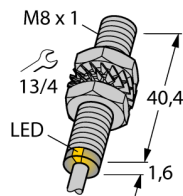


**Inductive sensor
with extended temperature range
BI2-EG08-AN6X/S100**



- Threaded barrel, M8 x 1
- Stainless steel, 1.4427 SO
- For temperatures up to +100 °C
- 3-wire DC, 10...30 VDC
- NO contact, NPN output
- Cable connection

Wiring diagram

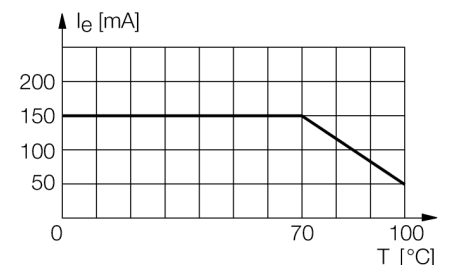


Functional principle

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.

Special versions are available for ambient temperatures between -60°C and +250°C.

derating curve



Type code	BI2-EG08-AN6X/S100
Ident no.	4602108
Rated operating distance Sn	2 mm
Mounting condition	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 %
	≤ ± 20 %, ≥ +70 °C
Hysteresis	3...15 %
Ambient temperature	-25...+100 °C
Operating voltage	10...30VDC
Residual ripple	≤ 10 % U _{in}
DC rated operational current	≤ 150 mA
Rated operational current	see derating curve
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 _e	≤ 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	42 mm
Housing material	stainless steel, 1.4427 SO
Material active area	Plastic, PA
End cap	Plastic, PA12-GF30
Max. tightening torque housing nut	10 Nm
Connection	cable
Cable quality	3 mm, Lif12Y33Y, TPE, 2 m
Cable cross section	3 x 0.14 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	LED yellow

**Inductive sensor
with extended temperature range
BI2-EG08-AN6X/S100**

Distance D	2 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn

Diameter of the active area B \varnothing 8 mm

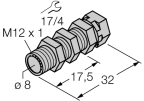
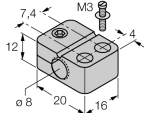
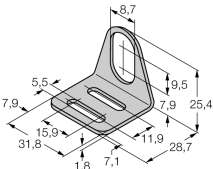


**Inductive sensor
with extended temperature range
BI2-EG08-AN6X/S100**

TURCK

Industrial
Automation

Accessories

Type code	Ident no.	Description	Dimension drawing
QM-08	6945100	Quick-mount bracket with dead-stop, chrome-plated brass, male thread M12 x 1. Note: The switching distance of proximity switches may be reduced through the use of quick-mount brackets.	
BST-08B	6947210	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	
MW-08	6945008	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	
BSS-08	6901322	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	