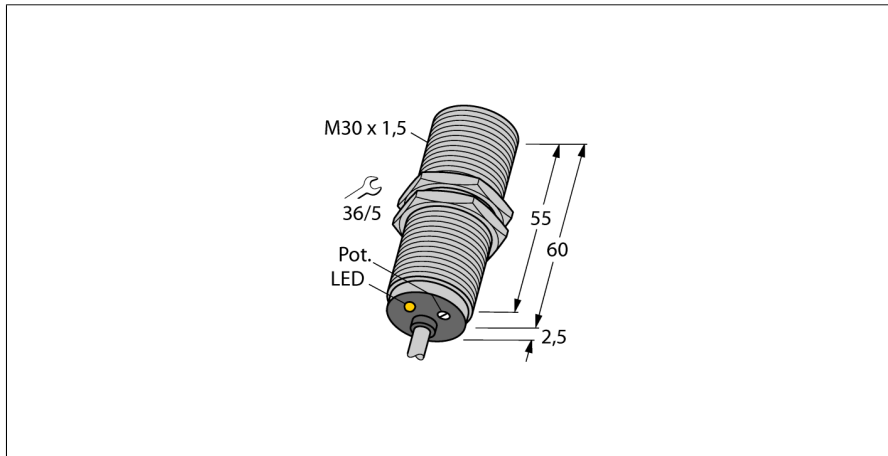


Capacitive sensor BC10-M30K-RZ3X

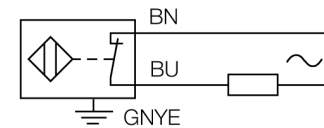
TURCK
works

Industrial
Automation



- M30 × 1.5 threaded barrel
- Chrome-plated brass
- Fine adjustment via potentiometer
- AC 2-wire, 20...250 VAC
- NC contact
- Cable connection

Wiring Diagram



Functional principle

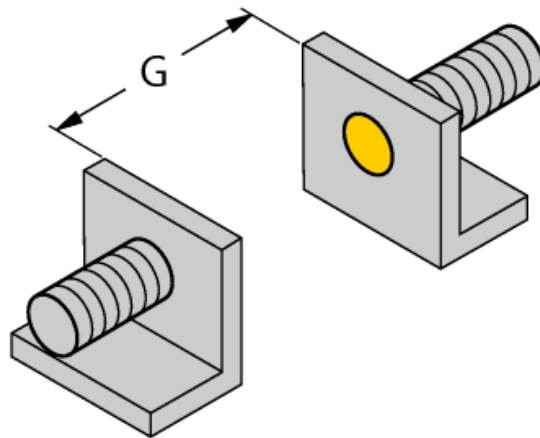
Capacitive proximity switches are designed for non-contact and wear-free detection of electrically conductive as well as non-conductive metal objects.

Type designation	BC10-M30K-RZ3X
Ident-No.	2503025
Rated switching distance (flush)	10 mm
Rated switching distance (non-flush)	10 mm
Secured operating distance	≤ (0.72 × S _n) mm
Hysteresis	2...20 %
Temperature drift	type 20 %
Repeat accuracy	≤ 2 % of full scale
Ambient temperature	-25...+70 °C
Operating voltage	20...250VAC
AC rated operational current	≤ 500 mA
Frequency	≥ 50...≤ 60 Hz
Smallest operating current I _o	≥ 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
Design	Threaded barrel, M30 × 1.5
Dimensions	62.5 mm
Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, PA12-GF30, yellow
Admissible pressure on front cap	≤ 3 bar
Max. tightening torque housing nut	25 Nm
Electrical connection	Cable
Cable quality	Ø 5.2mm, LifYY, PVC, 2
Cable cross section	3 × 0.5 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
Packaging unit	1
Switching state	LED, Yellow

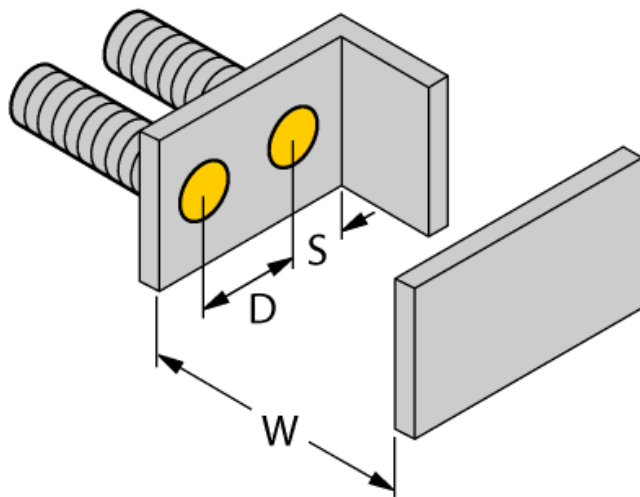
Capacitive sensor BC10-M30K-RZ3X

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
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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.



**Capacitive sensor
BC10-M30K-RZ3X**



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	