

BC10-P30SR-FZ3X2 Capacitive Sensor



Technical data

Туре	BC10-P30SR-FZ3X2
ID	23104
Rated switching distance (flush)	10 mm
Rated switching distance (non-flush)	15 mm
Secured operating distance	≤ (0.72 × Sn) mm
Hysteresis	220 %
Temperature drift	Typical 20 %
Repeat accuracy	≤ 2 % of full scale
Ambient temperature	-25+70 °C
Electrical data	
Operating voltage U _в	20250 VAC
AC rated operational current	≤ 500 mA
Frequency	≥ 50≤ 60 Hz
Smallest operating current	≥ 5 mA
Residual current	≤ 1.7 mA
Switching frequency	0.02 kHz
Oscillation frequency	According to EN 60947-5-2, 8.2.6.2 Table 9: 0.12.0 MHz
Isolation test voltage	1.5 kV
Output function	2-wire, Connection programmable, 2-wire
Voltage drop at I _e	≤ 7 V
Tests/approvals	
Mechanical data	
Design	Threaded barrel, M30 x 1.5
Dimensions	115 mm
Housing material	Plastic, ABS
Active area material	ABS, yellow

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 nonconductive metal objects.



Technical data

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



Accessories

MAP-M30



Mounting adapter; material: Polypropylene; sensor replacement with filled container possible (adapter remains in container during sensor replacement)

6950013



6947216

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

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.