

Capacitive sensor BCF10-S30-RZ3X

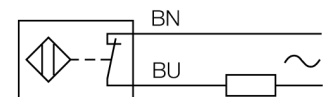
TURCK

Industrial
Automation



- Threaded barrel, M30 x 1.5
- Plastic, PA12-GF30
- Fine adjustment via potentiometer
- Increased RFI 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.

Type code	BCF10-S30-RZ3X
Ident no.	2506013
Rated switching distance (flush)	10 mm
Rated switching distance (non-flush)	10 mm
Assured sensing range	≤ (0.72 x Sn) mm
Hysteresis	2...20 %
Temperature drift	type ≤ ± 20 %
Repeatability	≤ 2 % of full scale
Ambient temperature	-25...+70 °C
Operating voltage	20...250 VAC
AC rated operational current	≤ 500 mA
Frequency	≥ 50...≤ 60 Hz
Smallest operating current I _m	≤ 5 mA
Residual current	≤ 1.7 mA
Switching frequency	0.02 kHz
Rated insulation voltage	≤ 1.5 kV
Output function	2-wire, NC contact, 2-wire
Voltage drop at I _n	≤ 7 V
Design	threaded barrel, M30 x 1.5
Dimensions	62.5 mm
Housing material	plastic, PA
Material active area	Plastic, PA, yellow
Admissible pressure on front cap	≤ 3 bar
Max. tightening torque housing nut	5 Nm
Connection	cable
Cable quality	Ø 5.2, LifYY, PVC, 2 m
Cable cross section	2 x 0.34 mm 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

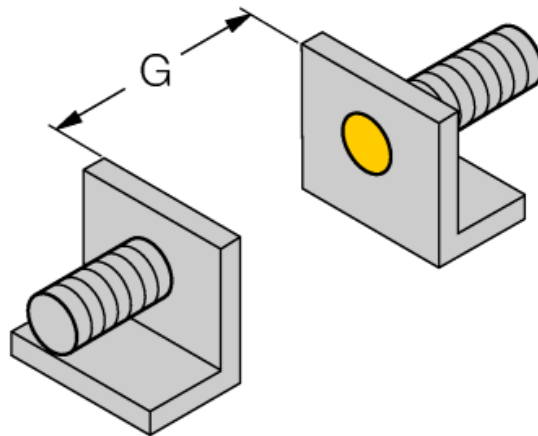
Capacitive sensor BCF10-S30-RZ3X

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 in compliance with the standard switching distance. Should the sensitivity of the sensors be changed via potentiometer, the data sheet specifications no longer apply.



**Capacitive sensor
BCF10-S30-RZ3X**

Accessories

Type code	Ident no.	Description	Dimension drawing
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	