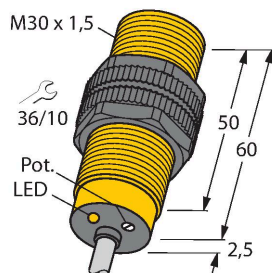


# BCF10-S30-RZ3X

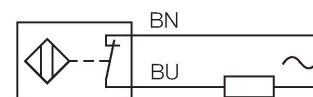
## Capacitive Sensor



### Features

- M30 × 1.5 threaded barrel
- Plastic, PA12-GF30
- Fine adjustment via potentiometer
- Increased EMI protection (even with high frequency equipment)
- Suited for highly viscous media
- AC 2-wire, 20...250 VAC
- NC contact
- Cable connection

### 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

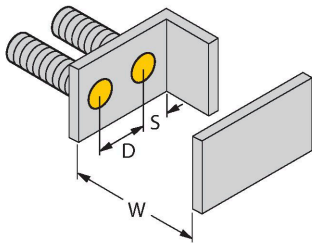
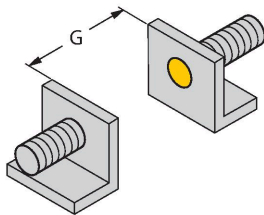
Type	BCF10-S30-RZ3X
Ident. no.	2506013
Rated switching distance (flush)	10 mm
Rated switching distance (non-flush)	10 mm
Secured operating distance	$\leq (0.72 \times \text{Sn})$
Hysteresis	2...20 %
Temperature drift	type 20 %
Repeat accuracy	$\leq 2 \%$ of full scale
Ambient temperature	-25...+70 °C
<b>Electrical data</b>	
Operating voltage	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
Isolation test voltage	$\leq 1.5 \text{ kV}$
Output function	2-wire, NC contact, 2-wire
Voltage drop at $I_o$	$\leq 7 \text{ V}$
<b>Mechanical data</b>	
Design	Threaded barrel, M30 × 1.5
Dimensions	62.5 mm
Housing material	Plastic, PA12-GF30, PEI

Technical data

Active area material	PA12-GF30, yellow
Admissible pressure on front cap	≤ 3 bar
Max. tightening torque of housing nut	5 Nm
Electrical connection	Cable
Cable quality	Ø 5.2 mm, LifYY, PVC, 2 m
Core cross-section	2 x 0.34 mm <sup>2</sup>
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.