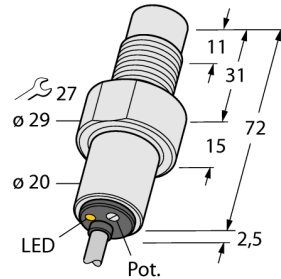


Capacitive sensor BC5-S185-AN4X

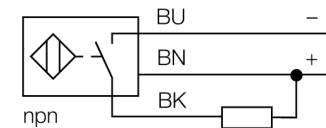
TURCK

Industrial
Automation



- Threaded barrel, M18 x 1
- 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 code	BC5-S185-AN4X
Ident no.	2503550
Rated switching distance (flush)	5 mm
Rated switching distance (non-flush)	7.5 mm
Assured sensing range	≤ (0.72 x Sn) mm
Hysteresis	2...20 %
Temperature drift	type ≤ ± 20 %
Repeatability	≤ 2 % of full scale
Ambient temperature	-25...+70 °C
Operating voltage	10...65VDC
Residual ripple	≤ 10 % U _{ss}
DC rated operational current	≤ 200 mA
No-load current I ₀	≤ 15 mA
Residual current	≤ 0.1 mA
Switching frequency	0.1 kHz
Rated insulation 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
Design	threaded barrel, M18 x 1
Dimensions	74.5 mm
Housing material	plastic, PVDF
Material active area	Plastic, PVDF, yellow
Max. tightening torque housing nut	2 Nm
Connection	cable
Cable quality	Ø 5.2, LifYY, PVC, 2 m
Cable cross section	3 x 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
Switching state	LED yellow

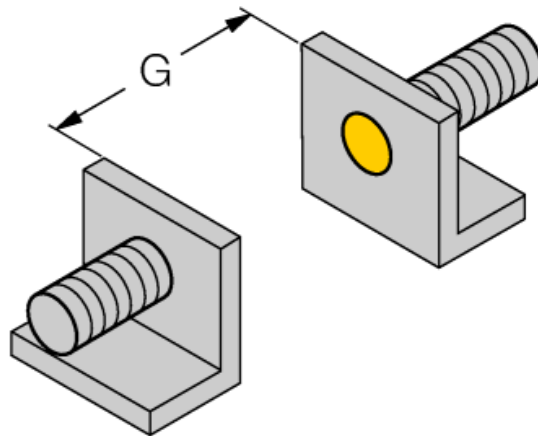
Capacitive sensor BC5-S185-AN4X

TURCK

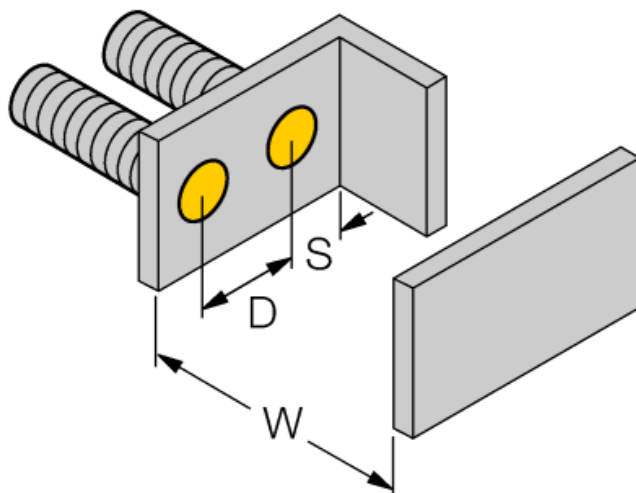
Industrial
Automation

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

Diameter of the active area B \varnothing 18 mm



The given minimum distances have been checked in compliance with 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**

TURCK

Industrial
Automation

Accessories

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