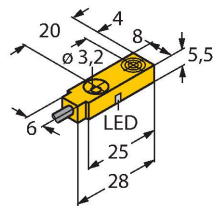


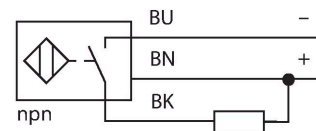
BI2-Q5.5-AN6X Inductive Sensor



Features

- Rectangular, height 5.5 mm
- Active face on top
- Plastic, PP
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- Cable connection

Wiring diagram

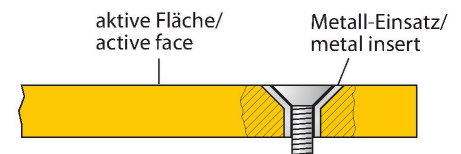


Technical data

| | |
|-------------------------------------------|-----------------------------------------------------|
| Type | BI2-Q5.5-AN6X |
| ID no. | 1613100 |
| 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 | 10...30 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_o | ≤ 1.8 V |
| Wire breakage/Reverse polarity protection | yes / Complete |
| Output function | 3-wire, NO contact, NPN |
| Switching frequency | 2 kHz |
| Design | Rectangular, Q5,5 |
| Dimensions | 28 x 8 x 5.5 mm |

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

| | |
|--------------------------------|---------------------------------------------------------------------|
| Housing material | Plastic, PP-GF20 |
| Active area material | PP-GF20 |
| Tightening torque fixing screw | 0.5 Nm |
| 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 |
| 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 | 8 mm |

Accessories

| | |
|--------------|-------------------------------------------------------------------|
| MW-Q4.7/Q5.5 | 6945013 |
| | Mounting bracket for rectangular Q4.7 or Q5.5; material VA 1.4401 |