

BCF10-S30-RZ3X

Capacitive Sensor



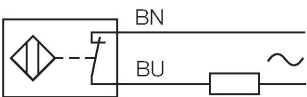
Technical data

Type	BCF10-S30-RZ3X
ID	2506013
Rated switching distance (flush)	10 mm
Rated switching distance (non-flush)	10 mm
Secured operating distance	≤ (0.72 × Sn) mm
Hysteresis	2...20 %
Temperature drift	Typical 20 %
Repeat accuracy	≤ 2 % of full scale
Ambient temperature	-25...+70 °C
Electrical data	
Operating voltage U _B	20...250 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
Isolation test voltage	1.5 kV
Output function	2-wire, NC contact, 2-wire
Voltage drop at I _o	≤ 7 V
Tests/approvals	
Mechanical data	
Design	Threaded barrel, M30 x 1.5
Dimensions	62.5 mm
Housing material	Plastic, PA12-GF30, PEI
Active area material	PA12-GF30, yellow
Admissible pressure on front cap	≤ 3 bar
Max. tightening torque of housing nut	5 Nm

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



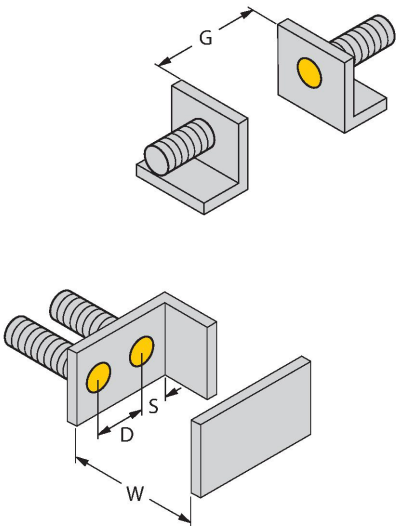
Functional principle

Capacitive proximity switches are designed for non-contact and wear-free detection of electrically conductive as well as non-conductive metal objects.

Technical data

Electrical connection	Cable
Cable quality	Ø 5.2 mm, LifYY, PVC, 2 m
Core 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
Power-on indication	Green
Switching state	LED, Red

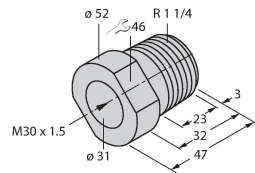
Mounting instructions

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.

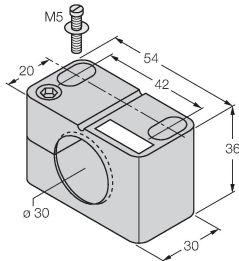
Accessories

MAP-M30	6950013
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Mounting adapter; material: Polypropylene; sensor replacement with filled container possible (adapter remains in container during sensor replacement)

BST-30B	6947216
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Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6