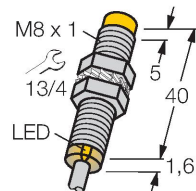


NI4-EG08-AG41X

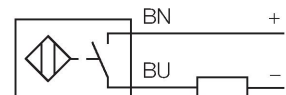
Inductive Sensor – With Increased Switching Distance



Features

- Threaded barrel, M8 x 1
- Stainless steel, 1.4427 SO
- Large sensing range
- 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	NI4-EG08-AG41X
ID	4561000
General data	
Rated switching distance	4 mm
Mounting conditions	Non-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_{ss}	≤ 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	0.3 kHz
Mechanical data	
Design	Threaded barrel, M8 x 1
Dimensions	42 mm
Housing material	Stainless steel, 1.4427 SO

Technical data

Active area material	Plastic
End cap	Plastic, PP
Max. tightening torque of housing nut	5 Nm
Electrical connection	Cable
Cable quality	Ø 4 mm, LiFY-11Y, PUR, 2 m
Core cross-section	2 x 0.25 mm²
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

The image contains three technical diagrams illustrating different mounting configurations for a device. The device is represented as a grey rectangular plate with a yellow circular active area in the center.

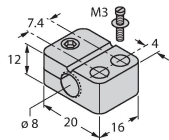
- Top Diagram:** Shows a single device mounted on a wall. The dimension T is indicated as the distance from the wall to the center of the active area.
- Middle Diagram:** Shows two devices mounted on a wall. The dimension G is the distance between the centers of the two devices, and S is the distance from the wall to the center of the device.
- Bottom Diagram:** Shows three devices mounted on a wall. The dimension N is the distance between the centers of the two top devices. The dimension S is the distance from the wall to the center of the device. The dimension D is the distance between the centers of the two bottom devices. The dimension W is the distance from the wall to the center of the device.

Distance D	$3 \times B$
Distance W	$3 \times S_n$
Distance T	$3 \times B$
Distance S	$1.5 \times B$
Distance G	$6 \times S_n$
Distance N	$2 \times S_n$
Diameter active area B	$\varnothing 8 \text{ mm}$

Accessories

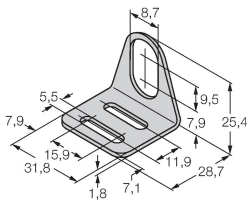
BST-08B 6947210

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



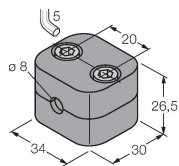
MW08 6945008

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

