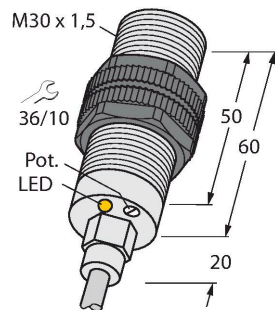


BC10-PT30-VP4X2

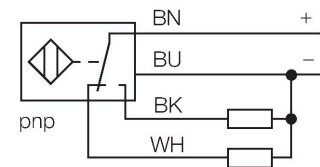
Capacitive Sensor



Features

- M30 × 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

Type	BC10-PT30-VP4X2
ID	2507010
Rated switching distance (flush)	10 mm
Rated switching distance (non-flush)	15 mm
Secured operating distance	$\leq (0.72 \times S_n) \text{ mm}$
Hysteresis	1...20 %
Repeat accuracy	$\leq 2 \%$ of full scale
Ambient temperature	-25...+70 °C
Electrical data	
Operating voltage U_B	65 VDC
Ripple U_{ss}	$\leq 10 \%$ U_{Bmax}
DC rated operating current I_B	$\leq 200 \text{ mA}$
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	0.5 kV
Output function	4-wire, Complementary contact, PNP
Short-circuit protection	yes/Cyclic
Voltage drop at I_B	$\leq 1.8 \text{ V}$
Wire break/reverse polarity protection	yes/Complete
Tests/approvals	
Approvals	UL

Technical data

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
Switching state	LED, Yellow

Mounting instructions

Product features

A technical drawing of a sensor bracket. It consists of two views: a side view and a top view. The side view shows a rectangular bracket with a circular hole in the center. A dimension line labeled 'G' indicates the distance from the front face of the bracket to the center of the hole. The top view shows the bracket from above, with a circular hole in the center. A dimension line labeled 'D' indicates the distance from the top edge of the bracket to the center of the hole. A dimension line labeled 'W' indicates the distance from the left edge of the bracket to the center of the hole. A dimension line labeled 'S' indicates the distance from the right edge of the bracket to the center of the hole.

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.

BC10-PT30-VP4X2| 02/21/2025 17-28 | technical changes reserved