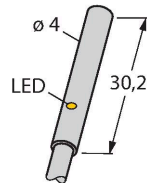


BI1-EH04-AP6X/S1367 7M

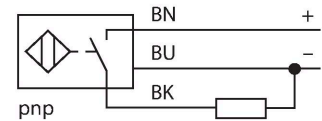
Inductive Sensor



Features

- Smooth barrel, Ø 4 mm
- Stainless steel, 1.4427 SO
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Cable connection

Wiring diagram



Technical data

Type	BI1-EH04-AP6X/S1367 7M
ID	100023383
Special version	S1367 Corresponds to:Old design before 2019
General data	
Rated switching distance	1 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
Temperature drift	$\leq \pm 10$ %
Hysteresis	3...15 %
Electrical data	
Operating voltage U_B	10...30 VDC
Ripple U_{ss}	≤ 10 % U_{Bmax}
DC rated operating current I_o	≤ 100 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, PNP
Switching frequency	3 kHz

Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

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, 7 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	2283 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.

1. The top diagram shows a sensor with two yellow circular active areas mounted on a rectangular plate. Dimension 'D' is the distance between the centers of the active areas. Dimension 'W' is the width of the plate. Dimension 'S' is the diameter of the holes through which the sensor is mounted.

2. The middle diagram shows a sensor mounted on a square plate. Dimension 'T' represents the thickness of the plate.

3. The bottom diagram shows two sensors mounted on a plate. Dimension 'G' is the distance from the edge of the plate to the center of one of the sensors.

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

BI1-EH04-AP6X/S1367 7M| 02/21/2025 14-37 | technical changes reserved

Accessories

MBS40

69477

Fixing clamp; material mounting
block: Anodized aluminium

