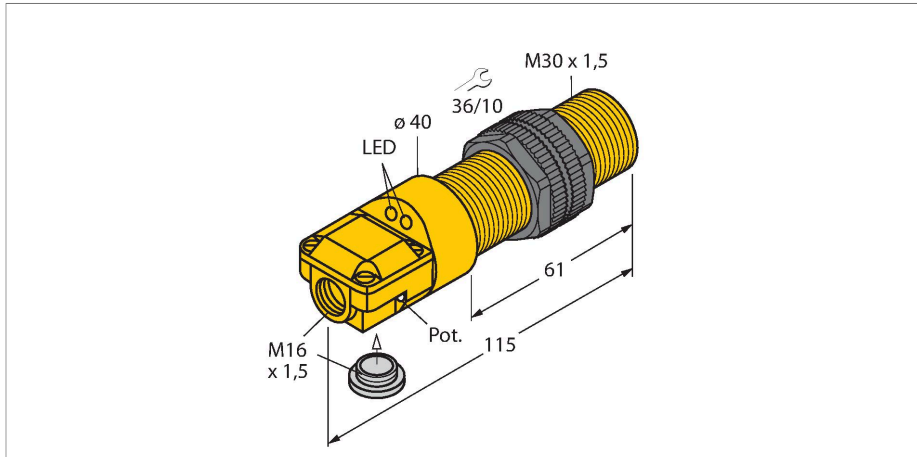


BC10-P30SR-FZ3X2

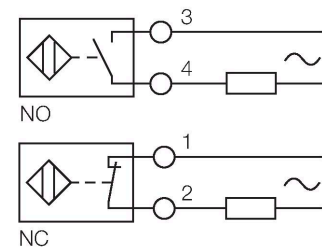
Capacitive Sensor



Features

- M30 × 1.5 threaded barrel
- 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.

Technical data

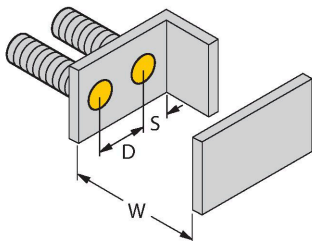
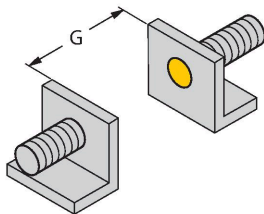
Type	BC10-P30SR-FZ3X2
ID	23104
Rated switching distance (flush)	10 mm
Rated switching distance (non-flush)	15 mm
Secured operating distance	$\leq (0.72 \times S_n) \text{ mm}$
Hysteresis	2...20 %
Temperature drift	Typical 20 %
Repeat accuracy	$\leq 2 \%$ of full scale
Ambient temperature	-25...+70 °C
Electrical data	
Operating voltage U_s	20...250 VAC
AC rated operational current	$\leq 500 \text{ mA}$
Frequency	$\geq 50... \leq 60 \text{ Hz}$
Smallest operating current	$\geq 5 \text{ mA}$
Residual current	$\leq 1.7 \text{ mA}$
Switching frequency	0.02 kHz
Oscillation frequency	According to EN 60947-5-2, 8.2.6.2 Table 9: 0.1...2.0 MHz
Isolation test voltage	1.5 kV
Output function	2-wire, Connection programmable, 2-wire
Voltage drop at I_s	$\leq 7 \text{ V}$
Tests/approvals	
Mechanical data	
Design	Threaded barrel, M30 x 1.5

Technical data

Dimensions	115 mm
Housing material	Plastic, ABS
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
Power-on indication	Green
Switching state	2 × LEDs, Red

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.