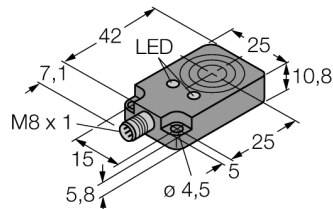


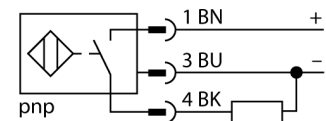
# Capacitive Sensor

## BC8-Q10-AP6X2-V1131/S250



- Rectangular, height 10.8mm
- Active face on top
- Plastic, PBT-GF30-V0
- Fixed settings
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M8 × 1 connector

### 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.

|                                        |                                                            |
|----------------------------------------|------------------------------------------------------------|
| Type                                   | BC8-Q10-AP6X2-V1131/S250                                   |
| ID                                     | 2621201                                                    |
| Rated switching distance (flush)       | 8 mm                                                       |
| Rated switching distance (non-flush)   | 8 mm                                                       |
| Secured operating distance             | $\leq (0.72 \times S_n) \text{ mm}$                        |
| Hysteresis                             | 1...20 %                                                   |
| Temperature drift                      | Typical 20 %                                               |
| Repeat accuracy                        | $\leq 2 \%$ of full scale                                  |
| Ambient temperature                    | -25...+70 °C                                               |
| <b>Electrical data</b>                 |                                                            |
| Operating voltage $U_s$                | 10...30 VDC                                                |
| Ripple $U_{s\Delta}$                   | $\leq 10 \% U_{s\text{max}}$                               |
| DC rated operating current $I_s$       | $\leq 200 \text{ mA}$                                      |
| No-load current $I_o$                  | $\leq 15 \text{ mA}$                                       |
| 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                 | 0.5 kV                                                     |
| Output function                        | 3-wire, NO contact, PNP                                    |
| Short-circuit protection               | yes/Cyclic                                                 |
| Voltage drop at $I_s$                  | $\leq 1.8 \text{ V}$                                       |
| Wire break/reverse polarity protection | yes/Complete                                               |
| <b>Tests/approvals</b>                 |                                                            |
| Approvals                              | UL                                                         |
| UL registration number                 | E210608                                                    |
| <b>Mechanical data</b>                 |                                                            |
| Design                                 | Rectangular, Q10                                           |
| Dimensions                             | 42 x 25 x 10.8 mm                                          |
| Housing material                       | Plastic, PBT-GF30-V0                                       |
| Electrical connection                  | Connector, M8                                              |
| 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 |