

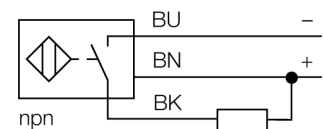
Inductive sensor NI3-EG08-AN6X

TURCK

Industrial
Automation

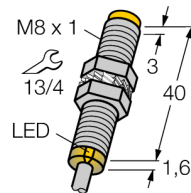
- Threaded barrel, M8 x 1
- Stainless steel, 1.4404
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- Cable connection

Wiring diagram



Functional principle

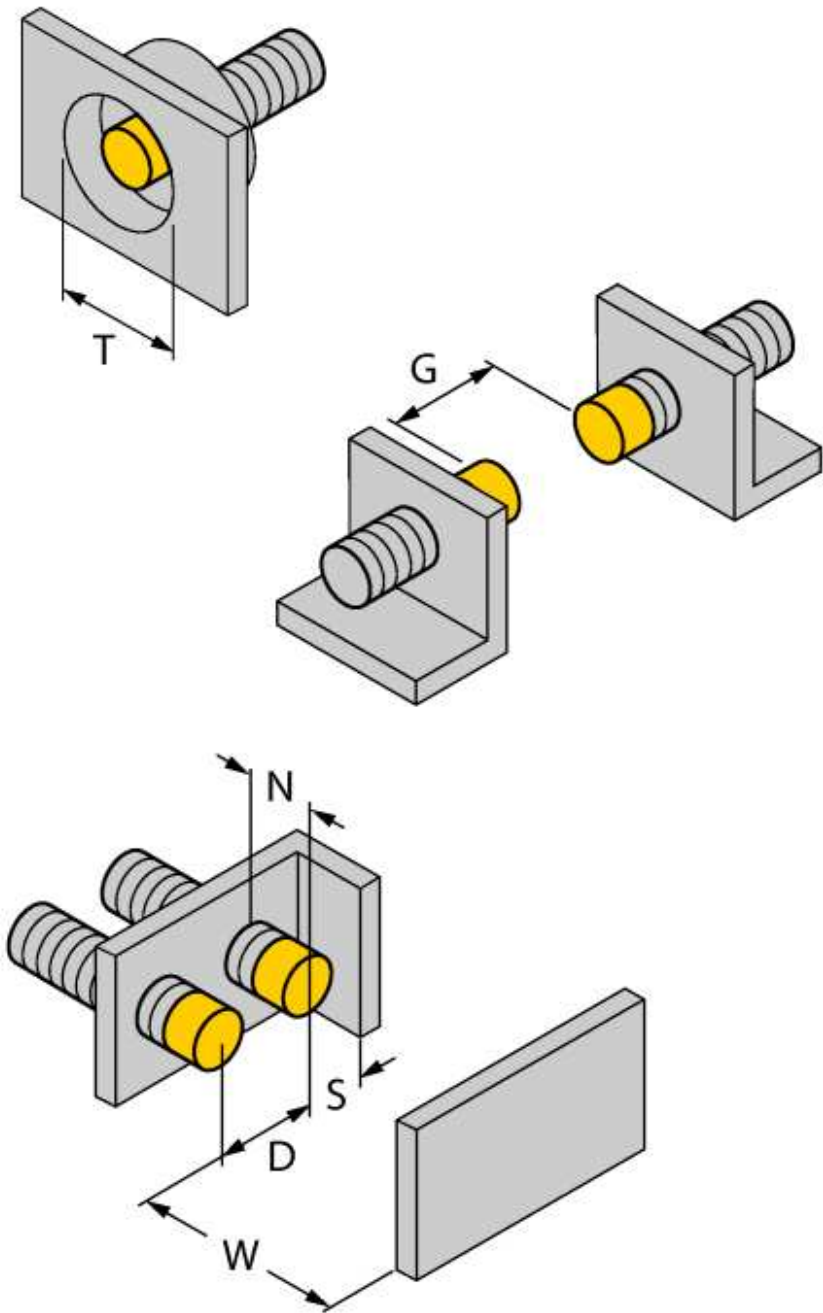
Inductive sensors detect metal objects contactless and wear-free. For this purpose they use a high-frequency electromagnetic AC field that interacts with the target. The sensors hosting a ferrite core coil generate the AC field through an LC resonant circuit.



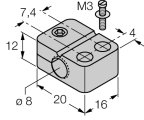
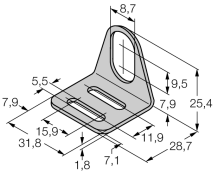
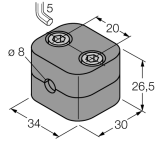
Type code	NI3-EG08-AN6X
Ident no.	4602840
Rated operating distance Sn	3 mm
Mounting condition	non-flush
Assured sensing range	$\leq (0,81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	$\leq 2\%$ of full scale
Temperaturdrift	10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
Operating voltage	10...30VDC
Residual ripple	$\leq 10\% U_{ss}$
DC rated operational current	≤ 150 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_N	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, NPN
Switching frequency	3 kHz
Design	threaded barrel, M8 x 1
Dimensions	41.6 mm
Housing material	Metal, V4A (1.4404)
Material active face	Plastic, PA
End cap	Plastic, PP
Max. tightening torque housing nut	10 Nm
Connection	cable
Cable quality	4 mm, LiYY-11Y, PUR, 2 m
Cable cross section	3 x 0.25 mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	● yellow

**Inductive sensor
NI3-EG08-AN6X**

Distance D	3 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Distance N	2 x Sn
<hr/>	
Diameter of the active area B	Ø 8 mm



Accessories

Type code	Ident no.	Description	Dimension drawing
BST-08B	6947210	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	 <p>Technical drawing of a rectangular fixing clamp. Dimensions: 12 (height), 7.4 (width), 20 (length), 16 (width of base), 4 (width of top flange), and a hole diameter of 8. An M3 screw is shown passing through the top flange.</p>
MW-08	6945008	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	 <p>Technical drawing of a U-shaped mounting bracket. Dimensions: 8.7 (height of the U-shape), 9.5 (height of the base), 7.9 (width of the base), 25.4 (total width), 15.9 (width of the U-shape), 31.8 (total length), 1.8 (thickness of the base), 7.1 (width of the U-shape), and 28.7 (total length including base).</p>
BSS-08	6901322	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	 <p>Technical drawing of a rectangular mounting bracket. Dimensions: 5 (height of the top flange), 20 (width), 26.5 (height), 34 (length), and 30 (width of the base). A hole diameter of 8 is indicated.</p>