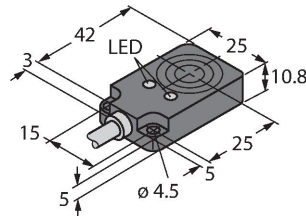


BI8U-Q10-AN6X2

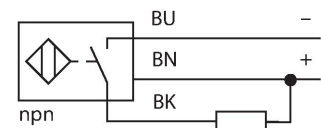
Inductive Sensor – With Increased Switching Distance



Features

- Rectangular, height 10.8 mm
- Active face on top
- Plastic, PBT-GF30-V0
- Factor 1 for all metals
- Resistant to magnetic fields
- Extended temperature range
- High switching frequency
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- Cable connection

Wiring diagram



Technical data

Type	BI8U-Q10-AN6X2
Ident. no.	1662003
Rated switching distance	8 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n) \text{ mm}$
Repeat accuracy	$\leq 2 \text{ \% of full scale}$
Temperature drift	$\leq \pm 10 \text{ \%}$
	$\leq \pm 15 \text{ \%}, \leq -25 \text{ }^\circ\text{C} \vee \geq +70 \text{ }^\circ\text{C}$
Hysteresis	3...15 %
Ambient temperature	-30...+85 °C
Operating voltage	10...30 VDC
Residual ripple	$\leq 10 \text{ \% } U_{ss}$
DC rated operational current	$\leq 200 \text{ mA}$
No-load current	$\leq 15 \text{ mA}$
Residual current	$\leq 0.1 \text{ mA}$
Isolation test voltage	$\leq 0.5 \text{ kV}$
Short-circuit protection	yes / Cyclic
Voltage drop at I_o	$\leq 1.8 \text{ V}$
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, NPN
Insulation class	□
Switching frequency	0.25 kHz
Design	Rectangular, Q10
Dimensions	42 x 25 x 10.8 mm

Functional principle

Inductive sensors are designed for wear-free and contactless detection of metal objects. Approx Factor 1 sensors have significant advantages due to their patented ferrite-coreless multi-coil system. They detect all metals at the same large switching distance and are resistant to magnetic fields.

Technical data

Housing material	Plastic, PBT-GF30-V0
Active area material	PBT-GF30-V0
Electrical connection	Cable
Cable quality	Ø 4 mm, LifYY-11Y, PUR, 2 m
Core cross-section	3 x 0.25 mm ²
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
Power-on indication	LED, Green
Switching state	LED, Yellow

Mounting instructions

Mounting instructions/Description

The image contains two technical diagrams. The left diagram shows two yellow sensor units mounted on a grey panel. Dimension lines indicate: 'B' for the width of one sensor unit, 'D' for the distance between the centers of the two sensors, 'S' for the distance from the panel surface to the sensor face, and 'W' for the total width of the mounting area. The right diagram shows two yellow sensor units, one of which is labeled with dimension 'G', representing the distance from the mounting surface to the sensor face.

Distance D	2 x B
Distance W	3 x Sn
Distance S	1 x B
Distance G	6 x Sn
Width active area B	25 mm