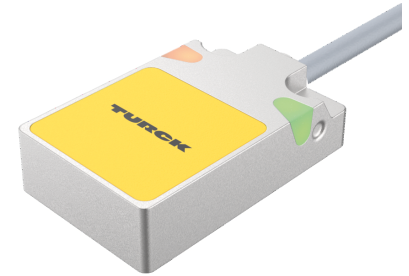
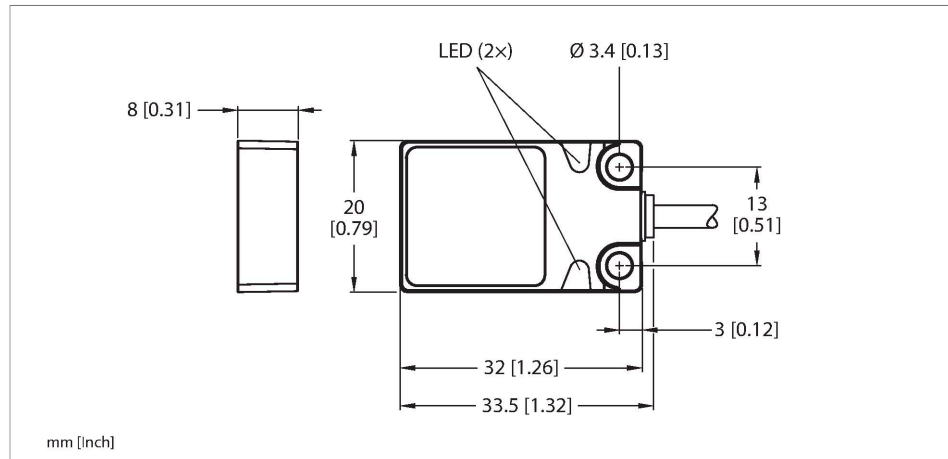


BI5U-Q08-AP6X2

Inductive Sensor



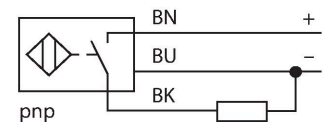
Technical data

| | |
|--|--|
| Type | BI5U-Q08-AP6X2 |
| ID | 1608901 |
| 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 |
| | $\leq \pm 15 \%, \leq -25 \text{ }^{\circ}\text{C} \vee \geq +70 \text{ }^{\circ}\text{C}$ |
| 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 | ≤ 200 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 |
| DC field stability | 300 mT |
| AC field stability | 300 mT _{SS} |
| Insulation class | □ |
| Switching frequency | 0.25 kHz |

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, PNP 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

| 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 ² |
| 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 | | |
|---|---------------------|-------|
|  | Distance D | 40 mm |
| | Distance W | 15 mm |
| | Distance S | 1 × B |
| | Distance G | 30 mm |
| | Width active area B | 20 mm |
| | | |

BI5U-Q08-AP6X2 | 02/21/2025 13-14 | technical changes reserved