1.4301
- factor 1 for all metals
- degree of protection IP68
- magnetic field immune
- extended temperature range
- high switching frequency
- predamping protection through self-compensation
- 3-wire DC, 10...30 VDC
- normally open npn output
- cable connection

Wiring diagram



Function principles

Inductive proximity switches are designed for wear-free non-contact detection of metal objects. Due to a ferrite-less 3-coil system, Uprox factor 1 sensor have distinct advantages. The detect all metals at the same switching distance, are magnetic field immune and feature large switching distances.

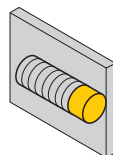
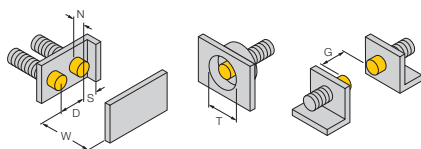
Type	Ni8U-EM12-AN6X
Ident-No.	1644320
Rated operating distance Sn	8 mm
Mounting mode	non-flush, partial flush mountable
Hysteresis (switching distance)	3... 15 %
Min. repeat accuracy	≤ 2 %
Temperature drift	≤ ± 10 %
Operating temperature	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C -30 ...+ 85 °C
Rated operational voltage (DC) U_B	10... 30 VDC
Max. ripple	≤ 10 % U _{pp}
Rated operational current (DC) I _e	≤ 200 mA
No-load current I ₀	≤ 15 mA
Max. OFF-state current	≤ 0,1 mA
Max. switching frequency	≤ 2 kHz
Rated insulation voltage	≤ 0,5 kV
Output function	3-wire, normally open, NPN
Short-circuit protection	yes, cyclic
Max. voltage drop at I _e	≤ 1,8 V
Wire breakage / reverse polarity protection	yes / complete
Protection class	☐
Housing style	threaded barrel; M12 x 1
Dimensions	54 mm
Housing material	metal, A2 1.4301 (AISI 304)
Active face	plastic, PBT
Max. fixing torque of coupling nut	10 Nm
Wiring	cable
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 x g (11 ms)
Degree of protection	IP68
Switching status indication	LED yellow

Inductive sensor**Ni8U-EM12-AN6X****Mounting instructions**

	minimum gap
Gap D	3 x B
Gap W	3 x Sn
Gap T	3 x B
Gap S	0,5 x B
Gap G	6 x Sn
Gap N	2 x Sn

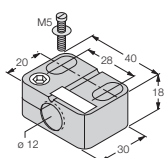
Diameter of active face B

Ø 12 mm



1-side flush mounting possible
1-side flush mounting: $S_r = 6 \text{ mm}$

Inductive sensor**Ni8U-EM12-AN6X****Accessories**

Typ	Ident-No.	Description	Dimension drawing
BST-12B	6947212	fixing clamp with dead-stop; material: PA6	 
QM-12	6945101	quick-mount fixing clamp with dead-stop; material: chrome-plated brass external thread M16 x 1	