Capacitive sensor
BCF10-S30-RZ3X
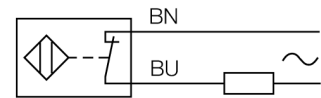

- ■ **M30 × 1.5 threaded barrel**
- ■ **Plastic, PA12-GF30**
- ■ **Fine adjustment via potentiometer**
- ■ **Increased EMI protection (even with high frequency equipment)**
- ■ **Suited for highly viscous media**
- ■ **AC 2-wire, 20…250 VAC**
- ■ **NC contact**
- ■ **Cable connection**

**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.

Type designation	BCF10-S30-RZ3X
Ident-No.	2506013

Rated switching distance Sn	10 mm
Mounting conditions	Flush
Secured operating distance	$\leq$ (0.72 x Sn) mm
Repeat accuracy	$\leq$ 2 % of full scale
Temperature drift	type 20 %
Hysteresis	2…20 %
Ambient temperature	-25…+70 °C

Operating voltage	20…250VAC
AC rated operational current	$\leq$ 500 mA
Frequency	$\geq$ 50…$\leq$ 60 Hz
Residual current	$\leq$ 1.7 mA
Isolation test voltage	$\leq$ 1.5 kV
Voltage drop at I_e	$\leq$ 7 V
Output function	2-wire, NC contact, 2-wire
Smallest operating current I_m	$\geq$ 5 mA
Switching frequency	0.02 kHz

Design	Threaded barrel,M30 × 1.5
Dimensions	62.5 mm
Housing material	Plastic, PA12-GF30, PEI
Active area material	Plastic, PA12-GF30, yellow
End cap	Plastic, PA
Admissible pressure on front cap	$\leq$ 3 bar
Max. tightening torque housing nut	5 Nm
Electrical connection	Cable
Cable quality	5.2mm, LifYY, PVC, 2
Cable cross section	2 x 0.34 mm²
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
Packaging unit	1

Switching state	LED,Yellow

Capacitive sensor
BCF10-S30-RZ3X

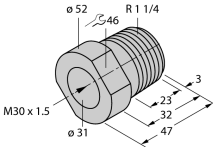| Mounting instructions/Description	minimum distances
Distance D	60 mm
Distance W	30 mm
Distance S	45 mm
Distance G	60 mm
Diameter active area B	Ø 30 mm
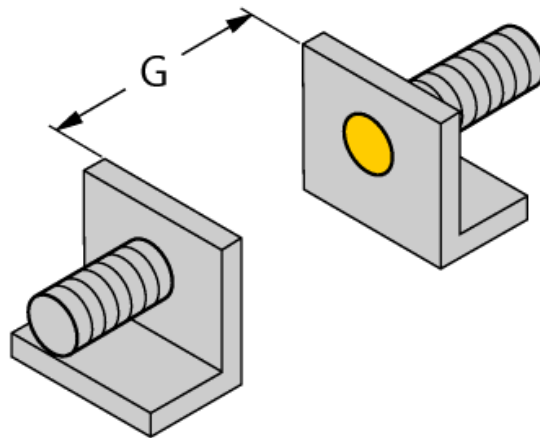
The given minimum distances have been checked against the standard switching distance.
Should the sensitivity of the sensors be changed via potentiometer, the data sheet specifications no longer apply.
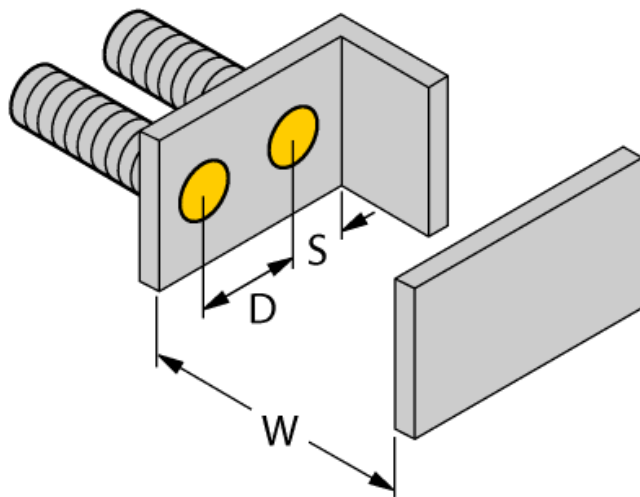
Accessories

Type code	Ident-No.	Description	
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	

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3 / 3   TURCK Inc. ● 3000 Campus Drive Minneapolis, MN 55441-2656 ● Phone: 763-553-7300 ● Application Support: 1-800-544-7769 ● Fax 763-553-0708 ● www.turck.com