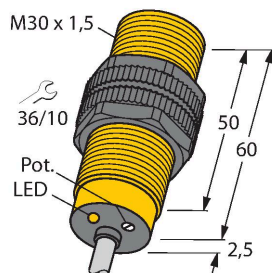


# BCE10-S30-VP6X

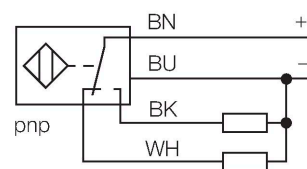
## Capacitive Sensor – With Potentiometer



### Features

- M30 × 1.5 threaded barrel
- Plastic, PA12-GF30
- Fine adjustment via potentiometer
- DC 4-wire, 10...30 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	BCE10-S30-VP6X
ID no.	100026660
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 %
Temperature drift	type 20 %
Repeat accuracy	$\leq 5 \%$ of full scale
Ambient temperature	-10...+60 °C
<b>Electrical data</b>	
Operating voltage	10...30 VDC
Residual ripple	$\leq 10 \%$ $U_{ss}$
DC rated operational current	$\leq 100$ mA
No-load current	$\leq 15$ mA
Residual current	$\leq 0.1$ mA
Switching frequency	0.05 kHz
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
<b>Tests/approvals</b>	
Approvals	UL

Technical data

UL registration number	E210608
Mechanical data	
Design	Threaded barrel, M30 × 1.5
Dimensions	62.5 mm
Housing material	Plastic, PA12-GF30, PEI
Active area material	PA12-GF30, yellow
Admissible pressure on front cap	≤ 3 bar
Max. tightening torque of housing nut	5 Nm
Electrical connection	Cable
Cable quality	Ø 5.2 mm, LifYY, PVC, 2 m
Core cross-section	4 x 0.34 mm <sup>2</sup>
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP65
MTTF	1080 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED, Yellow

Mounting instructions

Product features

A technical drawing showing two components. The component on the left is a rectangular block with a threaded rod passing through its center. The component on the right is a similar rectangular block with a yellow circular feature in the center. A dimension line labeled 'G' indicates the distance between the two components. Another dimension line labeled 'D' indicates the distance from the top of the left component to the top of the right component.

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