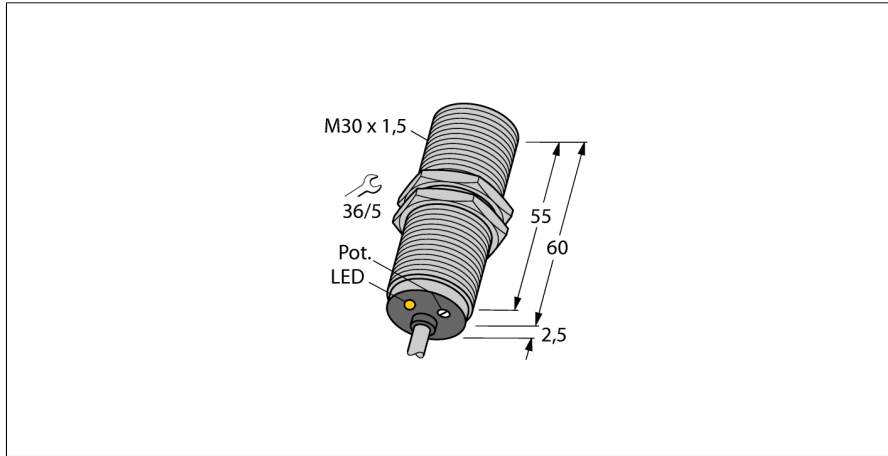


# Capacitive sensor BC10-M30K-AZ3X

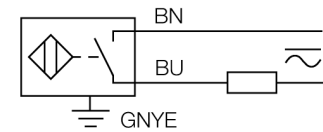
**TURCK**  
*works*

Industrial  
Automation



- M30 × 1.5 threaded barrel
- Chrome-plated brass
- Fine adjustment via potentiometer
- AC 2-wire, 20...250 VAC
- NO 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.

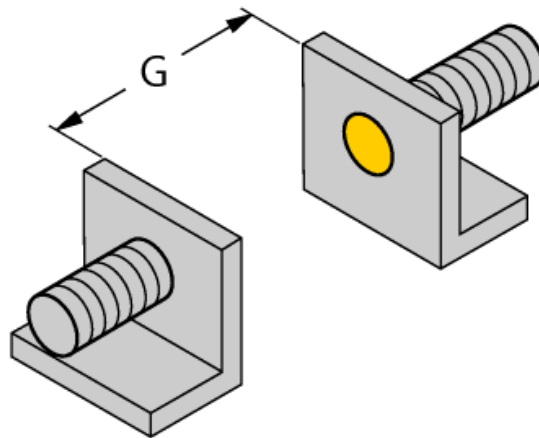
<b>Type designation</b>	BC10-M30K-AZ3X
Ident-No.	2503031
<b>Rated switching distance (flush)</b>	10 mm
Rated switching distance (non-flush)	10 mm
Secured operating distance	≤ (0.72 × S <sub>n</sub> ) mm
Hysteresis	2...20 %
Temperature drift	type 20 %
Repeat accuracy	≤ 2 % of full scale
Ambient temperature	-25...+70 °C
<b>Operating voltage</b>	20...250VAC
AC rated operational current	≤ 500 mA
Frequency	≥ 50...≤ 60 Hz
Smallest operating current I <sub>o</sub>	≥ 5 mA
Residual current	≤ 1.7 mA
Switching frequency	0.02 kHz
Isolation test voltage	≤ 1.5 kV
Output function	2-wire, NO contact, 2-wire
Voltage drop at I <sub>o</sub>	≤ 7 V
<b>Design</b>	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 <sup>2</sup>
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
<b>Switching state</b>	LED, Yellow

# Capacitive sensor BC10-M30K-AZ3X

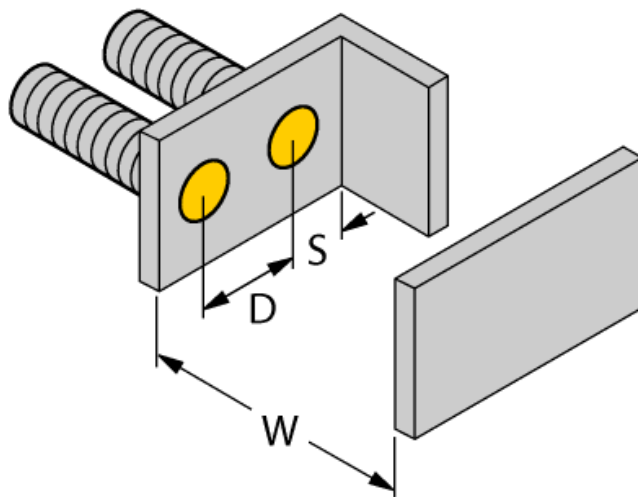
Mounting instructions/Description	minimum distances
Distance D	60 mm
Distance W	30 mm
Distance S	45 mm
Distance G	60 mm

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Diameter active area B	Ø 30 mm
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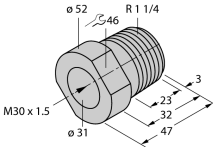
The given minimum distances have been checked against the standard switching distance. Should the sensitivity of the sensors be changed via potentiometer, the data sheet specifications no longer apply.



**Capacitive sensor  
BC10-M30K-AZ3X**



**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	