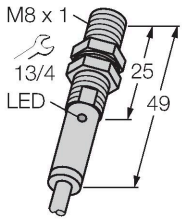
BI1.5-EG08F-AP6X
Inductive Sensor – Stainless Steel Front



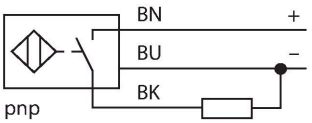
Technical data

Type	BI1.5-EG08F-AP6X
ID	4614626
General data	
Rated switching distance	1.5 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	≤ 10 % of full scale
Temperature drift	≤ ±20 %
Hysteresis	3…15 %
Electrical data	
Operating voltage	10…30 VDC
Residual ripple	≤ 10 % U_{ss}
DC rated operational current	≤ 200 mA
No-load current	10 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes / Cyclic
Voltage drop at I_e	≤ 2 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, PNP
Switching frequency	0.2 kHz

Features

- Threaded barrel, M8 x 1
- Stainless steel, 1.4305
- DC 3-wire, 10…30 VDC
- NO contact, PNP output
- Cable connection

Wiring diagram



Functional principle

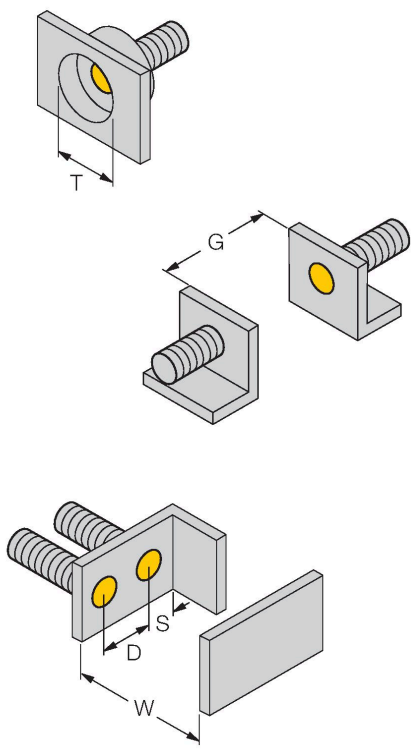
Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

Technical data

Mechanical data	
Design	Threaded barrel, M8 x 1
Dimensions	49 mm
Housing material	Stainless steel, 1.4305 (AISI 303)
Active area material	Stainless steel, 1.4305 (AISI 303)
Max. tightening torque of housing nut	9 Nm
Electrical connection	Cable
Cable quality	Ø 4 mm, Gray, LifYY, PVC, 2 m
Core cross-section	3 x 0.25 mm^2
Environmental conditions	
Ambient temperature	-25…+70 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
Switching state	LED, Yellow

Mounting instructions

Mounting instructions/Description



Distance D	30 mm
Distance W	4.5 mm
Distance T	8 mm (Fe metal); 50 mm (non Fe-metal)
Distance S	15 mm (Fe metal); 25 mm (non Fe-metal)
Distance G	35 mm
Diameter active area B	Ø 8 mm

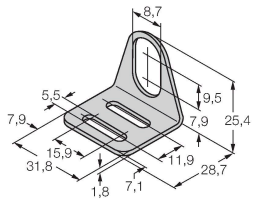
Switching distance not reduced when flush mounted in ferrous metals

When mounted in non-ferrous metals the active face has to protrude 10 mm.

The values depend on the mounting nuts used. Therefore we recommend the use of the nuts which are included in the delivery.

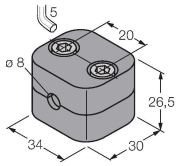
Accessories

MW-08	6945008



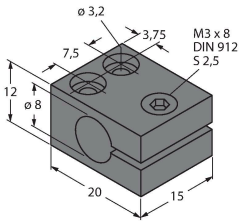
Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)

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