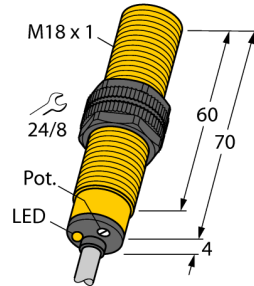


Capacitive sensor BC5-S18-AZ3X

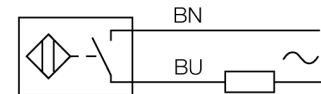
TURCK
works

Industrial
Automation



- M18 × 1 threaded barrel
- Plastic, PA12-GF30
- Fine adjustment via potentiometer
- AC 2-wire, 20...250 VAC
- NO contact
- Cable connection

Wiring Diagram



Functional principle

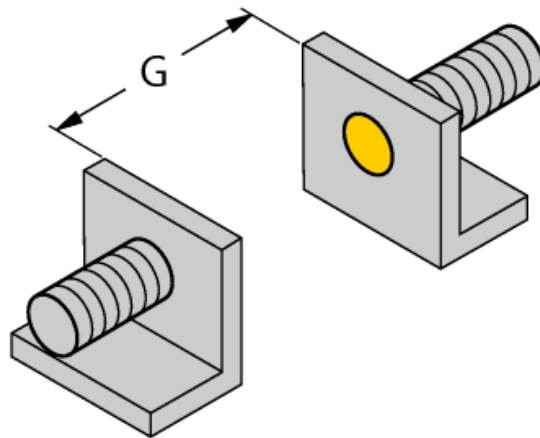
Capacitive proximity switches are designed for non-contact and wear-free detection of electrically conductive as well as non-conductive metal objects.

Type designation	BC5-S18-AZ3X
Ident-No.	2305500
Rated switching distance (flush)	5 mm
Rated switching distance (non-flush)	7.5 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, NO contact, 2-wire
Voltage drop at I _o	≤ 7 V
Design	Threaded barrel, M18 × 1
Dimensions	74 mm
Housing material	Plastic, PA12-GF30, PEI
Active area material	Plastic, PA12-GF30, yellow
Admissible pressure on front cap	≤ 6 bar
Max. tightening torque housing nut	2 Nm
Electrical connection	Cable
Cable quality	Ø 5.2mm, LifYY, PVC, 2
Cable cross section	2 × 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
Packaging unit	1
Switching state	LED, Yellow

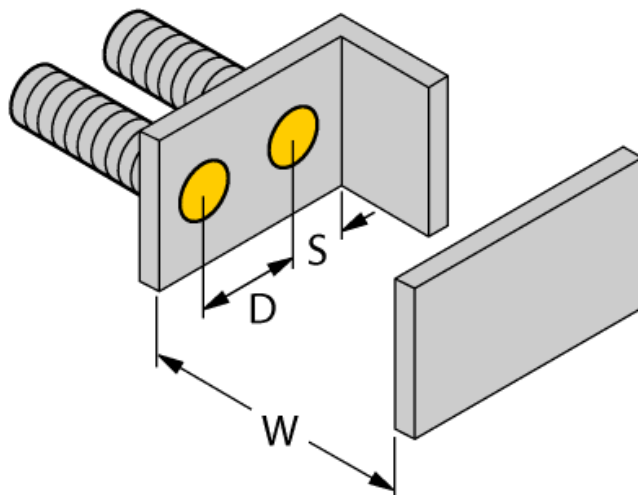
Capacitive sensor BC5-S18-AZ3X

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	Ø 18 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
BC5-S18-AZ3X



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)	