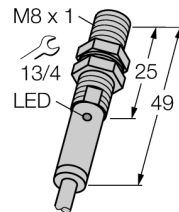
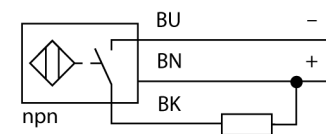


Inductive Sensor Stainless Steel Front BI1.5-EG08F-AN6X



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

Wiring Diagram



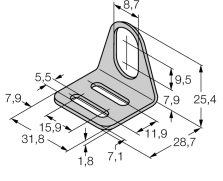
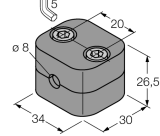
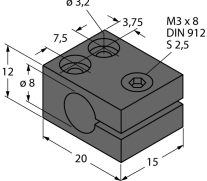
Functional principle

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.

Type	BI1.5-EG08F-AN6X
ID	4614627
General data	
Rated switching distance S_n	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 %
Electrical data	
Operating voltage U_o	10...30 VDC
Ripple U_{rs}	≤ 10 % U_{Bmax}
DC rated operating current I_o	≤ 200 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 break/reverse polarity protection	yes/Complete
Output function	3-wire, NO contact, NPN
Switching frequency	0.2 kHz
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 4mm, Gray, LiYY, 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

Accessories

Type code	Ident-No.		Dimension drawing
MW-08	6945008	Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)	 Technical drawing of the MW-08 mounting bracket. It is a U-shaped bracket with a flat base and a vertical back. Dimensions are: base width 31.8, base thickness 1.8, base height 7.9, back height 25.4, back width 8.7, and a central slot width of 15.9.
BSS-08	6901322	Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene	 Technical drawing of the BSS-08 mounting clamp. It is a cylindrical clamp with two circular sensor ports. Dimensions are: outer diameter 26.5, inner diameter 20, and a height of 34. The sensor ports have a diameter of 8.
MBS80	69479	Mounting clamp for smooth barrel sensors; mounting block material: Anodized aluminum	 Technical drawing of the MBS80 mounting clamp. It is a rectangular block with two circular sensor ports. Dimensions are: length 20, width 15, and height 12. The sensor ports have a diameter of 8. The block has a central slot with a width of 7.5 and a depth of 3.75. The mounting holes have a diameter of 3.2. The block is made of anodized aluminum.