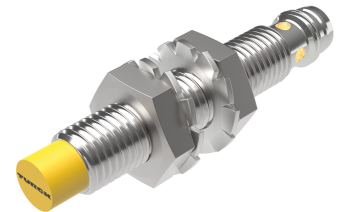
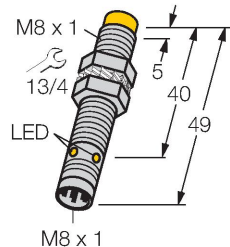


NI6U-EG08-RP6X-V1131

Inductive Sensor – With Extended Switching Distance



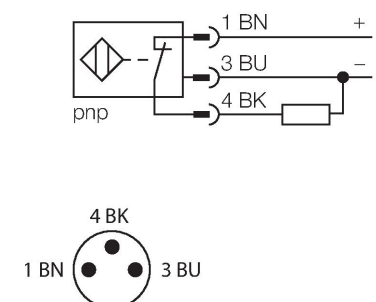
Technical data

Type	NI6U-EG08-RP6X-V1131
ID	4635831
General data	
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	$\leq \pm 10 \%$
	$\leq \pm 20 \%, \leq 0^\circ\text{C}$
Hysteresis	3...15 %
Electrical data	
Operating voltage	10...30 VDC
Residual ripple	$\leq 10 \%$ U_{ss}
DC rated operational current	≤ 150 mA
No-load current	15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes / Cyclic
Voltage drop at I_a	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NC contact, PNP
DC field stability	200 mT
AC field stability	200 mT _{ss}
Insulation class	□
Switching frequency	1 kHz

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
- NC contact, PNP output
- M8 x 1 male connector

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	49 mm
Housing material	Stainless steel, 1.4427 SO
Active area material	Plastic, PA12-GF30
Max. tightening torque of housing nut	5 Nm
Electrical connection	Connector, M8 x 1
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

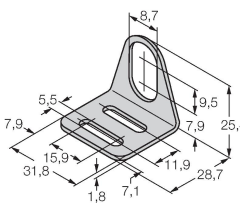
The diagrams illustrate the mounting of the uprox®+ threaded barrel sensor. The top diagram shows a side view of the sensor mounted on a plate with dimension T. The middle diagram shows a top view of the sensor mounted on a plate with dimension G. The bottom diagram shows a perspective view of the sensor mounted on a plate with dimensions N, S, D, and W.

A side view diagram of the threaded barrel sensor showing its internal structure and the yellow active area.

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
					

Accessories

Dimension drawing	Type	ID	
	PKGV3M-2/TEL	6625385	Connection cable, M8 female connector, straight, 3-pin, stainless steel coupling nut, cable length: 2 m, jacket material: PVC, black; cULus approval