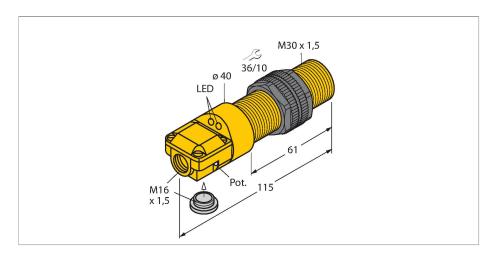


# BC10-P30SR-VN4X2 Capacitive Sensor



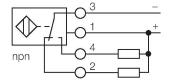
#### Technical data

Type	BC10-P30SR-VN4X2
ID	25051
Rated switching distance (flush)	10 mm
Rated switching distance (non-flush)	15 mm
Secured operating distance	≤ (0.72 × Sn) mm
Hysteresis	120 %
Repeat accuracy	≤ 2 % of full scale
Ambient temperature	-25+70 °C
Electrical data	
Operating voltage U <sub>B</sub>	65 VDC
Ripple U <sub>ss</sub>	≤ 10 % U <sub>Bmax</sub>
DC rated operating current I <sub>e</sub>	≤ 200 mA
No-load current	≤ 15 mA
Residual current	≤ 0.1 mA
Switching frequency	0.1 kHz
Oscillation frequency	According to EN 60947-5-2, 8.2.6.2 Table 9: 0.12.0 MHz
Isolation test voltage	0.5 kV
Output function	4-wire, Complementary contact, NPN
Short-circuit protection	yes/Cyclic
Voltage drop at I <sub>e</sub>	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Tests/approvals	
Mechanical data	
Design	Threaded barrel, M30 x 1.5
Dimensions	115 mm
Housing material	Plastic, ABS

#### **Features**

- ■M30 × 1.5 threaded barrel
- ■Plastic, ABS
- Fine adjustment via potentiometer
- ■DC 4-wire, 10...65 VDC
- Complementary contact, NPN 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.

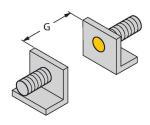


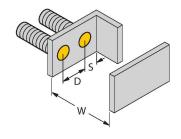
# Technical data

Active area material	ABS, yellow
Admissible pressure on front cap	≤ 3 bar
Max. tightening torque of housing nut	5 Nm
Electrical connection	Terminal chamber
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
Switching state	2 × LEDs, Yellow

# Mounting instructions

#### Product features





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

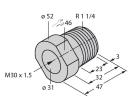
The given minimum distances have been checked against the standard switching distance.

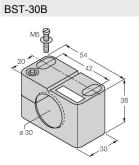
Should the sensitivity of the sensors be changed via potentiometer, the data sheet specifications no longer apply.

#### Accessories

MAP-M30	6950013
	Mounting adapter; material: Polypropylene; sensor replacement
ø 52 R 1 1/4	with filled container possible (adapter
	remains in container during sensor

replacement)





Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

6947216