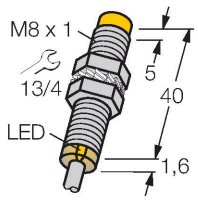
NI6U-EG08-AP6X
Inductive Sensor – With Extended Switching Distance



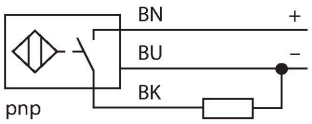
Features

- 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, PNP output
- Cable connection

Technical data

Type	NI6U-EG08-AP6X
ID	4635800
General data	
Rated switching distance	6 mm
Mounting conditions	Non-flush
Secured operating distance	≤ (0.81 × Sn) mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ±10 %
	≤ ± 20 %, ≤ 0 °C
Hysteresis	3…15 %
Electrical data	
Operating voltage U_B	10…30 VDC
Ripple U_{ss}	≤ 10 % U_{Bmax}
DC rated operating current I_e	≤ 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_e	≤ 1.8 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
Mechanical data	
Design	Threaded barrel, M8 x 1

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.

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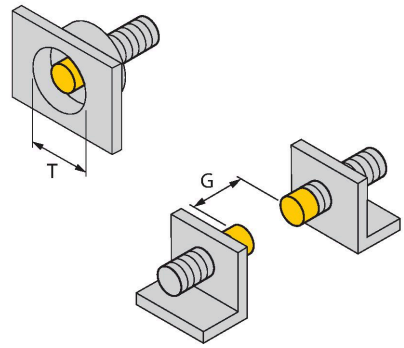
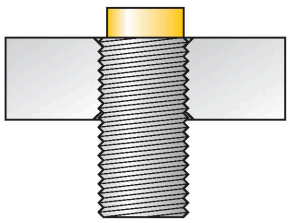
Technical data

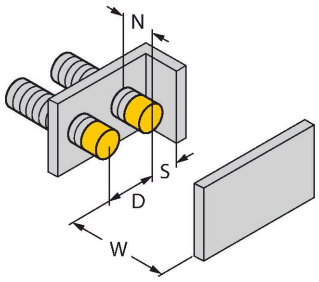
Dimensions	42 mm
Housing material	Stainless steel, 1.4427 SO
Active area material	Plastic
End cap	Plastic, PP
Max. tightening torque of housing nut	5 Nm
Electrical connection	Cable
Cable quality	Ø 4 mm, LifYY-11Y, PUR, 2 m
Core cross-section	3 x 0.25 mm²
Environmental conditions	
Ambient temperature	-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.

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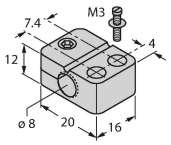
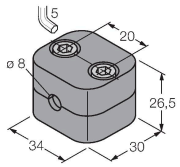
Accessories

BST-08B	6947210



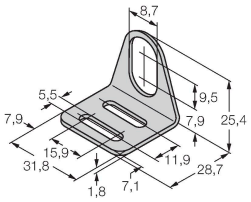
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

BSS-08	6901322



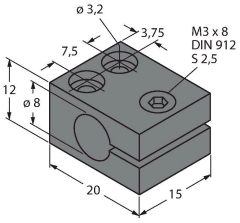
Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene

MW08	6945008



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

MBS80	69479



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

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