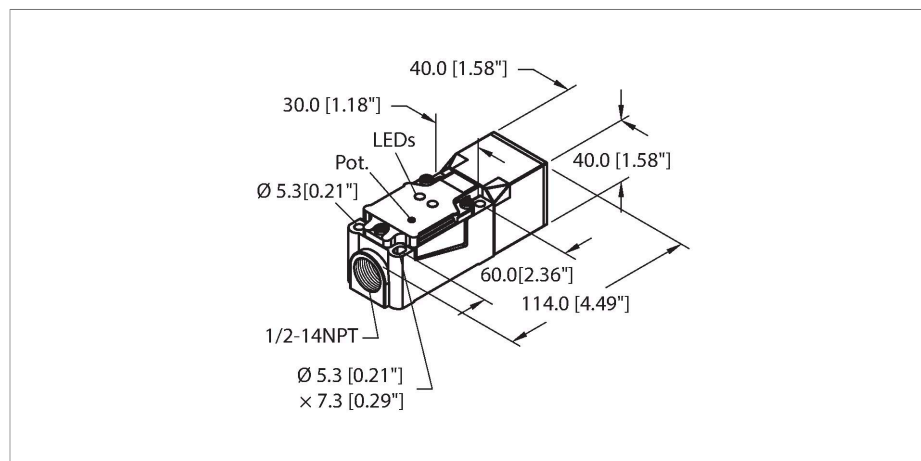


# BC20-CP40-VP4X2/S10

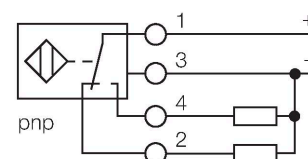
## Capacitive Sensor



### Features

- Rectangular, height 40 mm
- 9 selectable sensor head positions
- Plastic, PBT-GF30-V0
- Fine adjustment via potentiometer
- DC 4-wire, 10...65 VDC
- Complementary contact, PNP output
- Terminal chamber

### 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	BC20-CP40-VP4X2/S10
ID	25156
Special version	S10 corresponds to: Mounting base with 1/2-14NPT thread
Rated switching distance (flush)	20 mm
Rated switching distance (non-flush)	20 mm
Secured operating distance	$\leq (0.72 \times S_n)$
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	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

## Technical data

Wire breakage/Reverse polarity protection      yes / Complete

### Tests/approvals

Approvals      UL

UL registration number      E210608

### Mechanical data

Design      Rectangular, CP40

Dimensions      114 x 40 x 40 mm

Housing material      Plastic, PBT-GF30-V0

Active area material      PBT-GF30-V0, yellow

Electrical connection      Terminal chamber

Clamping ability       $\leq 2.5 \text{ mm}^2$

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      LED, Green

Switching state      LED, Yellow

## Mounting instructions

### Product features

Diameter active area B      Ø 40 mm