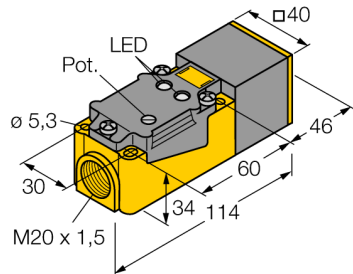


**capacitive sensor**  
**BC20-CP40-VP4X2**

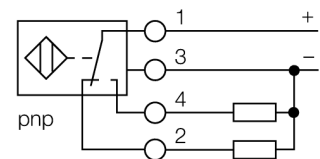
**TURCK**

Industrial  
Automation



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

**Wiring diagram**



**Functional principle**

Capacitive proximity switches are designed for non-contact and wear-free detection of metal (electrically conductive) and non-metal (electrically non-conductive) objects.

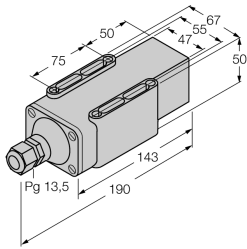
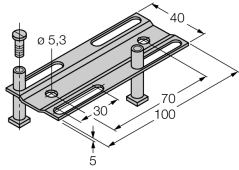
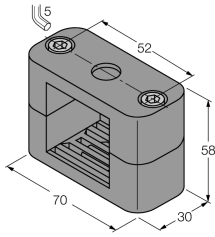
<b>Type</b>	BC20-CP40-VP4X2
Ident-No.	25160
<b>Rated operating distance Sn</b>	20 mm, flush mounting
Rated operating distance Sn	30 mm, non-flush mounting
Assured sensing range	$\delta$ (0,72 x Sn) mm
Hysteresis	2...20
Temperature drift	$\delta \pm 20$ %
Repeatability	$\delta 2$ %
Ambient temperature	-25...+70
<b>Operating voltage</b>	10...65
Residual ripple	$\delta 10$ % $U_{SS}$
DC rated operational current	$\delta 200$ mA
No-load current $I_0$	$\delta 15$ mA
Residual current	$\delta 0.1$ mA
Switching frequency	$\delta 0.1$ kHz
Rated insulation voltage	$\delta 0.5$ kV
Output function	4-wire, changover contact, PNP
Short-circuit protection	yes/ cyclic
Voltage drop at $I_e$	$\delta 1.8$ V
Wire breakage / Reverse polarity protection	yes/ complete
<b>Design</b>	rectangular, CP40
Dimensions	114 x 40 x 40
Housing material	Plastic, PBT-GF30-V0, black
Material active face	Plastic, PBT-GF30-V0, yellow
Connection	Terminal chamber
Clamping ability	$\delta 2.5$ mm <sup>2</sup>
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
<b>Operating voltage</b>	LED green
Switching state	LED yellow
<b>Width of the active face B</b>	40 mm

capacitive sensor  
BC20-CP40-VP4X2

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**Accessories**

Type code	Ident-No.	Short text	Dimension drawing
SG40	69500	Protective housing; housing material: PA (per UL94/V-2); cover: PBT-GF30; for harsh environments; protection degree IP68, 5 m w.g.	 <p>Technical drawing of the protective housing SG40. It shows a perspective view of a rectangular enclosure with a cylindrical connector on the left side. Dimensions are provided in millimeters: total length 190, connector length 143, top width 75, top depth 50, and a small offset of 67. The connector has a diameter of Pg 13.5.</p>
JUSTIERSCHIENE JS 025/037	69429	Mounting rail; material: VA 1.4301	 <p>Technical drawing of the mounting rail JUSTIERSCHIENE JS. It shows a perspective view of a long, thin metal rail with two vertical mounting posts. Dimensions include a total length of 100, a distance of 70 between the posts, a post diameter of <math>\varnothing 5,3</math>, and a rail thickness of 5.</p>
BSS-CP40	6901318	Fixing clamp; material: Polypropylene	 <p>Technical drawing of the fixing clamp BSS-CP40. It shows a perspective view of a U-shaped plastic clamp. Dimensions are: top width 52, height 58, and bottom width 70. A small detail shows a hole with a diameter of 5.</p>