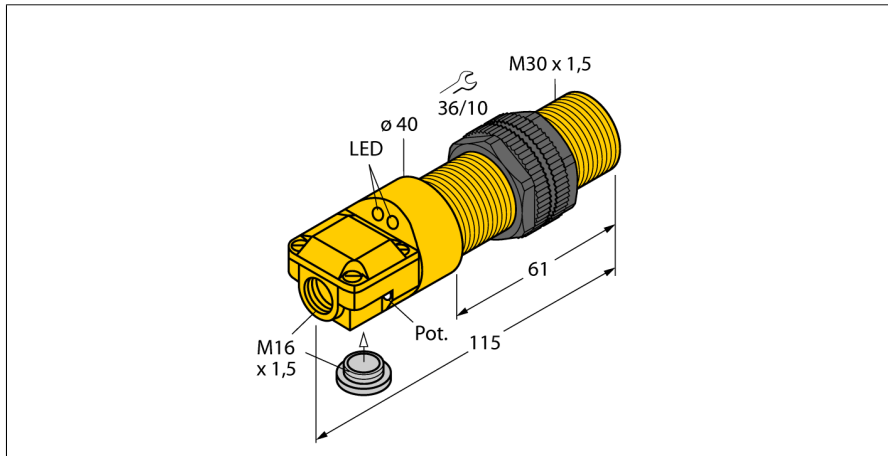


# Capacitive sensor BC10-P30SR-FZ3X2

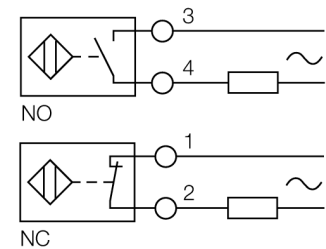
**TURCK**

Industrial  
Automation



- Threaded barrel, M30 x 1.5
- Plastic, ABS
- 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 designation</b>	BC10-P30SR-FZ3X2
Ident no.	23104
<b>Rated switching distance (flush)</b>	10 mm
Rated switching distance (non-flush)	15 mm
Assured switching distance	≤ (0.72 x S <sub>n</sub> ) mm
Hysteresis	2...20 %
Temperature drift	type 20 %
Repeatability	≤ 2 % of full scale
Ambient temperature	-25...+70 °C
<b>Operating voltage</b>	20...250 VAC
AC rated operational current	≤ 500 mA
Frequency	≥ 50...≤ 60 Hz
Smallest operating current I <sub>o</sub>	≥ 5 mA
Residual current	≤ 1.7 mA
Switching frequency	0.02 kHz
Rated insulation voltage	≤ 1.5 kV
Output function	2-wire, connection programmable, 2-wire
Voltage drop at I <sub>o</sub>	≤ 7 V
<b>Construction</b>	Threaded barrel, M30 x 1.5
Housing material	Plastic, ABS
Active area material	Plastic, ABS, yellow
Admissible pressure on front cap	≤ 3 bar
Max. tightening torque 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
<b>Switching state</b>	LED

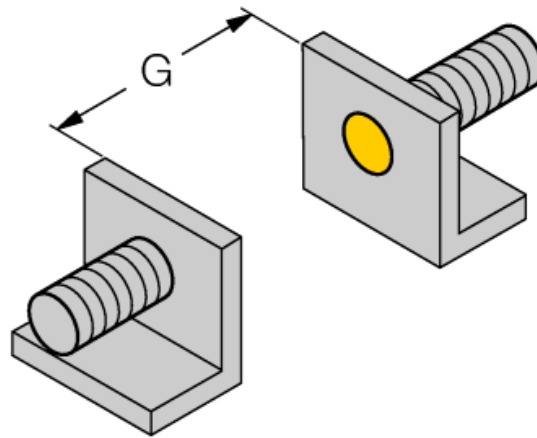
# Capacitive sensor BC10-P30SR-FZ3X2

**TURCK**

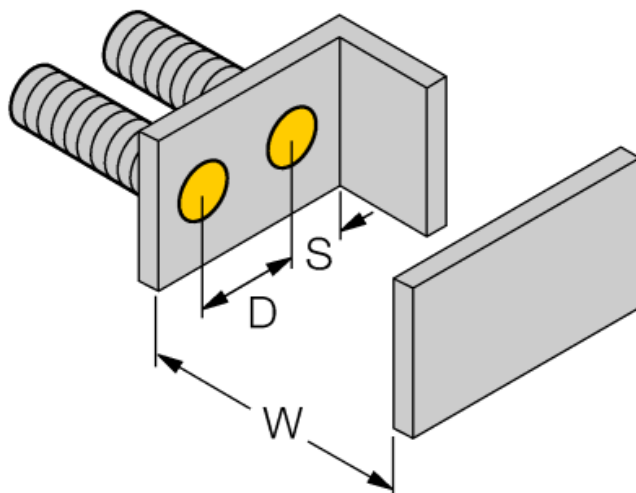
Industrial  
Automation

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                       $\varnothing$  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.



**Capacitive sensor  
BC10-P30SR-FZ3X2**

**Accessories**

Type code	Ident no.	Description	
MAP-M30	6950013	Mounting adapter; material: Polypropylene; sensor replacement with filled container possible (adapter remains in container during sensor replacement)	
BST-30B	6947216	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	