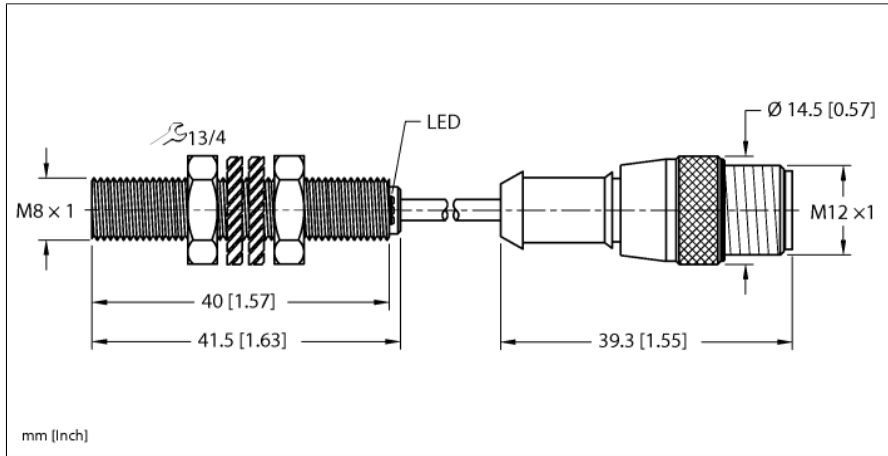
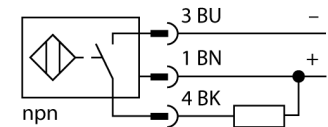


Inductive Sensor With Weldguard® coating BI2-EG08-AN6X-1-RS4T/S1589



- Threaded barrel, M8 × 1
- Stainless steel, 1.4305 (AISI 303)
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- Pigtail with M12 × 1 connector

Wiring Diagram



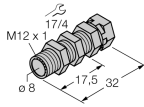
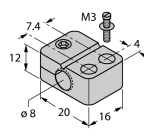
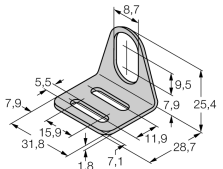
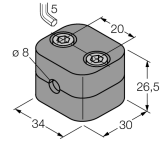
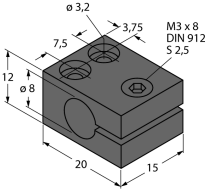
Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this purpose they use a high-frequency electromagnetic AC field that interacts with the target. The sensors hosting a ferrite core coil generate the AC field through an LC resonant circuit.

Type	BI2-EG08-AN6X-1-RS4T/S1589
ID	4602175
Special version	S1589 Corresponds to: With weldguard coating
General data	
Rated switching distance S_n	2 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	$\leq 2\%$ of full scale
Hysteresis	20 %
Electrical data	
Operating voltage U_s	10...30 VDC
Ripple U_{rs}	$\leq 10\%$ U_{Bmax}
DC rated operating current I_s	≤ 150 mA
Residual current	≤ 0.1 mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at I_s	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Output function	3-wire, NO contact, NPN
Switching frequency	3 kHz
Mechanical data	
Design	Threaded barrel, M8 x 1
Dimensions	41.5 mm
Housing material	Stainless steel, 1.4305 (AISI 303)
Active area material	Plastic, PA6.6
End cap	Plastic, PP
Material coupling nut	metal, CuZn, nickel-plated
Max. tightening torque of housing nut	5 Nm
Electrical connection	Cable with connector, M12 × 1
Cable quality	Ø 3.3mm, Gray, LiFY-11Y, PUR, 1 m
Core cross-section	3 x 0.14 mm ²

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

Accessories

Type code	Ident-No.		Dimension drawing
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.	 <p>Technical drawing of a quick-mount bracket (QM-08) showing dimensions: M12 x 1 thread, 17.4 mm length, 17.5 mm diameter, and 32 mm total length.</p>
BST-08B	6947210	Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6	 <p>Technical drawing of a mounting clamp (BST-08B) showing dimensions: 7.4 mm width, 12 mm height, 8 mm diameter hole, 20 mm length, 16 mm depth, and 4 mm offset. It includes an M3 screw.</p>
MW-08	6945008	Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)	 <p>Technical drawing of a mounting bracket (MW-08) showing dimensions: 8.7 mm width, 5.5 mm height, 7.9 mm offset, 15.9 mm length, 1.8 mm thickness, 7.1 mm offset, 11.9 mm length, 28.7 mm length, 7.9 mm offset, 9.5 mm height, 25.4 mm length, and 31.8 mm length.</p>
BSS-08	6901322	Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene	 <p>Technical drawing of a mounting clamp (BSS-08) showing dimensions: 5 mm height, 20 mm length, 26.5 mm height, 34 mm width, and 30 mm width. It includes an 8 mm diameter hole.</p>
MBS80	69479	Mounting clamp for smooth barrel sensors; mounting block material: Anodized aluminum	 <p>Technical drawing of a mounting clamp (MBS80) showing dimensions: 12 mm height, 8 mm diameter hole, 7.5 mm width, 3.2 mm diameter hole, 3.75 mm offset, 20 mm length, 15 mm width, and M3 x 8 DIN 912 S 2.5 screw.</p>