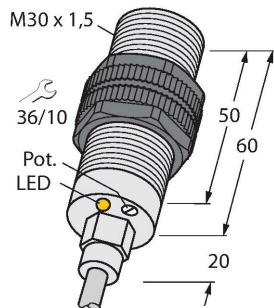


BC10-PT30-VP4X2

Capacitive Sensor



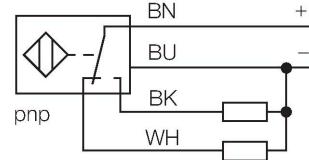
Technical data

| | |
|---|---|
| Type | BC10-PT30-VP4X2 |
| ID | 2507010 |
| Rated switching distance (flush) | 10 mm |
| Rated switching distance (non-flush) | 15 mm |
| Secured operating distance | $\leq (0.72 \times S_n)$ |
| Hysteresis | 1...20 % |
| Repeat accuracy | $\leq 2\%$ of full scale |
| Ambient temperature | -25...+70 °C |
| Electrical data | |
| Operating voltage | 10...65 VDC |
| Residual ripple | $\leq 10\% U_{ss}$ |
| DC rated operational current | $\leq 200\text{ mA}$ |
| No-load current | $\leq 15\text{ mA}$ |
| Residual current | $\leq 0.1\text{ mA}$ |
| 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 | $\leq 0.5\text{ kV}$ |
| Output function | 4-wire, Complementary contact, PNP |
| Short-circuit protection | yes / Cyclic |
| Voltage drop at I_o | $\leq 1.8\text{ V}$ |
| Wire breakage/Reverse polarity protection | yes / Complete |

Features

- M30 x 1.5 threaded barrel
- Plastic, PVDF
- Fine adjustment via potentiometer
- DC 4-wire, 10...65 VDC
- Complementary contact, PNP 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.

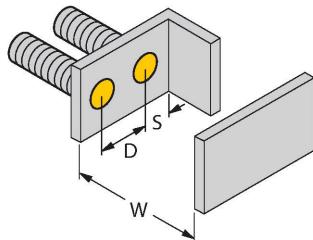
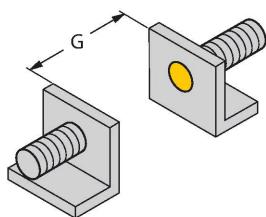
Technical data

Tests/approvals

| | |
|---------------------------------------|--|
| Approvals | UL |
| UL registration number | E210608 |
| Mechanical data | |
| Design | Threaded barrel, M30 x 1.5 |
| Housing material | Plastic, PVDF |
| Active area material | PVDF, yellow |
| Max. tightening torque of housing nut | 2 Nm |
| Electrical connection | Cable |
| Cable quality | Ø 5.7 mm, PVC, 2 m |
| Core cross-section | 4 x 0.34 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 | Green |
| Switching state | LED, Yellow |

Mounting instructions

Product features



| | |
|------------------------|---------|
| Distance D | 60 mm |
| Distance W | 30 mm |
| Distance S | 45 mm |
| Distance G | 60 mm |
| Diameter active area B | Ø 30 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.