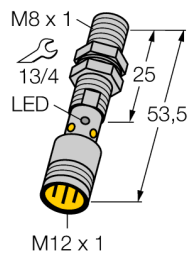


Inductive Sensor

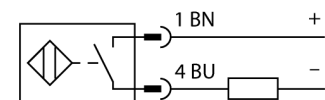
Stainless Steel Front

BI1.5-EG08F-AG6X-H1341



- Threaded barrel, M8 x 1
- Stainless steel, 1.4305
- DC 2-wire, 10...30 VDC
- Polarized version
- NO contact
- M12 x 1 male connector

Wiring Diagram



Type	BI1.5-EG08F-AG6X-H1341
ID	4614631
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	1...15 %
Electrical data	
Operating voltage U_o	10...30 VDC
Ripple U_{ri}	≤ 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
Smallest operating current I_{min}	≥ 3 mA
Switching frequency	0.2 kHz
Mechanical data	
Design	Threaded barrel, M8 x 1
Dimensions	53.3 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	Connector, M12 x 1
Environmental conditions	
Ambient temperature	-25...+70 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67

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.

Switching state

2-color LED, Red/green

Accessories

Type code	Ident-No.		Dimension drawing
MW-08	6945008	Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)	Isometric view of the mounting bracket MW-08. Dimensions are provided in millimeters: 8,7, 9,5, 25,4, 7,9, 11,9, 28,7, 7,1, 1,8, 31,8, 15,9, 5,5, 7,9.
BSS-08	6901322	Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene	Isometric view of the mounting clamp BSS-08. Dimensions are provided in millimeters: 5, 20, 26,5, 30, 34, ø 8.
MBS80	69479	Mounting clamp for smooth barrel sensors; mounting block material: Anodized aluminum	Isometric view of the mounting clamp MBS80. Dimensions are provided in millimeters: 12, ø 8, 20, 15, 7,5, 3,2, 3,75, M3 x 8 DIN 912 S 2,5.