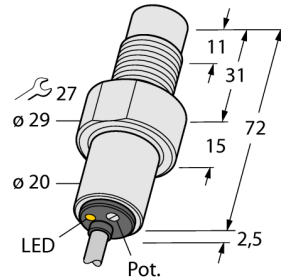


# Capacitive sensor BC5-S185-AP4X

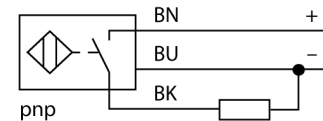
**TURCK**  
*works*

Industrial  
Automation



- M18 × 1 threaded barrel
- Plastic, PVDF
- Fine adjustment via potentiometer
- 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.

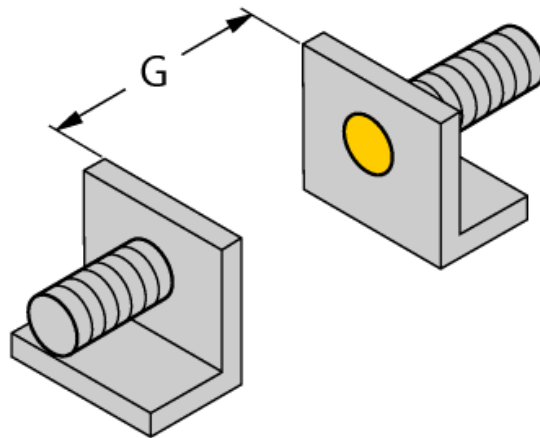
<b>Type designation</b>	BC5-S185-AP4X
Ident-No.	25035
<b>Rated switching distance Sn</b>	7.5 mm
Mounting conditions	Flush
Secured operating distance	≤ (0.72 × Sn) mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	type 20 %
Hysteresis	2...20 %
Ambient temperature	-25...+70 °C
<b>Operating voltage</b>	10...65 VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
DC rated operational current	≤ 200 mA
No-load current I <sub>0</sub>	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes/ Cyclic
Voltage drop at I <sub>0</sub>	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	3-wire, NO contact, PNP
Switching frequency	0.1 kHz
<b>Design</b>	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 × 0.34 mm <sup>2</sup>
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
<b>Switching state</b>	LED, Yellow

# Capacitive sensor BC5-S185-AP4X

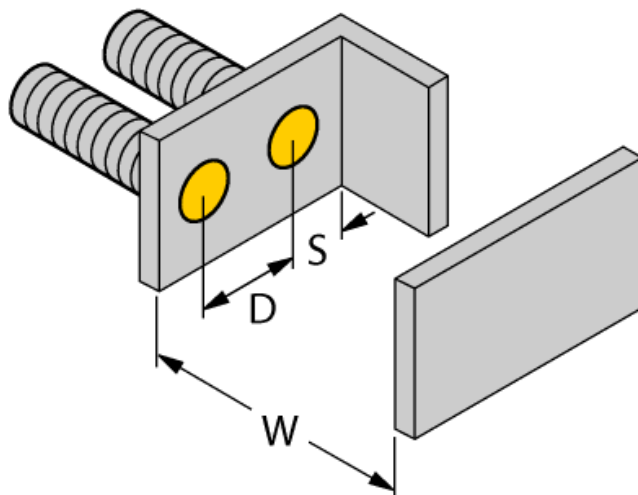
Mounting instructions/Description	minimum distances
Distance D	36 mm
Distance W	15 mm
Distance S	27 mm
Distance G	30 mm

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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-S185-AP4X



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	