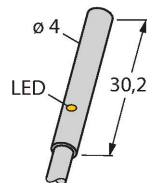


BI1U-EH04-AN6X

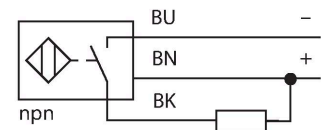
Inductive Sensor



Features

- Smooth barrel, Ø 4 mm
- Stainless steel, 1.4427 SO
- Factor 1 for all metals
- Resistant to magnetic fields
- Large switching distance
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- Cable connection

Wiring diagram



Technical data

Type	BI1U-EH04-AN6X
ID	4602114
General data	
Rated switching distance	1 mm
Mounting conditions	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	≤ 100 mA
No-load current	≤ 20 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}
Switching frequency	2 kHz

Functional principle

Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox3 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	Smooth barrel, 4 mm
Dimensions	30.2 mm
Housing material	Stainless steel, 1.4427 SO
Active area material	Plastic, PA12
End cap	Plastic, PA12
Electrical connection	Cable
Cable quality	Ø 3 mm, LifY-11Y, PUR, 2 m
Core cross-section	3 x 0.14 mm ²
Environmental conditions	
Ambient temperature	-25...+70 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED, Yellow

Mounting instructions

Mounting instructions/Description

The image contains three isometric diagrams illustrating different mounting configurations for a sensor. The top diagram shows a sensor with two yellow circular active areas mounted on a rectangular plate. Dimension lines indicate 'D' as the distance between the centers of the active areas, 'W' as the width of the plate, and 'S' as the diameter of the mounting holes. The middle diagram shows a side view of the sensor mounted on a plate, with 'T' indicating the thickness of the plate. The bottom diagram shows two sensors mounted on a plate, with 'G' indicating the distance from the edge of the plate to the center of the active area.

Distance D	2 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Diameter active area B	Ø 4 mm

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Accessories

MBS40

69477

Fixing clamp; material mounting
block: Anodized aluminium

