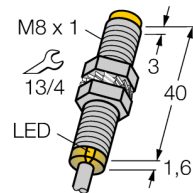


# Inductive sensor NI3-EG08-AP6X

**TURCK**

Industrial  
Automation



- Threaded barrel, M8 x 1
- Stainless steel, 1.4427 SO
- 3-wire DC, 10...30 VDC
- NO contact, PNP output
- Cable connection

### Wiring diagram



### Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

We offer special versions for temperatures of -60 °C up to +250 °C.

<b>Type code</b>	NI3-EG08-AP6X
Ident no.	4602740
<b>Rated operating distance Sn</b>	3 mm
Mounting condition	non-flush
Assured sensing range	≤ (0,81 x Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	≤ 2 % of full scale
Temperature drift	10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
<b>Operating voltage</b>	10...30VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
DC rated operational current	≤ 150 mA
No-load current I <sub>0</sub>	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I <sub>0</sub>	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, PNP
Switching frequency	3 kHz
<b>Design</b>	threaded barrel, M8 x 1
Dimensions	41.6 mm
Housing material	stainless steel, 1.4427 SO
Material active area	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 <sup>2</sup>
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
<b>Switching state</b>	LED yellow

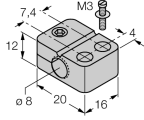
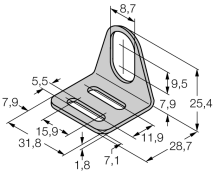
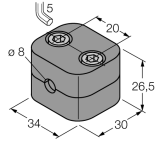
**Inductive sensor  
NI3-EG08-AP6X**

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

**Diameter of the active area B**                       $\varnothing$  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 M3 (thread size of hole).</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), 9.5 (height of lip), 25.4 (width of lip), 7.9 (width of lip), 11.9 (width of lip), 28.7 (width of lip), 7.1 (width of lip), 1.8 (width of lip), 15.9 (width of lip), 31.8 (width of lip), 7.9 (width of lip), 5.5 (width of lip), and 7.9 (width of lip).</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), 20 (width), 26.5 (height), 34 (width), and 30 (width).</p>