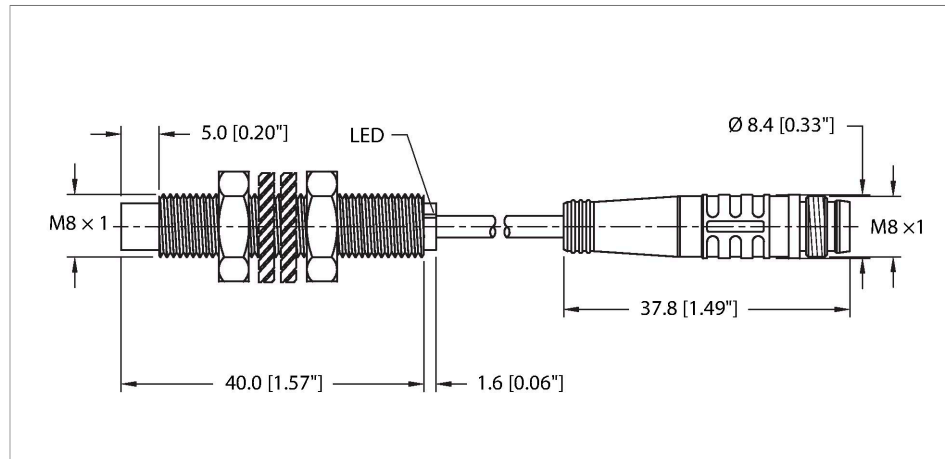


NI6U-EG08-AP6X-0.2-PSG3F

Inductive Sensor – With Extended Switching Distance



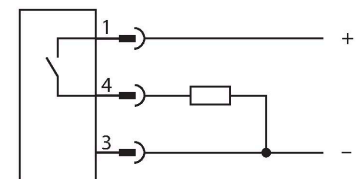
Features

- M8 × 1 threaded barrel
- Stainless steel, 1.4404
- 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, PNP output
- Pigtail with male end M8 x 1

Technical data

Type	NI6U-EG08-AP6X-0.2-PSG3F
ID	4635899
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
	$\leq \pm 20 \%, \leq 0^\circ \text{C}$
Hysteresis	3...15 %
Electrical data	
Operating voltage U_B	10...30 VDC
Ripple U_{ss}	$\leq 10 \%$ U_{Bmax}
DC rated operating current I_o	$\leq 150 \text{ mA}$
No-load current	$\leq 15 \text{ mA}$
Residual current	$\leq 0.1 \text{ mA}$
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at I_o	$\leq 1.8 \text{ V}$
Wire break/reverse polarity protection	yes/Complete
Output function	3-wire, NO contact, PNP
DC field stability	200 mT
AC field stability	200 mT _{SS}
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
Housing material	Stainless steel, 1.4427 SO
Active area material	Plastic
Max. tightening torque of housing nut	5 Nm
Electrical connection	Cable with connector, M8 x 1
Cable quality	Ø 4 mm, LifYY-11Y, PUR, 0.2 m
Core cross-section	3 x 0.25 mm ²
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 a threaded barrel sensor. The top diagram shows a side view of the sensor mounted to a plate with dimension T. The middle diagram shows a top view of the sensor mounted to a plate with dimension G. The bottom diagram shows a side view of the sensor mounted to a plate with dimensions N, S, D, and W.

A side view of the threaded barrel sensor showing the active area (yellow) and the threaded section.

Distance D	3 x B
Distance W	18 mm
Distance T	3 x B
Distance S	12 mm
Distance G	36 mm
Distance N	2 x Sn
Diameter active area B	Ø 8 mm

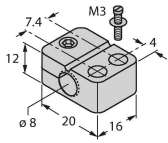
All non-flush mountable uprox®+ threaded barrel sensors can be screwed to the upper edge of the barrel. In this mounting position, the sensor operates safely with a 20 % reduced switching distance.

Accessories

BST-08B

6947210

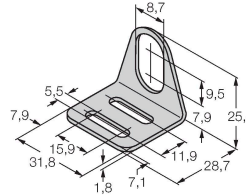
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6



MW08

6945008

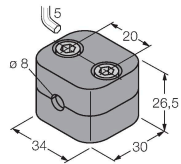
Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)



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

