

BI1.5-EG08F-AN6X

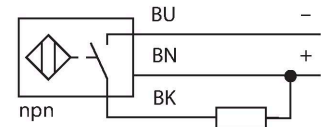
Inductive Sensor – Stainless Steel Front



Features

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

Wiring diagram



Technical data

Type	BI1.5-EG08F-AN6X
Ident. no.	4614627
Rated switching distance	1.5 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	≤ 10 % of full scale
Temperature drift	$\leq \pm 20$ %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
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_o	≤ 2 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, NPN
Switching frequency	0.2 kHz
Design	Threaded barrel, M8 x 1
Dimensions	49 mm

Functional principle

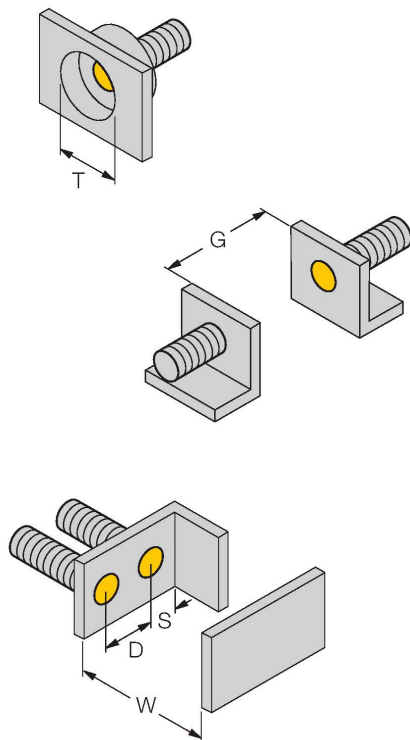
Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

Technical data

Housing material	Stainless steel, 1.4305 (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
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

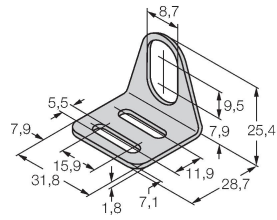
When mounted in non-ferrous metals the active face has to protrude 10 mm.

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

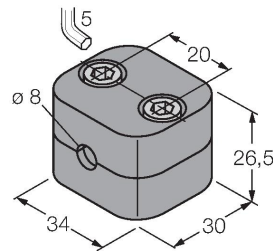
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Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)

BSS-08

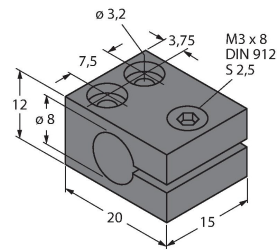
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Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene

MBS80

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