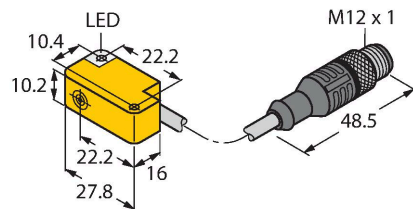


BI2-Q10S-AZ31X-0.2-RS4.2T Inductive Sensor

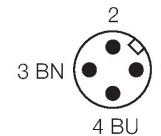
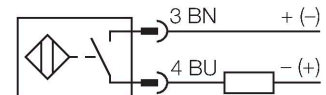


Features

- Rectangular, height 10.2 mm
- Active face, lateral
- Cable outlet to all sides
- Plastic, PP-GF20
- AC 2-wire, 20...250 VAC
- DC 2-wire, 10...300 VDC
- NO contact
- M12 male connector

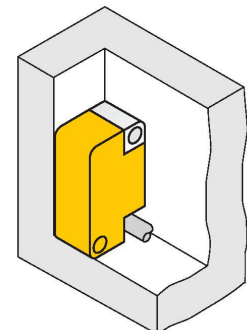
Technical data

| | |
|------------------------------|---|
| Type | BI2-Q10S-AZ31X-0.2-RS4.2T |
| Ident. no. | 1309186 |
| Rated switching distance | 2 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 | ≤ 2 % of full scale |
| Temperature drift | $\leq \pm 10$ % |
| Hysteresis | 3...15 % |
| Ambient temperature | -25...+70 °C |
| Operating voltage | 20...250 VAC |
| Operating voltage | 10...300 VDC |
| AC rated operational current | ≤ 100 mA |
| DC rated operational current | ≤ 100 mA |
| Frequency | $\geq 50... \leq 60$ Hz |
| Residual current | ≤ 1.7 mA |
| Isolation test voltage | ≤ 1.5 kV |
| Surge current | ≤ 1 A (≤ 10 ms max. 5 Hz) |
| Voltage drop at I_o | ≤ 6 V |
| Output function | 2-wire, NO contact |
| Smallest operating current | ≥ 3 mA |
| Switching frequency | 0.02 kHz |



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.



Technical data

| | |
|-----------------------|--|
| Design | Rectangular, Q10S |
| Dimensions | 27.8 x 16 x 10.2 mm |
| Housing material | Plastic, PP-GF20 |
| Active area material | PP-GF20 |
| Material coupling nut | metal, CuZn, nickel-plated |
| Electrical connection | Cable with connector, M12 × 1 |
| Cable quality | Ø 3 mm, Gray, Lif9Y-11Y, PUR, 0.2 m |
| Core cross-section | 2 x 0.14 mm ² |
| 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 |
| Switching state | LED, Yellow |

Mounting instructions

| Mounting instructions/Description | | |
|---|---------------------|---------|
|  | Distance D | 2 × B |
| | Distance W | 3 x Sn |
| | Distance S | 1 x B |
| | Distance G | 6 x Sn |
| | Width active area B | 10.2 mm |
| | | |

BI2-Q10S-AZ31X-0.2-RS4.2T| 12/03/2020 05-18 | technical changes reserved