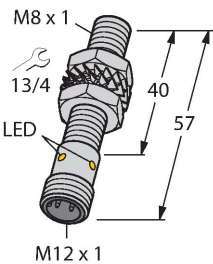


BI2-EG08-AG6X-H1341

Inductive Sensor



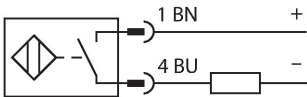
Technical data

Type	BI2-EG08-AG6X-H1341
ID	100018000
General data	
Rated switching distance	2 mm
Mounting conditions	Flush
Secured operating distance	≤ (0.81 × S _n) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 10 % of full scale
Temperature drift	≤ ±10 %
Hysteresis	1...15 %
Electrical data	
Operating voltage U _B	10...30 VDC
Ripple U _{ss}	≤ 10 % U _{Bmax}
DC rated operating current I _o	≤ 100 mA
Rated operational current	at 25°C
Residual current	≤ 0.8 mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at I _o	≤ 3.5 V
Wire break/reverse polarity protection	Polarized
Output function	NO contact, 2-wire
Smallest operating current	≥ 3 mA
Switching frequency	0.3 kHz
Mechanical data	
Design	Threaded barrel, M8 x 1
Dimensions	57 mm

Features

- Threaded barrel, M8 x 1
- Stainless steel, 1.4427 SO
- DC 2-wire, 10...30 VDC
- Polarized version
- NO contact
- M12 x 1 male connector

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

Housing material	Stainless steel, 1.4427 SO
Active area material	Plastic
Max. tightening torque of housing nut	5 Nm
Electrical connection	Connector, M12 × 1
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

A side view of a square mounting bracket with a central circular hole. A dimension line labeled 'T' indicates the thickness of the bracket.

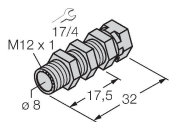
Two square mounting brackets are shown, one in front of the other, with a dimension line labeled 'G' indicating the distance between their centers.

Two square mounting brackets are shown side-by-side. A dimension line labeled 'D' indicates the distance between the centers of the two holes. A dimension line labeled 'S' indicates the distance from the edge of the bracket to the center of the hole. A dimension line labeled 'W' indicates the width of the bracket.

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

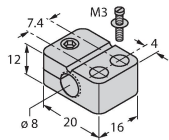
Accessories

QM-08 6945100



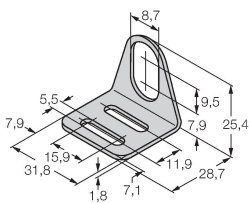
Quick-mount bracket with dead-stop, chrome-plated brass, male thread M12 x 1. Note: The switching distance of proximity switches may be reduced through the use of quick-mount brackets.

BST-08B 6947210



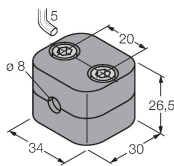
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

MW08 6945008



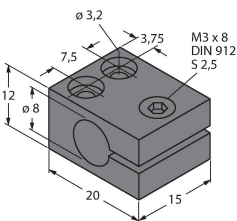
Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)

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