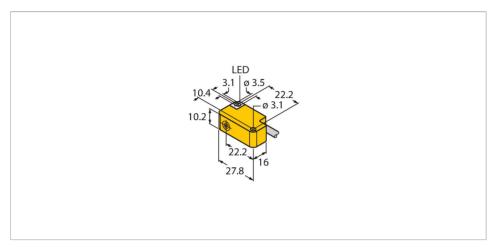


BI2-Q10S-VP6X Inductive Sensor



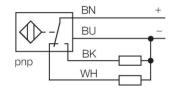
Technical data

| Type | BI2-Q10S-VP6X |
|---|---|
| Type | · |
| Ident. no. | 1609340 |
| Rated switching distance | 2 mm |
| Mounting conditions | Flush |
| Secured operating distance | \leq (0.81 \times Sn) mm |
| Correction factors | St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4 |
| Repeat accuracy | ≤ 2 % of full scale |
| Temperature drift | ≤ ± 10 % |
| Hysteresis | 315 % |
| Ambient temperature | -25+70 °C |
| Operating voltage | 1030 VDC |
| Residual ripple | ≤ 10 % U _{ss} |
| DC rated operational current | ≤ 150 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 _e | ≤ 1.8 V |
| Wire breakage/Reverse polarity protection | yes / Complete |
| Output function | 4-wire, Complementary contact, PNP |
| Switching frequency | 2 kHz |
| Design | Rectangular, Q10S |
| Dimensions | 27.8 x 16 x 10.2 mm |
| Housing material | Plastic, PP-GF20 |

Features

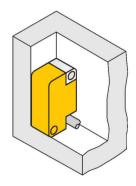
- Rectangular, height 10.2 mm
- Active face, lateral
- Cable outlet to all sides
- Plastic, PP-GF20
- DC 4-wire, 10...30 VDC
- Changeover contact, PNP output
- Cable connection

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.



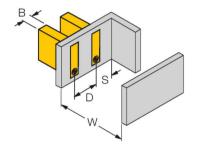


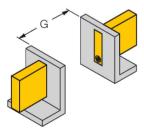
Technical data

| Active area material | PP-GF20 |
|-----------------------|--|
| Electrical connection | Cable |
| Cable quality | Ø 3 mm, Lif9Y-11YFHF, PUR, 2 m |
| Core cross-section | 4 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 x B |
|---------------------|---------|
| Distance W | 3 x Sn |
| Distance S | 1 x B |
| Distance G | 6 x Sn |
| Width active area B | 10.2 mm |