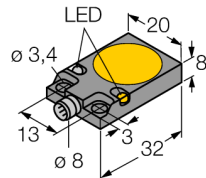


Inductive sensor

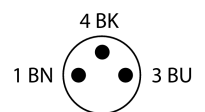
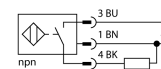
With increased switching distance

BI7-Q08-AN6X2-V1131



- Rectangular, height 8 mm
- Active face on top
- Metal, GD-Zn
- Connector with snap-lock
- Large sensing range
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- Flange connector, Ø 8 mm

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.

| | |
|---|---|
| Type designation | BI7-Q08-AN6X2-V1131 |
| Ident-No. | 1601622 |
| Rated switching distance Sn | 7 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 | $\leq 2\%$ of full scale |
| Temperature drift | $\leq \pm 10\%$ |
| Hysteresis | 3...15 % |
| Ambient temperature | -25...+70 °C |
| Operating voltage | 10...30 VDC |
| Residual ripple | $\leq 10\%$ U _{ss} |
| DC rated operational current | ≤ 200 mA |
| No-load current I ₀ | ≤ 15 mA |
| Residual current | ≤ 0.1 mA |
| Isolation test voltage | ≤ 0.5 kV |
| Short-circuit protection | yes/ Cyclic |
| Voltage drop at I ₀ | ≤ 1.8 V |
| Wire breakage/Reverse polarity protection | yes/ Complete |
| Output function | 3-wire, NO contact, NPN |
| Switching frequency | 0.5 kHz |
| Design | Rectangular, Q08 |
| Dimensions | 32 x 20 x 8 mm |
| Housing material | Metal, GD-Zn |
| Active area material | Plastic, PA12-GF30, yellow |
| Electrical connection | Connector, Ø 8 mm |
| 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 |
| Power-on indication | LED, Green |
| Switching state | LED, Yellow |

Inductive sensor With increased switching distance BI7-Q08-AN6X2-V1131

| | |
|------------|--------|
| Distance D | 2 x B |
| Distance W | 3 x Sn |
| Distance S | 1 x B |
| Distance G | 6 x Sn |

Width active area B 20 mm

