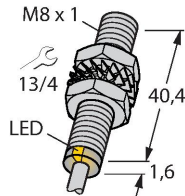


BI2U-EG08-AN6X

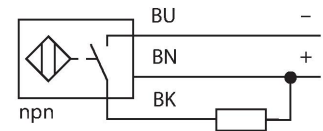
Inductive Sensor – With Extended Switching Distance



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
- Recessed mountable
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- Cable connection

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

Type	BI2U-EG08-AN6X
ID	4602035
General data	
Rated switching distance	2 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2 \%$ of full scale
Temperature drift	$\leq \pm 10 \%$ $\leq \pm 20 \%, \leq -25 \text{ °C} \vee \geq +70 \text{ °C}$
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	≤ 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_o	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Output function	3-wire, NO contact, NPN
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

Technical data

Dimensions	42 mm
Housing material	Stainless steel, 1.4427 SO
Active area material	Plastic
End cap	Plastic, PA12-GF30
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 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

Diagram showing the side view of a flush mountable sensor. Dimension T indicates the distance from the mounting surface to the active area of the sensor.

Diagram showing two sensors being mounted onto a plate. Dimension G indicates the distance between the mounting surfaces of the two sensors.

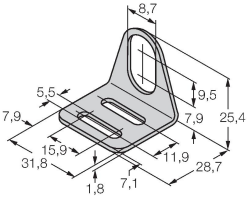
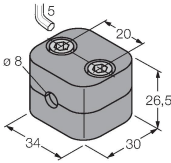
Diagram showing a top view of the sensor. Dimensions D, S, and W are indicated. D is the distance from the mounting surface to the active area. S is the distance between the active areas of two sensors. W is the width of the mounting surface.

Diagram showing a cross-sectional view of the sensor's threaded barrel. The active area is highlighted in yellow.

Distance D	16 mm
Distance W	6 mm
Distance T	24 mm
Distance S	12 mm
Distance G	12 mm
Diameter active area B	Ø 8 mm

All flush mountable uprox+ threaded barrel types are also recessed mountable. Safe operation is ensured if the sensor is screwed in by half a turn.

Accessories

QM-08	6945100	Quick-mount bracket with dead-stop, chrome-plated brass, male thread M12 x 1. Note: The switching distance of proximity switches may be reduced through the use of quick-mount brackets.	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			
