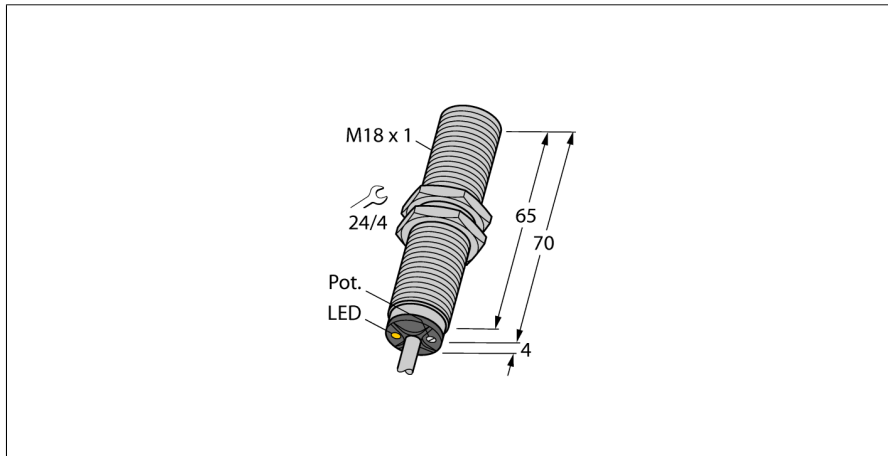


# Capacitive sensor BC5-M18-AZ3X

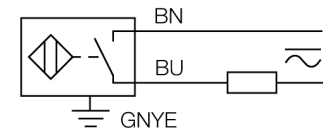
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- M18 × 1 threaded barrel
- Chrome-plated brass
- Fine adjustment via potentiometer
- AC 2-wire, 20...250 VAC
- NO contact
- Cable connection

### 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>	BC5-M18-AZ3X
Ident no.	2305000
<b>Rated switching distance (flush)</b>	5 mm
Rated switching distance (non-flush)	5 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>Approvals</b>	UL ABS cULus
<b>Design</b>	Threaded barrel, M18 × 1
Dimensions	74 mm
Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, PBT-GF30-V0, yellow
Admissible pressure on front cap	≤ 4 bar
Max. tightening torque housing nut	25 Nm
Electrical connection	Cable
Cable quality	Ø 5.2, LiFY, PVC, 2m
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
<b>Switching state</b>	LED yellow

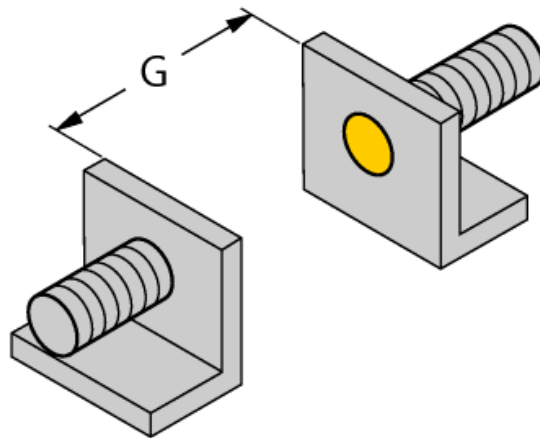
# Capacitive sensor BC5-M18-AZ3X

**TURCK**

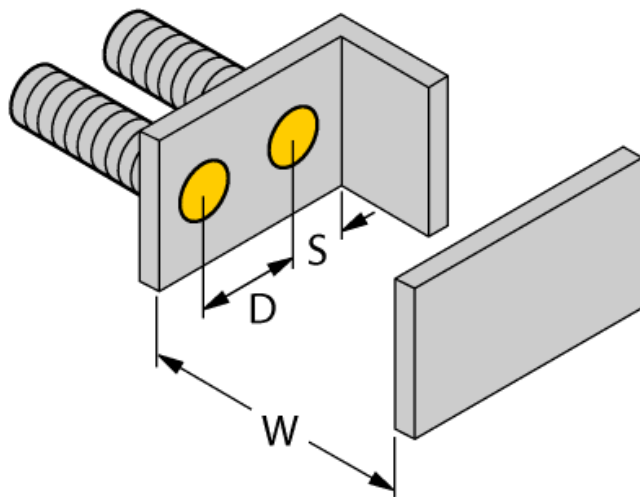
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Mounting instructions/Description	minimum distances
Distance D	36 mm
Distance W	15 mm
Distance S	27 mm
Distance G	30 mm

Diameter active area B                       $\varnothing$  18 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.



Capacitive sensor  
BC5-M18-AZ3X

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Accessories

Type code	Ident no.	Description	
BS 18	69471	Mounting bracket for threaded barrel devices; material: PA66-GF	
BSN 18	69472	Fixing clamp; material: PA66-GF	
BST-18B	6947214	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	
MAP-M18	6950012	Mounting adapter; material: Polypropylene; sensor replacement with filled container possible (adapter remains in container during sensor replacement)	