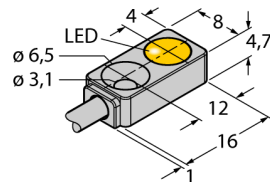


# Inductive sensor

## BI2-Q4,7-AN6X

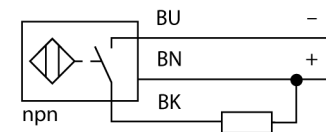
**TURCK**

Industrial  
Automation



- Rectangular, height 4.7 mm
- Active face on top
- Metal housing, GD-ZnAl
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- Cable connection

### Wiring Diagram



### 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.

<b>Type designation</b>	BI2-Q4,7-AN6X
Ident no.	1614001
<b>Rated switching distance S<sub>n</sub></b>	2 mm
Mounting conditions	Flush
Secured operating distance	≤ (0,81 × S <sub>n</sub> ) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
Hysteresis	3...15 %
Ambient temperature	0...+85 °C
<b>Operating voltage</b>	10...30 VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
DC rated operational current	≤ 100 mA
No-load current I <sub>0</sub>	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes/ Cyclic
Voltage drop at I <sub>e</sub>	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	3-wire, NO contact, NPN
Switching frequency	1 kHz
<b>Design</b>	Rectangular, Q4,7
Dimensions	16 x 8 x 4.7 mm
Housing material	Metal, GD-ZnAl
Active area material	Plastic, PA12
Tightening torque fixing screw	0.5 Nm
Electrical connection	Cable
Cable quality	3 mm, Gray, Lif9Y-11Y, PUR, 2m Suited for E-ChainSystems® acc. to manufacturers declaration H1063M
Cable cross section	3 x 0.14 mm <sup>2</sup>
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
<b>Switching state</b>	LED yellow

**Inductive sensor  
BI2-Q4,7-AN6X**

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<b>Distance D</b>	$2 \times B$
Distance W	$3 \times S_n$
Distance S	$1.5 \times B$
Distance G	$6 \times S_n$

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**Width active area B** 8 mm

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