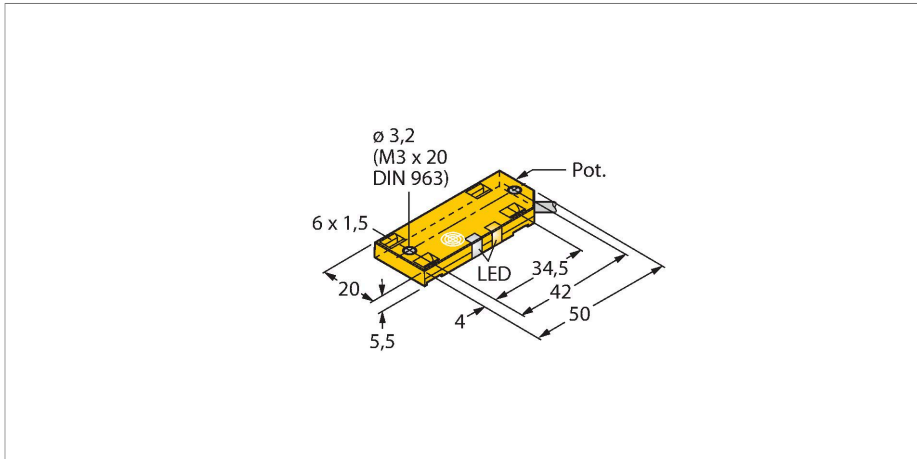


BC10-QF5.5-AN6X2

Capacitive Sensor



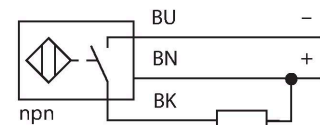
Technical data

| | |
|---|---|
| Type | BC10-QF5.5-AN6X2 |
| ID | 2620121 |
| Rated switching distance (flush) | 10 mm |
| Rated switching distance (non-flush) | 10 mm |
| Secured operating distance | ≤ (0.72 × Sn) |
| Hysteresis | 1...20 % |
| Temperature drift | Typical 20 % |
| Repeat accuracy | ≤ 2 % of full scale |
| Ambient temperature | -25...+70 °C |
| Electrical data | |
| Operating voltage | 10...30 VDC |
| Residual ripple | ≤ 10 % U _{ss} |
| DC rated operational current | ≤ 200 mA |
| No-load current | ≤ 15 mA |
| Residual current | ≤ 0.1 mA |
| Switching frequency | 0.1 kHz |
| Oscillation frequency | According to EN 60947-5-2, 8.2.6.2 Table 9: 0.1...2.0 MHz |
| Isolation test voltage | ≤ 0.5 kV |
| Output function | 3-wire, NO contact, NPN |
| Short-circuit protection | yes / Cyclic |
| Voltage drop at I _o | ≤ 1.8 V |
| Wire breakage/Reverse polarity protection | yes / Complete |

Features

- Rectangular, height 5.5 mm
- Large active face, marked for correct installation
- Plastic, PP
- Fine adjustment via potentiometer
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- Cable connection

Wiring diagram

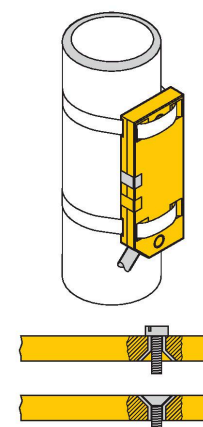


Functional principle

Capacitive proximity switches are designed for non-contact and wear-free detection of electrically conductive as well as non-conductive metal objects.

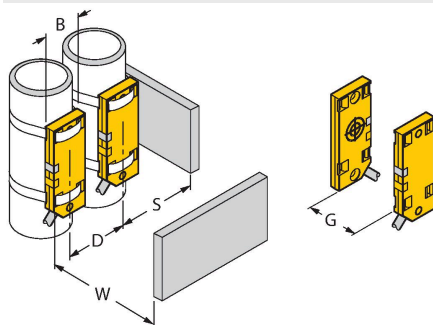
Technical data

| Tests/approvals | |
|------------------------|--|
| Approvals | UL |
| UL registration number | E210608 |
| Mechanical data | |
| Design | Rectangular, QF5,5 |
| Dimensions | 54 x 20.3 x 5.5 mm |
| Housing material | Plastic, PP |
| Active area material | PP |
| Electrical connection | Cable |
| Cable quality | Ø 3 mm, Lif9Y-11Y, PUR, 2 m |
| 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 | 1080 years acc. to SN 29500 (Ed. 99) 40 °C |
| Power-on indication | LED, Green |
| Switching state | LED, Yellow |



Mounting instructions

Product features



| | |
|------------------------|---------|
| Distance D | 40 mm |
| Distance W | 30 mm |
| Distance S | 30 mm |
| Distance G | 60 mm |
| Diameter active area B | Ø 20 mm |

The given minimum distances have been checked against the standard switching distance.
Should the sensitivity of the sensors be changed via potentiometer, the data sheet specifications no longer apply.