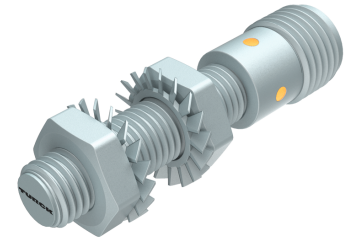
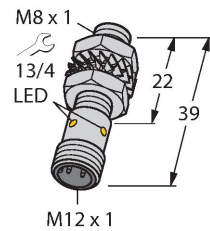


BI2-EGT08K-AG41X-H1341/S1589

Inductive Sensor – With Weldguard® coating



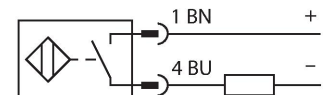
Technical data

Type	BI2-EGT08K-AG41X-H1341/S1589
ID	4602599
Special version	S1589 Corresponds to: With weldguard coating
General data	
Rated switching distance	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	≤ 2 % of full scale
Hysteresis	1...15 %
Electrical data	
Operating voltage U_B	10...55 VDC
Ripple U_{rs}	≤ 10 % U_{Bmax}
DC rated operating current I_B	≤ 100 mA
Residual current	≤ 0.6 mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at I_B	≤ 3.5 V
Wire break/reverse polarity protection	Polarized
Output function	NO contact, 2-wire
Smallest operating current	≥ 3 mA
Switching frequency	1 kHz

Features

- Threaded barrel, M8 x 1
- Stainless steel, PTFE-coated
- DC 2-wire, 10...55 VDC
- Polarized version
- NO contact
- M12 x 1 male 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.

Technical data

Mechanical data	
Design	Threaded barrel, M8 x 1
Dimensions	39 mm
Housing material	Stainless steel, 1.4427 SO, PTFE-coated
Active area material	Plastic, PA12-GF20, PTFE-coated
Max. tightening torque of housing nut	5 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
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED, Yellow

Mounting instructions

Mounting instructions/Description

Diagram showing the side view of the mounting bracket. Dimension T is indicated as the distance from the bottom edge of the bracket to the center of the active area (yellow circle).

Diagram showing the top view of the mounting bracket. Dimension G is indicated as the distance between the two mounting holes (yellow circles).

Diagram showing the front view of the mounting bracket. Dimensions D, S, and W are indicated. D is the distance from the bottom edge to the center of the active area. S is the distance from the center of the active area to the edge of the bracket. W is the width of the bracket.

Distance D	$3 \times B$
Distance W	$3 \times S_n$
Distance T	$3 \times B$
Distance S	$1.5 \times B$
Distance G	$6 \times S_n$
Diameter active area B	$\varnothing 8 \text{ mm}$

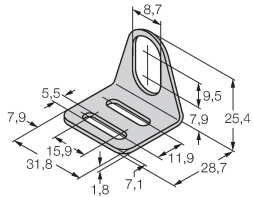
BI2-EGT08K-AG41X-H1341/S1589| 02/21/2025 14-03 | technical changes reserved

Accessories

MW08

6945008

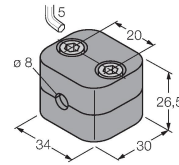
Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)



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

