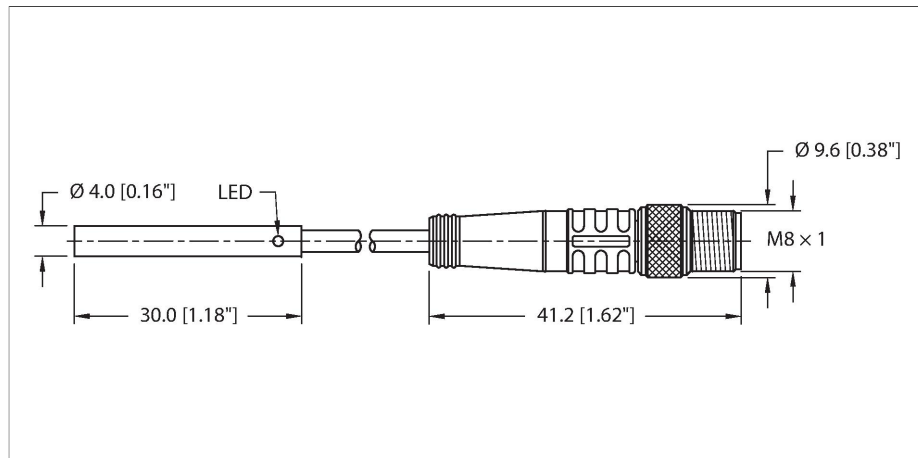


BI1U-EH04-AP6X-0.3-PSG3M

Inductive Sensor



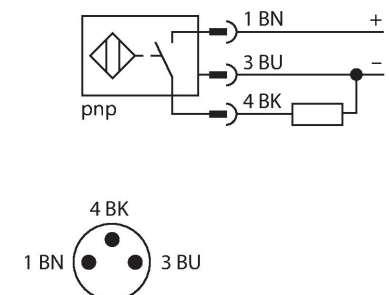
Technical data

Type	BI1U-EH04-AP6X-0.3-PSG3M
ID	4602123
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
Temperature drift	$\leq \pm 10 \%$
	$\leq \pm 20 \%, \leq 0^\circ \text{C}$
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	$\leq 100 \text{ mA}$
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}
Switching frequency	2 kHz
Mechanical data	
Design	Smooth barrel, 4 mm
Dimensions	30 mm

Features

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

Housing material	Stainless steel, 1.4427 SO
Active area material	Plastic, PA12-GF30
Material coupling nut	metal, CuZn, nickel-plated
Electrical connection	Connector, M8 × 1
Cable quality	Ø 3 mm, Gray, LifY-11Y, PUR, 0.3 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 technical diagrams of a mounting bracket. The top diagram is a top-down view showing an L-shaped bracket with two yellow circular active areas. Dimensions are indicated: 'D' is the distance between the centers of the two active areas, 'S' is the distance from the center of the rightmost active area to the inner corner of the bracket, and 'W' is the total width of the bracket. The bottom-left diagram is a side view showing the bracket's profile with dimension 'T' indicating the thickness of the vertical flange. The bottom-right diagram is a perspective view showing the bracket from an angle, with dimension 'G' indicating the distance between the two active areas along the horizontal axis.

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

Accessories

MBS40

69477

Fixing clamp; material mounting
block: Anodized aluminium

