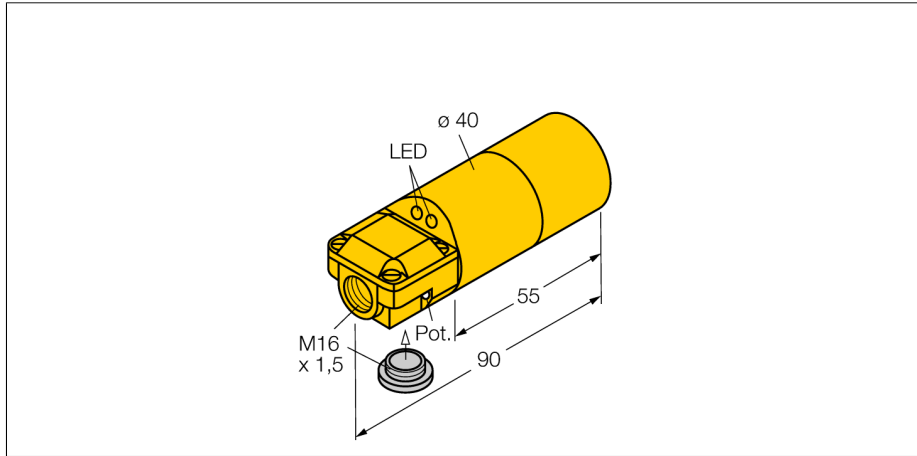


# Capacitive sensor BC20-K40SR-VP4X2

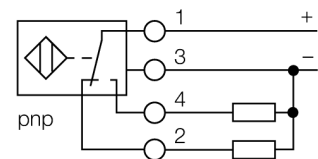
**TURCK**

Industrial  
Automation



- 2 cable entries (axial, radial)
- Smooth barrel, Ø 40 mm
- Plastic, ABS
- 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 electrically conductive as well as non-conductive metal objects.

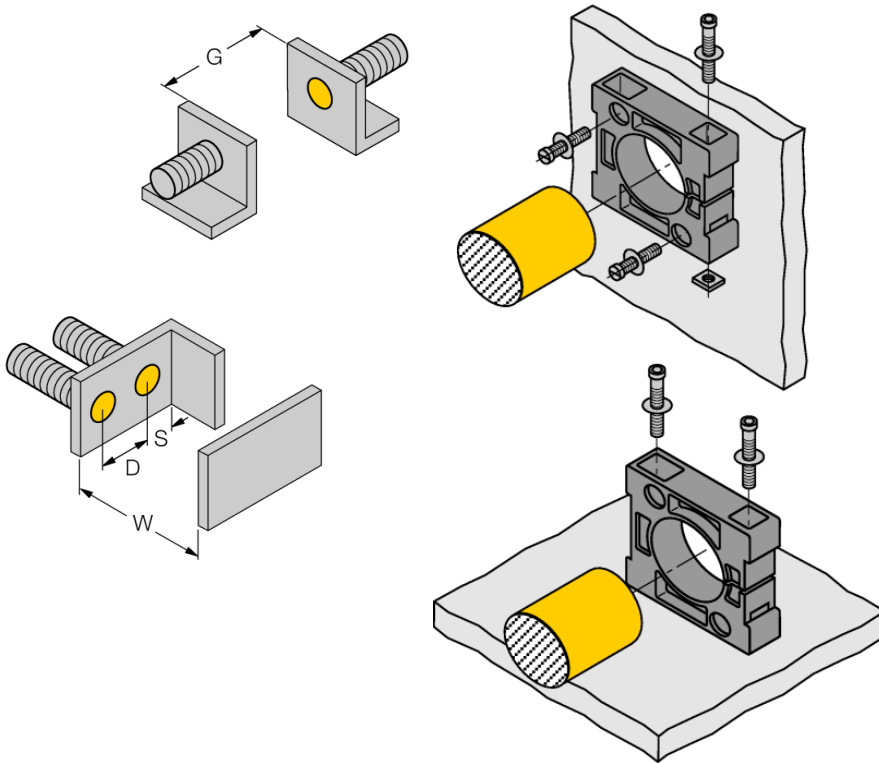
<b>Type code</b>	BC20-K40SR-VP4X2
Ident no.	25100
<b>Rated operating distance Sn</b>	20 mm
Rated operating distance Sn	30 mm, non-flush mounting
Assured sensing range	≤ (0.72 x Sn) mm
Hysteresis	2...20 %
Temperaturdrift	type ≤ ± 20 %
Repeatability	≤ 2 % of full scale
Ambient temperature	-25...+70 °C
<b>Operating voltage</b>	10...65VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
DC rated operational current	≤ 200 mA
No-load current I <sub>0</sub>	≤ 15 mA
Residual current	≤ 0.1 mA
Switching frequency	0.1 kHz
Rated insulation voltage	≤ 0.5 kV
Output function	4-wire, changover contact, PNP
Short-circuit protection	yes/ cyclic
Voltage drop at I <sub>0</sub>	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
<b>Design</b>	smooth barrel, 40 mm
Dimensions	90 mm
Housing material	Plastic, ABS
Material active face	Plastic, ABS
Connection	Terminal chamber
Clamping ability	≤ 2.5 mm <sup>2</sup>
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
<b>Operating voltage</b>	LED green
Switching state	● yellow
Included in scope of supply	BS40, cable gland, blanking plug

**Capacitive sensor  
BC20-K40SR-VP4X2**

Mounting instructions / Description	minimum distances
Distance D	40 mm
Distance W	60 mm
Distance S	60 mm
Distance G	120 mm

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<b>Diameter of the active area B</b>	Ø 40 mm
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The given minimum distances have been checked in compliance with the standard switching distance. Should the sensitivity of the sensors be changed via potentiometer, the data sheet specifications no longer apply.

**Capacitive sensor  
BC20-K40SR-VP4X2**

**Accessories**

Type code	Ident no.	Description	Dimension drawing
MAP-K40	6950014	Mounting adapter; material: Polypropylene; sensor replacement with filled container possible (adapter remains in container during sensor replacement)	
BS 40	69466	Fixing clamp; material mounting block: PBT	