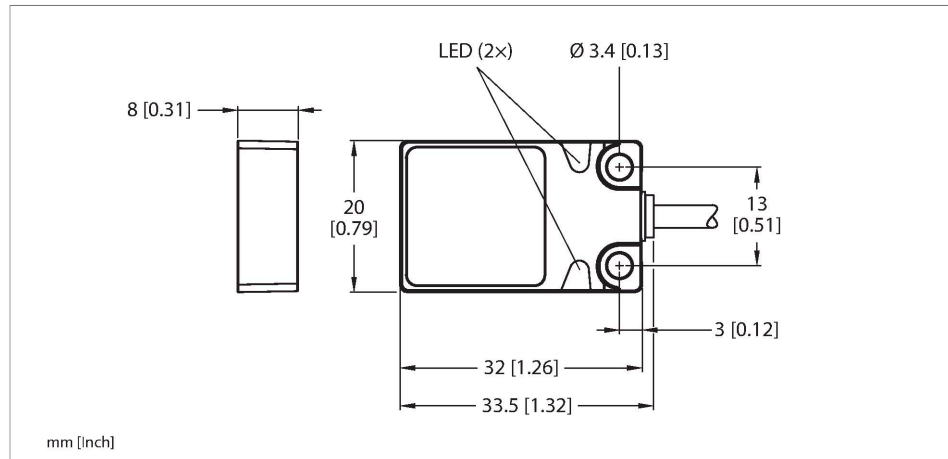


# BI5U-Q08-AN6X2 Inductive Sensor



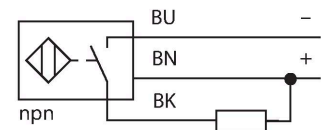
## Technical data

Type	BI5U-Q08-AN6X2
ID	1608911
General data	
Rated switching distance	5 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2 \%$ of full scale
Temperature drift	$\leq \pm 10 \%$
	$\leq \pm 15 \%, \leq -25 \text{ °C} \vee \geq +70 \text{ °C}$
Hysteresis	3...15 %
Electrical data	
Operating voltage $U_B$	10...30 VDC
Ripple $U_{ss}$	$\leq 10 \%$ $U_{Bmax}$
DC rated operating current $I_o$	$\leq 200$ mA
No-load current	$\leq 15$ mA
Residual current	$\leq 0.1$ mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at $I_o$	$\leq 1.8$ V
Wire break/reverse polarity protection	yes/Complete
Output function	3-wire, NO contact, NPN
DC field stability	300 mT
AC field stability	300 mT <sub>ss</sub>
Insulation class	□

## Features

- Rectangular, height 8 mm
- Active face on top
- Metal, Zamak, nickel-plated
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Extended temperature range
- High switching frequency
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- Cable connection

## Wiring diagram



## Functional principle

Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox 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

Switching frequency	0.25 kHz
Mechanical data	
Design	Rectangular, Q08
Dimensions	32 x 20 x 8 mm
Housing material	Metal, Zamak, Nickel Plated
Active area material	Plastic, PP, yellow
Electrical connection	Cable
Cable quality	Ø 3 mm, Gray, Lif9Y-11Y, PUR, 2 m
	Suited for E-ChainSystems® acc. to manufacturers declaration H1063M
Core cross-section	3 x 0.14 mm <sup>2</sup>
Environmental conditions	
Ambient temperature	-30...+85 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68
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 illustrating the mounting of the BI5U-Q08-AN6X2 sensor. The primary diagram shows three yellow sensors mounted on a gray rail. Dimension lines indicate: 'B' for the width of the sensor, 'D' for the distance between the centers of adjacent sensors, 'S' for the distance from the sensor face to the end of the rail, and 'W' for the total width of the rail assembly. A secondary diagram shows a single yellow sensor and its associated gray cable, with dimension 'G' indicating the length of the cable from the sensor face to the end of the rail.

Distance D	40 mm
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Distance W	15 mm
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Distance S	1 × B
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Distance G	30 mm
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Width active area B	20 mm
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BI5U-Q08-AN6X2 | 02/21/2025 13-14 | technical changes reserved