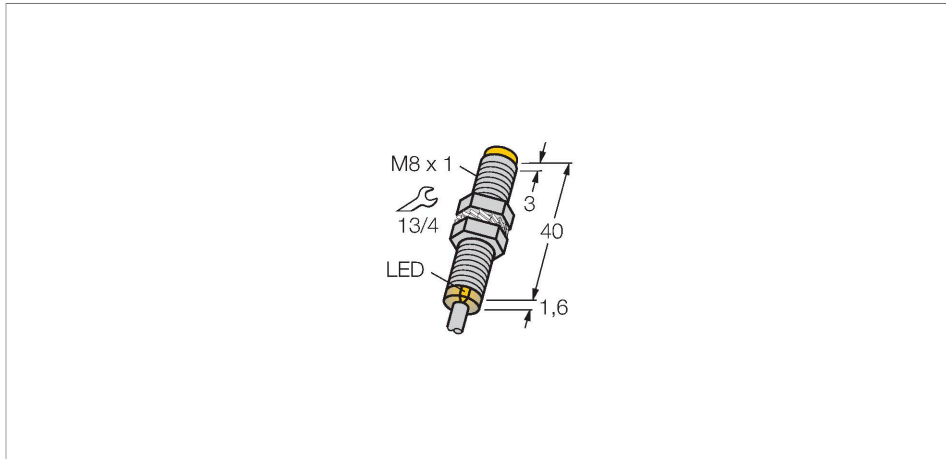


# NI4-EG08-AG41X

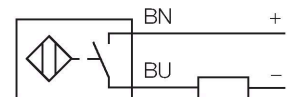
## Inductive Sensor – With Increased Switching Distance



### 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



### Technical data

Type	NI4-EG08-AG41X
Ident. no.	4561000
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	$\leq 2\%$ of full scale
Temperature drift	$\leq \pm 10\%$
Hysteresis	1...15 %
Ambient temperature	-25...+70 °C
Operating voltage	10...55 VDC
Residual ripple	$\leq 10\% U_{ss}$
DC rated operational current	$\leq 100$ mA
Residual current	$\leq 0.6$ mA
Isolation test voltage	$\leq 0.5$ kV
Short-circuit protection	yes / Cyclic
Voltage drop at $I_e$	$\leq 3.5$ V
Wire breakage/Reverse polarity protection	Polarized
Output function	NO contact, 2-wire
Smallest operating current	$\geq 3$ mA
Switching frequency	0.3 kHz
Design	Threaded barrel, M8 x 1
Dimensions	41.6 mm
Housing material	Stainless steel, 1.4427 SO

### Functional principle

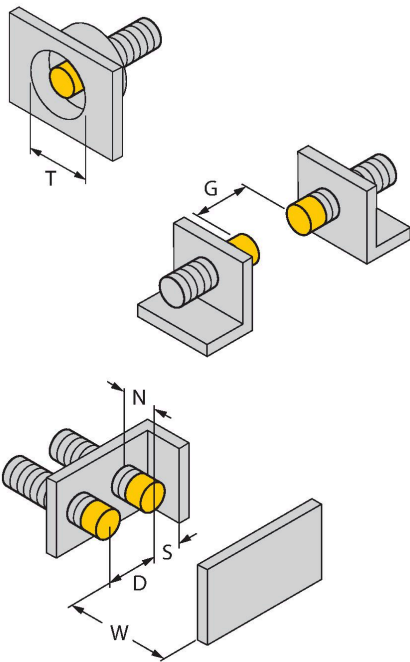
Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

## Technical data

Active area material	Plastic, PA12-GF30
End cap	Plastic, PP
Max. tightening torque 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 <sup>2</sup>
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

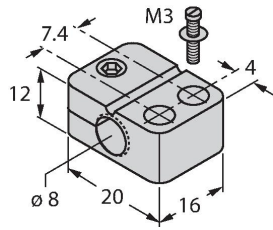


Distance D	3 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Distance N	2 x Sn
Diameter active area B	Ø 8 mm

## Accessories

**BST-08B**

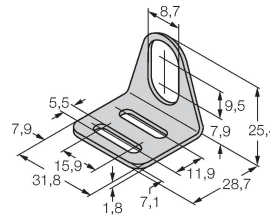
6947210



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

**MW08**

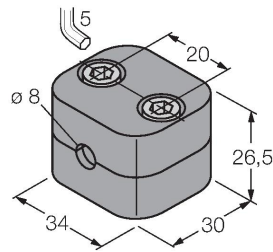
6945008



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

**BSS-08**

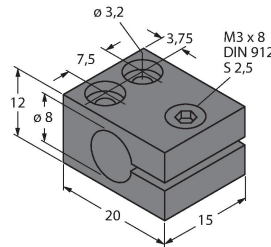
6901322



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

**MBS80**

69479



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