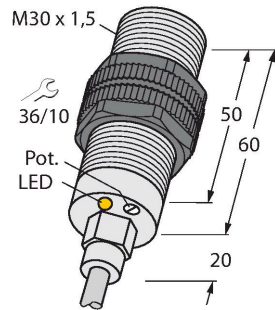


# BC10-PT30-VP4X2

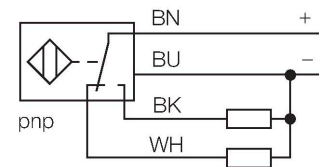
## Capacitive Sensor



### 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	$\leq (0.72 \times S_n)$
Hysteresis	1...20 %
Repeat accuracy	$\leq 2 \%$ of full scale
Ambient temperature	-25...+70 °C
<b>Electrical data</b>	
Operating voltage	10...65 VDC
Residual ripple	$\leq 10 \%$ $U_{ss}$
DC rated operational current	$\leq 200$ mA
No-load current	$\leq 15$ mA
Residual current	$\leq 0.1$ 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	$\leq 0.5$ kV
Output function	4-wire, Complementary contact, PNP
Short-circuit protection	yes / Cyclic
Voltage drop at $I_o$	$\leq 1.8$ V
Wire breakage/Reverse polarity protection	yes / Complete

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 mm²
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

The image shows two isometric views of a sensor. The top view shows the sensor with a yellow circular active area. Dimension lines indicate the following measurements: 'G' is the distance between the two sensor units; 'D' is the distance from the base to the top of the sensor; 'W' is the width of the sensor; 'S' is the distance from the base to the center of the active area; and 'B' is the diameter of the active area.

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

BC10-PT30-VP4X2| 07/26/2023 16-21 | technical changes reserved