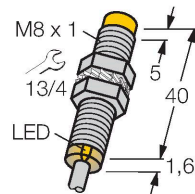


# NI6U-EG08-AN6X

## Inductive Sensor – With Extended Switching Distance



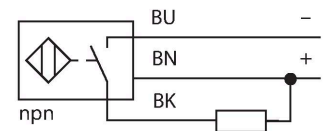
### Features

- Threaded barrel, M8 x 1
- Stainless steel, 1.4427 SO
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Large switching distance
- High switching frequency
- Integrated protection against predamping
- Little metal-free spaces
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- Cable connection

### Technical data

Type	NI6U-EG08-AN6X
ID	4635803
<b>General data</b>	
Rated switching distance	6 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2 \%$ of full scale
Temperature drift	$\leq \pm 10 \%$ $\leq \pm 20 \%, \leq 0 \text{ }^{\circ}\text{C}$
Hysteresis	3...15 %
<b>Electrical data</b>	
Operating voltage	10...30 VDC
Residual ripple	$\leq 10 \%$ $U_{ss}$
DC rated operational current	$\leq 150$ mA
No-load current	15 mA
Residual current	$\leq 0.1$ mA
Isolation test voltage	$\leq 0.5$ kV
Short-circuit protection	yes / Cyclic
Voltage drop at $I_o$	$\leq 1.8$ V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, NPN
DC field stability	200 mT
AC field stability	200 mT <sub>ss</sub>
Insulation class	□
Switching frequency	1 kHz

### Wiring diagram



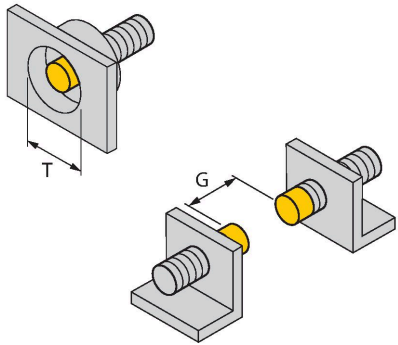
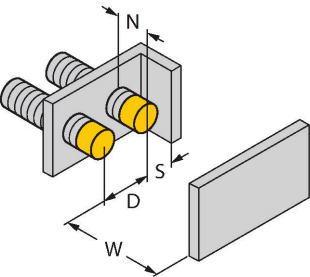
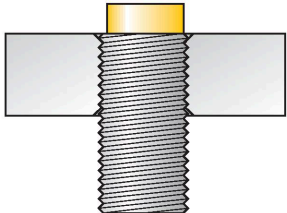
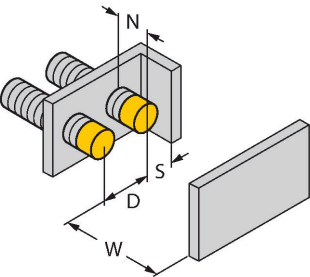
### Functional principle

Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox+ sensors have significant advantages due to their patented multi-coil system. They excel thanks to their optimum switching distances, maximum flexibility and operational reliability as well as efficient standardization.

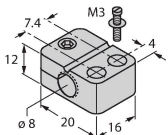
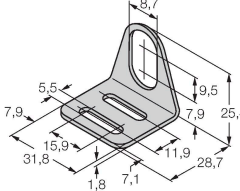
Technical data

Mechanical data	
Design	Threaded barrel, M8 x 1
Dimensions	42 mm
Housing material	Stainless steel, 1.4427 SO
Active area material	Plastic, PA12-GF30
End cap	Plastic, PP
Max. tightening torque of housing nut	5 Nm
Electrical connection	Cable
Cable quality	Ø 4 mm, LiYY-11Y, PUR, 2 m
Core cross-section	3 x 0.25 mm <sup>2</sup>
Environmental conditions	
Ambient temperature	-30...+85 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED, Yellow

Mounting instructions

Mounting instructions/Description	
	Distance D 32 mm
	Distance W 18 mm
	Distance T 32 mm
	Distance S 12 mm
	Distance G 36 mm
	Distance N 12 mm
	Diameter active area B Ø 8 mm
	All non-flush mountable uprox®+ threaded barrel sensors can be screwed to the upper edge of the barrel. In this mounting position, the sensor operates safely with a 20 % reduced switching distance.

Accessories

BST-08B	6947210	Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6	MW-08	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
