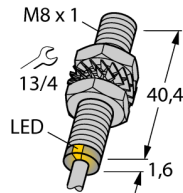


Inductive sensor BI2-EG08-AZ14X

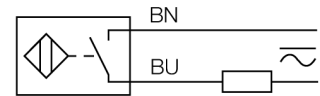
TURCK

Industrial
Automation



- Threaded barrel, M8 x 1
- Stainless steel, 1.4404
- AC 2-wire, 20...132 VAC
- DC 2-wire, 10...140 VDC
- NO contact
- Cable connection

Wiring diagram



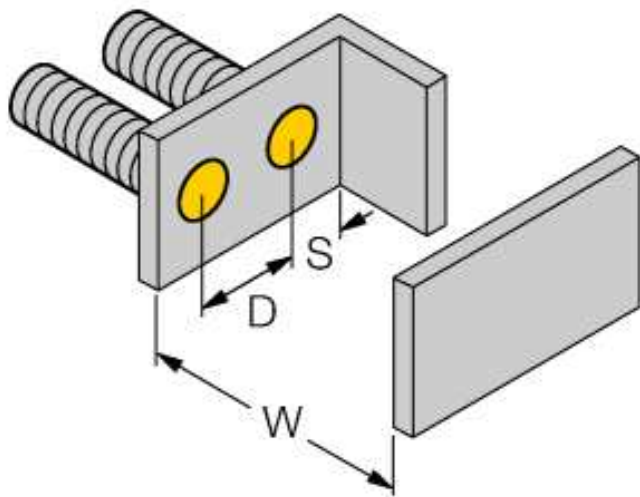
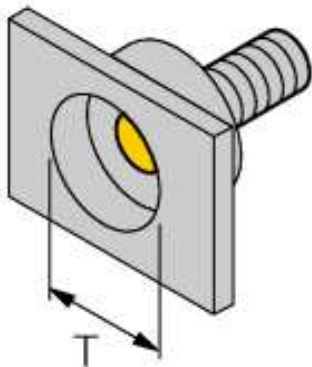
Functional principle

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	BI2-EG08-AZ14X
Ident no.	4100001
Rated operating distance Sn	2 mm
Mounting condition	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	1...15 %
Ambient temperature	-25...+70 °C
Operating voltage	20...132 VAC
Operating voltage	10...140VDC
AC rated operational current	≤ 100 mA
DC rated operational current	≤ 100 mA
Frequency	$\geq 50... \leq 60$ Hz
Residual current	≤ 0.6 mA
Rated insulation voltage	≤ 1.5 kV
Surge current	$\leq 0.2A$ (... 10 ms max. 0.2 A)
Voltage drop at I_n	≤ 6 V
Output function	2-wire, NO contact
Smallest operating current I_m	≤ 3 mA
Switching frequency	0.02 kHz
Design	threaded barrel, M8 x 1
Dimensions	42 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	5.2 mm, grey, LifYY-11Y, PUR, 2 m
Cable cross section	2×0.34 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
BI2-EG08-AZ14X**

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	Ø 8 mm



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	