

# Capacitive sensor BC10-P30SR-FZ3X2

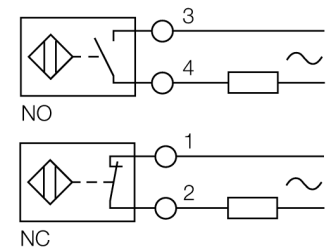
**TURCK**

Industrial  
Automation



- Threaded barrel, M30 x 1.5
- Plastic, PA12-GF30
- Fine adjustment via potentiometer
- AC 2-wire, 20...250 VAC
- Programmable connection (NC/NO)
- 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>	BC10-P30SR-FZ3X2
Ident no.	23104
<b>Rated switching distance (flush)</b>	10 mm
Rated switching distance (non-flush)	15 mm
Assured sensing range	$\leq (0.72 \times S_n)$ mm
Hysteresis	2...20 %
Temperature drift	type $\leq \pm 20$ %
Repeatability	$\leq 2$ % of full scale
Ambient temperature	-25...+70 °C
<b>Operating voltage</b>	20...250 VAC
AC rated operational current	$\leq 500$ mA
Frequency	$\geq 50... \leq 60$ Hz
Smallest operating current $I_m$	$\leq 5$ mA
Residual current	$\leq 1.7$ mA
Switching frequency	0.02 kHz
Rated insulation voltage	$\leq 1.5$ kV
Output function	2-wire, connection programmable, 2-wire
Voltage drop at $I_m$	$\leq 7$ V
<b>Design</b>	threaded barrel, M30 x 1.5
Housing material	silicone, PA
Material active area	Plastic, PA12-GF30, yellow
Admissible pressure on front cap	$\leq 3$ bar
Max. tightening torque housing nut	5 Nm
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
<b>Switching state</b>	LED

# Capacitive sensor BC10-P30SR-FZ3X2

Mounting instructions / Description	minimum distances
Distance D	60 mm
Distance W	30 mm
Distance S	45 mm
Distance G	60 mm

---

Diameter of the active area B	Ø 30 mm
-------------------------------	---------



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.

