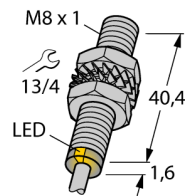


Inductive sensor BI2-EG08-AZ14X

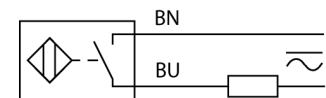
TURCK

Industrial
Automation



- Threaded barrel, M8 x 1
- Stainless steel, 1.4427 SO
- 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, 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.

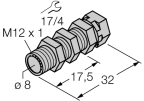
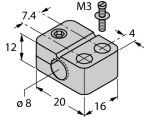
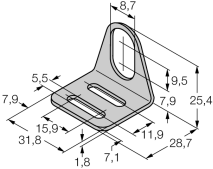
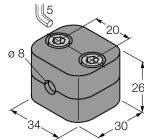
Type designation	BI2-EG08-AZ14X
Ident no.	4100001
Rated switching distance S_n	2 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0,81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	$\leq 2\%$ of full scale
Temperature drift	$\leq \pm 10\%$
Hysteresis	1...15 %
Ambient temperature	-25...+70 °C
Operating voltage	20...132VAC
Operating voltage	10...140 VDC
AC rated operational current	≤ 100 mA
DC rated operational current	≤ 100 mA
Frequency	$\geq 50... \leq 60$ Hz
Residual current	≤ 0.6 mA
Isolation test voltage	≤ 1.5 kV
Surge current	≤ 0.2 A (...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	Stainless steel, 1.4427 SO
Active area material	Plastic, PA12-GF30
End cap	Plastic, PA12-GF30
Max. tightening torque housing nut	5 Nm
Electrical connection	Cable
Cable quality	5.2 mm, Gray, LiFYY-11Y, PUR, 2m
Cable cross section	2 x 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	LED 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
<hr/>	
Diameter active area B	Ø 8 mm



Accessories

Type code	Ident no.	Description	
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	
MBS80	69479	Mounting bracket for threaded barrel devices; material mounting block: Anodized aluminium	