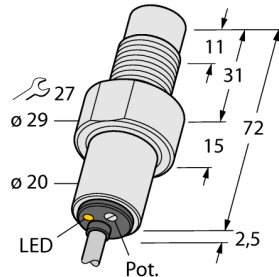


Capacitive sensor with extended temperature range BC5-S185-AN4X/S100

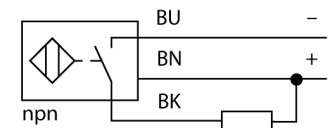
TURCK
works

Industrial
Automation



- M18 × 1 threaded barrel
- Plastic, PVDF
- Fine adjustment via potentiometer
- For temperatures up to 100°C
- DC 3-wire, 10...65 VDC
- NO contact, NPN output
- Cable connection

Wiring Diagram

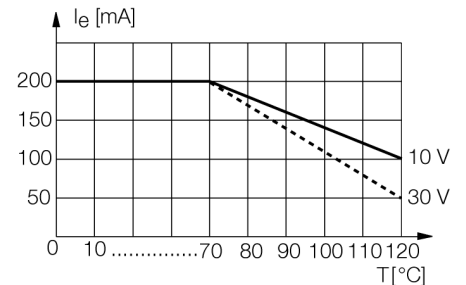


Functional principle

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

Special capacitive sensor versions can be used at temperatures of up to +100°C.

Derating Curve

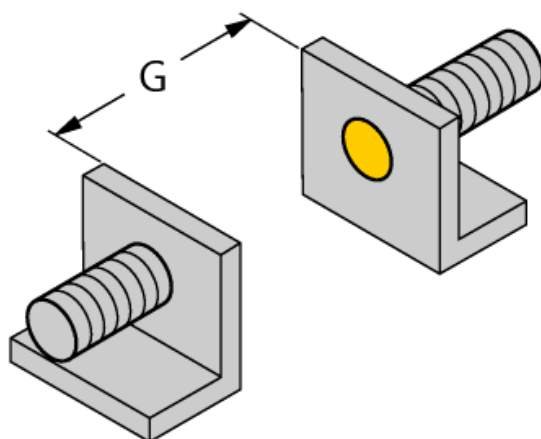


Type designation	BC5-S185-AN4X/S100
Ident-No.	2503551
Rated switching distance Sn	7.5 mm
Mounting conditions	Flush
Secured operating distance	≤ (0.72 x Sn) mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	type 20 %
Hysteresis	2...20 %
Ambient temperature	-25...+100 °C
Operating voltage	10...65 VDC
Residual ripple	≤ 10 % U _{ss}
DC rated operational current	≤ 200 mA
Rated operational current	See derating curve
No-load current I₀	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes/ Cyclic
Voltage drop at I₀	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	3-wire, NO contact, NPN
Switching frequency	0.1 kHz
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	5.2mm, LifYY, PVC, 2
Cable cross section	3 x 0.5 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

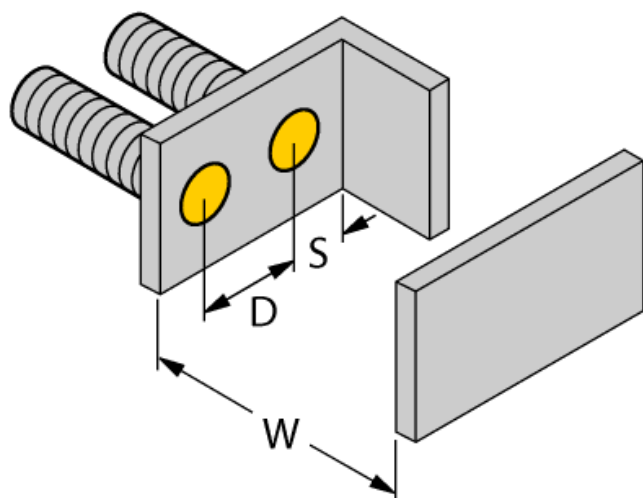
**Capacitive sensor
with extended temperature range
BC5-S185-AN4X/S100**

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
with extended temperature range
BC5-S185-AN4X/S100



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	