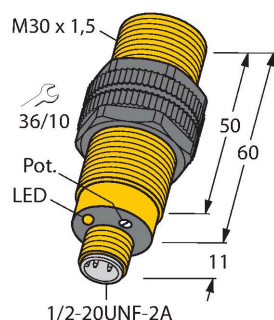# BC10-S30-RDZ3X-B3131
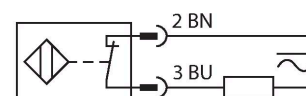# Capacitive Sensor

Features

- M30 × 1.5 threaded barrel
- Plastic, PA12-GF30
- Fine adjustment via potentiometer
- AC 2-wire, 20…250 VAC
- DC 2-wire, 20…320 VDC
- 1/2" connector

Wiring diagram

Technical data

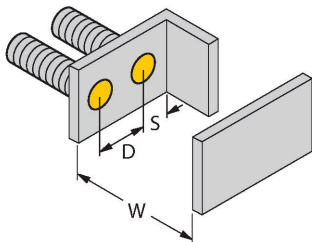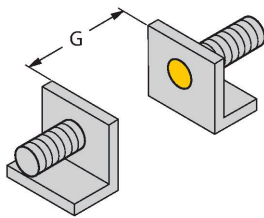|	
Type	BC10-S30-RDZ3X-B3131
Ident. no.	2310820
Rated switching distance (flush)	10 mm
Rated switching distance (non-flush)	15 mm
Secured operating distance	≤ (0.72 x Sn)
Hysteresis	2…20 %
Temperature drift	type 20 %
Repeat accuracy	≤ 2 % of full scale
Ambient temperature	-25…+70 °C
Electrical data	
Operating voltage	20…250
Operating voltage	20…320 VDC
AC rated operational current	≤ 200 mA
DC rated operational current	≤ 200 mA
Frequency	≥ 50…≤ 60 Hz
Smallest operating current	≥ 3 mA
Residual current	≤ 1.7 mA
Switching frequency	0.02 kHz
Isolation test voltage	≤ 1.5 kV
Output function	2-wire, Connection programmable, 2-wire
Voltage drop at I_e	≤ 7 V
Mechanical data	
Design	Threaded barrel, M30 × 1.5

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

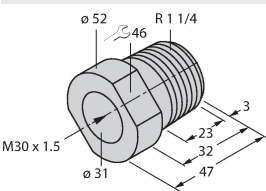|	
Dimensions	60 mm
Housing material	Plastic, PA12-GF30, PEI
Active area material	Plastic, PA12-GF30, yellow
Admissible pressure on front cap	≤ 3 bar
Max. tightening torque housing nut	5 Nm
Electrical connection	Connector, 1/2"
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	1080 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED, 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.
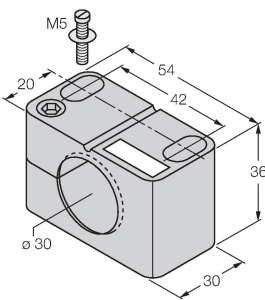
Accessories

MAP-M30	6950013

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

BST-30B	6947216

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

Accessories

Accessories