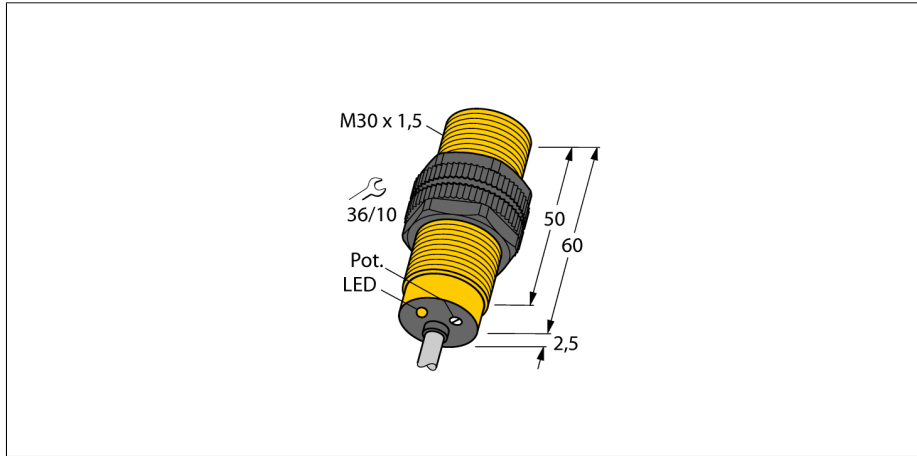


Capacitive sensor BCF10-S30-RZ3X

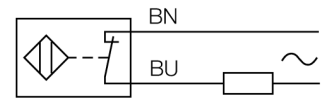
TURCK

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

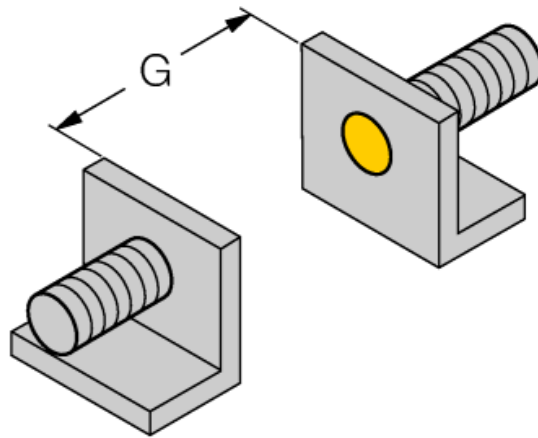
Capacitive proximity switches are designed for non-contact and wear-free detection of electrically conductive as well as non-conductive metal objects.

Type code	BCF10-S30-RZ3X
Ident no.	2506013
Rated operating distance S_n	10 mm
Rated operating distance S_n	10 mm, non-flush mounting
Assured sensing range	$\leq (0.72 \times S_n)$ mm
Hysteresis	2...20 %
Temperaturdrift	type $\leq \pm 20$ %
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_m	≤ 7 V
Design	threaded barrel, M30 x 1.5
Dimensions	62.5 mm
Housing material	Plastic, PA
Material active face	Plastic, PA, yellow
Admissible pressure on front cap	≤ 5 bar
Max. tightening torque housing nut	5 Nm
Connection	cable
Cable quality	$\varnothing 5.2$, 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	● yellow

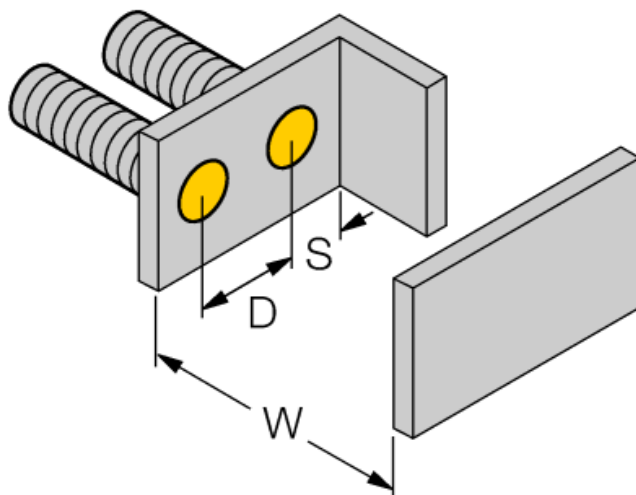
Capacitive sensor BCF10-S30-RZ3X

Mounting instructions / Description	minimum distances
Distance D	60 mm
Distance W	30 mm
Distance S	45 mm
Distance G	60 mm

Diameter of the active area B	Ø 30 mm
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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	