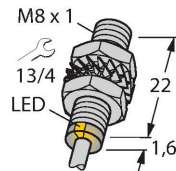


BI2-EGT08K-AG41X

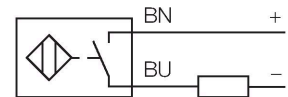
Inductive Sensor



Features

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

Wiring diagram



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

Type	BI2-EGT08K-AG41X
ID	4602545
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
Temperature drift	$\leq \pm 10$ %
Hysteresis	1...15 %
Electrical data	
Operating voltage U_B	10...55 VDC
Ripple U_{rs}	≤ 10 % U_{Bmax}
DC rated operating current I_o	≤ 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 break/reverse polarity protection	Polarized
Output function	NO contact, 2-wire
Smallest operating current	≥ 3 mA
Switching frequency	1 kHz

Technical data

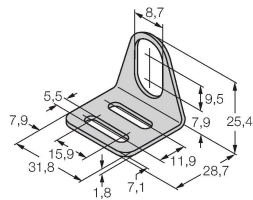
Mechanical data	
Design	Threaded barrel, M8 x 1
Dimensions	23.6 mm
Housing material	Stainless steel, 1.4427 SO, PTFE-coated
Active area material	Plastic, PA12-GF20, PTFE-coated
End cap	Plastic, PP
Max. tightening torque of housing nut	5 Nm
Electrical connection	Cable
Cable quality	Ø 4 mm, LifYY-11Y, 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

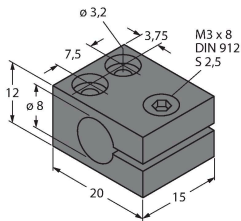
Mounting instructions/Description	
	Distance D
	$3 \times B$
	Distance W
	$3 \times S_n$
	Distance T
	$3 \times B$
	Distance S
	$1.5 \times B$
	Distance G
	$6 \times S_n$
	Diameter active area B
	$\varnothing 8 \text{ mm}$

Accessories

MW08	6945008
Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)	



MBS80	69479
Mounting clamp for smooth barrel sensors; mounting block material: Anodized aluminum	



BSS-08	6901322
Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene	

