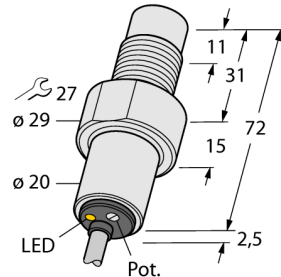


Capacitive sensor BC5-S185-AN4X

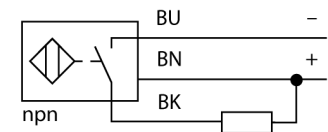
TURCK
works

Industrial
Automation



- M18 × 1 threaded barrel
- Plastic, PVDF
- Fine adjustment via potentiometer
- DC 3-wire, 10...65 VDC
- NO contact, NPN output
- Cable connection

Wiring Diagram



Functional principle

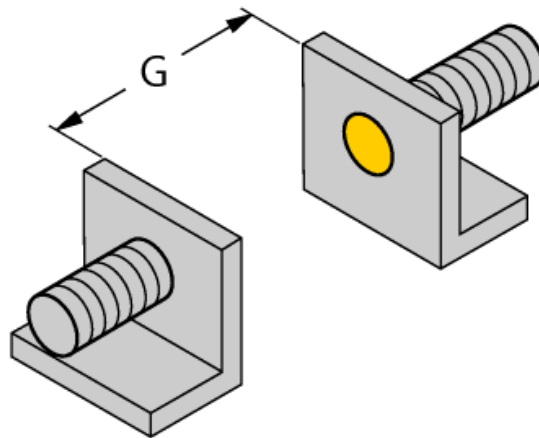
Capacitive proximity switches are designed for non-contact and wear-free detection of electrically conductive as well as non-conductive metal objects.

Type designation	BC5-S185-AN4X
Ident-No.	2503550
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	10...65 VDC
Residual ripple	≤ 10 % U _{is}
DC rated operational current	≤ 200 mA
No-load current I ₀	≤ 15 mA
Residual current	≤ 0.1 mA
Switching frequency	0.1 kHz
Isolation test voltage	≤ 0.5 kV
Output function	3-wire, NO contact, NPN
Short-circuit protection	yes/ Cyclic
Voltage drop at I ₀	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes/ Complete
Approvals	UL
Design	Threaded barrel, M18 × 1
Dimensions	74.5 mm
Housing material	Plastic, PVDF
Active area material	Plastic, PVDF, yellow
Max. tightening torque housing nut	2 Nm
Electrical connection	Cable
Cable quality	Ø 5.2mm, LifYY, PVC, 2
Cable cross section	3 × 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

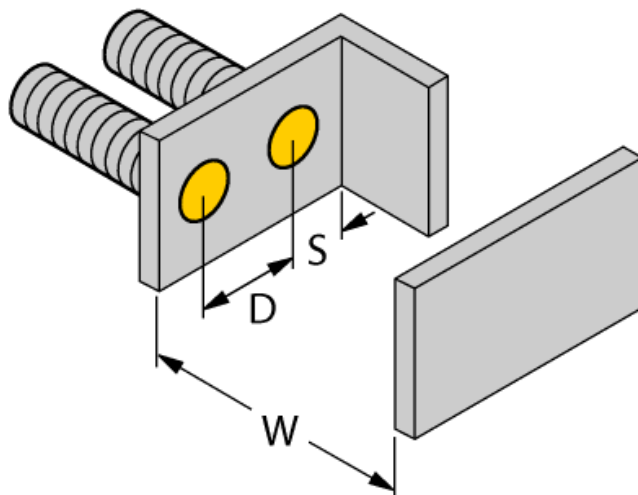
Capacitive sensor BC5-S185-AN4X

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
------------------------	---------



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-S185-AN4X



Accessories

Type code	Ident-No.	Description	
BSN 18	69472	Fixing clamp; material: PA66-GF	
BST-18B	6947214	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	