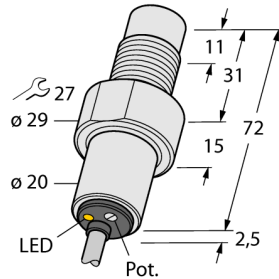
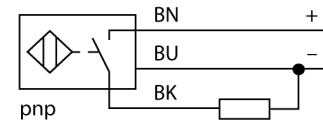


**Capacitive sensor
with extended temperature range
BC5-S185-AP4X/S100**



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

Wiring Diagram

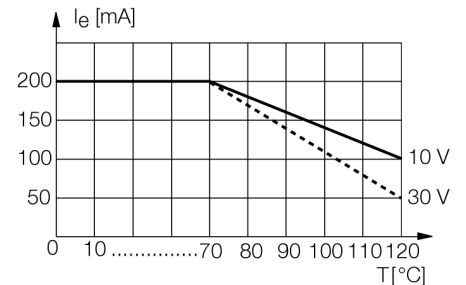


Functional principle

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.

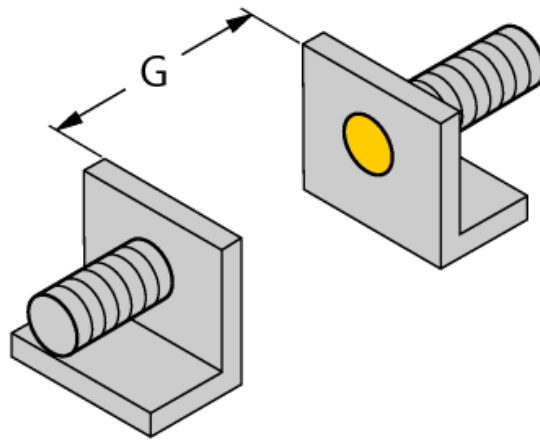
Derating Curve



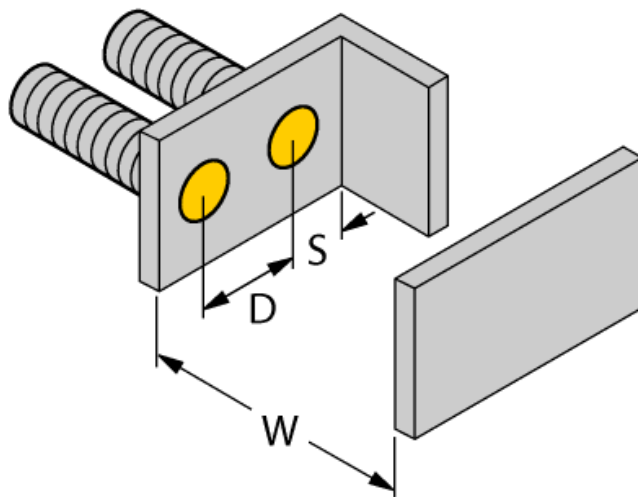
Type designation	BC5-S185-AP4X/S100
Ident-No.	2503502
Rated switching distance (flush)	5 mm
Rated switching distance (non-flush)	7.5 mm
Secured operating distance	≤ (0.72 × S _n) mm
Hysteresis	2...20 %
Temperature drift	type 20 %
Repeat accuracy	≤ 2 % of full scale
Ambient temperature	-25...+100 °C
Operating voltage	10...65 VDC
Residual ripple	≤ 10 % U _s
DC rated operational current	≤ 200 mA
Rated operational current	See derating curve
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, PNP
Short-circuit protection	yes/ Cyclic
Voltage drop at I _e	≤ 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 × 0.5 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-AP4X/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



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-AP4X/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	