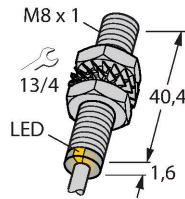


BI2-EGT08-AG41X

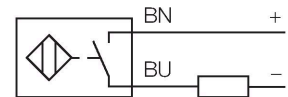
Inductive Sensor



Features

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

Wiring diagram



Technical data

Type	BI2-EGT08-AG41X
ID	4602540
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	10...55 VDC
Residual ripple	≤ 10 % U_{ss}
DC rated operational current	≤ 100 mA
Residual current	≤ 0.6 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes / Cyclic
Voltage drop at I_o	≤ 3.5 V
Wire breakage/Reverse polarity protection	Polarized
Output function	NO contact, 2-wire
Smallest operating current	≥ 3 mA
Switching frequency	1 kHz
Mechanical data	
Design	Threaded barrel, M8 x 1

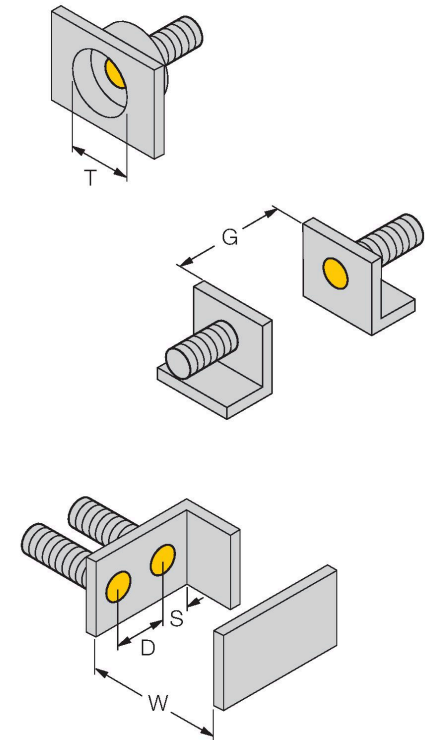
Functional principle

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

Dimensions	41.6 mm
Housing material	Stainless steel, 1.4427 SO, PTFE-coated
Active area material	Plastic, PA12-GF20, PTFE-coated
End cap	Plastic, PP
Max. tightening torque of housing nut	5 Nm
Electrical connection	Cable
Cable quality	Ø 4 mm, LifYY-11Y, PUR, 2 m
Core cross-section	2 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
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED, Yellow

Mounting instructions

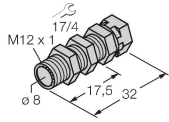
Mounting instructions/Description		
	Distance D	3 × B
	Distance W	3 × Sn
	Distance T	3 × B
	Distance S	1.5 × B
	Distance G	6 × Sn
	Diameter active area B	Ø 8 mm

BI2-EGT08-AG41X | 11/07/2023 13-59 | technical changes reserved

Accessories

QM-08

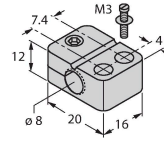
6945100



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.

BST-08B

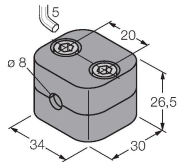
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Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

BSS-08

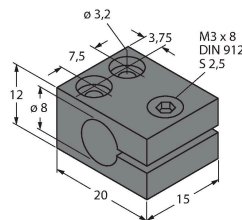
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Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene

MBS80

69479



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