BI2-EG08-AZ14X
Inductive Sensor

Technical data

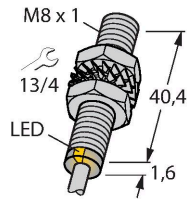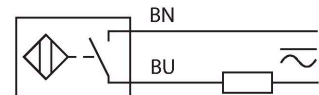|	
Type	BI2-EG08-AZ14X
ID	4100001
General data	
Rated switching distance	2 mm
Mounting conditions	Flush
Secured operating distance	≤ (0.81 × Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ±10 %
Hysteresis	1…15 %
Electrical data	
Operating voltage U_B	20…132 VAC
Operating voltage U_B	10…140 VDC
AC rated operational current	≤ 100 mA
DC rated operating current I_e	≤ 100 mA
Frequency	≥ 50…≤ 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_e	≤ 6 V
Output function	2-wire, NO contact, 2-wire
Smallest operating current	≥ 3 mA
Switching frequency	0.02 kHz

Features

- 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.

Technical data

Mechanical data	
Design	Threaded barrel, M8 x 1
Dimensions	42 mm
Housing material	Stainless steel, 1.4427 SO
Active area material	Plastic
End cap	Plastic, PA12-GF30
Max. tightening torque of housing nut	5 Nm
Electrical connection	Cable
Cable quality	Ø 5.2 mm, Gray, LifYY-11Y, PUR, 2 m
Core cross-section	2 x 0.34 mm^2
Environmental conditions	
Ambient temperature	-25…+70 °C
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

Mounting instructions

Mounting instructions/Description

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 active area B	Ø 8 mm

Accessories

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

Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

MW08   6945008

Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)

BSS-08   6901322

Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene

MBS80   69479

Mounting clamp for smooth barrel
sensors; mounting block material:
Anodized aluminum