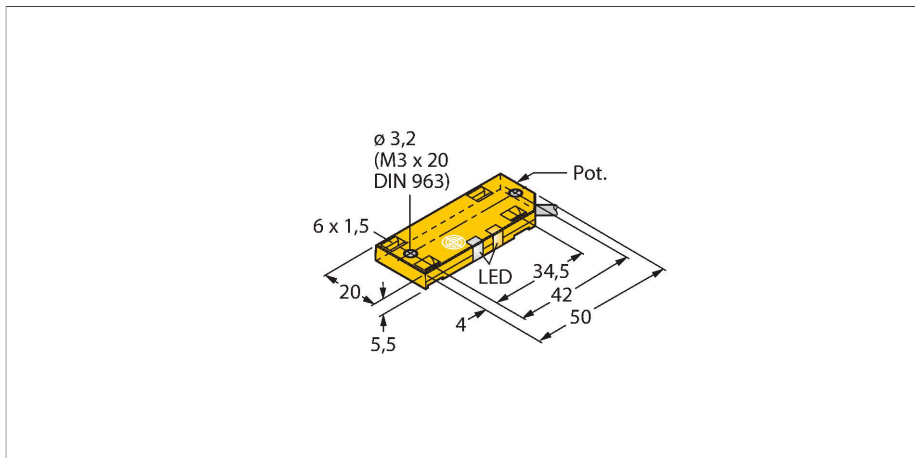


# BC10-QF5.5-AN6X2 7M

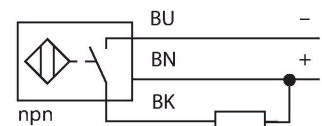
## Capacitive Sensor



### Features

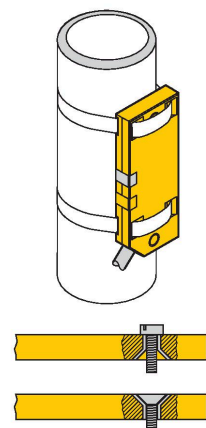
- Rectangular, height 5.5 mm
- Large active face, marked for correct installation
- Plastic, PP
- Fine adjustment via potentiometer
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- Cable connection

### 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.



### Technical data

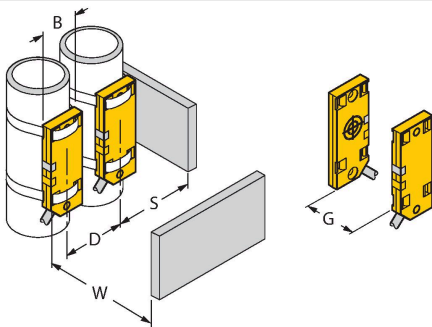
Type	BC10-QF5.5-AN6X2 7M
ID	100000977
Rated switching distance (flush)	10 mm
Rated switching distance (non-flush)	10 mm
Secured operating distance	≤ (0.72 × Sn)
Hysteresis	1...20 %
Temperature drift	Typical 20 %
Repeat accuracy	≤ 2 % of full scale
Ambient temperature	-25...+70 °C
<b>Electrical data</b>	
Operating voltage	10...30 VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
DC rated operational current	≤ 200 mA
No-load current	≤ 15 mA
Residual current	≤ 0.1 mA
Switching frequency	0.1 kHz
Oscillation frequency	According to EN 60947-5-2, 8.2.6.2 Table 9: 0.1...2.0 MHz
Isolation test voltage	≤ 0.5 kV
Output function	3-wire, NO contact, NPN
Short-circuit protection	yes / Cyclic
Voltage drop at I <sub>e</sub>	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete
<b>Tests/approvals</b>	
Approvals	UL
UL registration number	E210608

## Technical data

Mechanical data	
Design	Rectangular, QF5,5
Dimensions	54 x 20.3 x 5.5 mm
Housing material	Plastic, PP
Active area material	PP
Electrical connection	Cable
Cable quality	Ø 3 mm, Lif9Y-11Y, PUR, 7 m
Core cross-section	3 x 0.14 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
Power-on indication	LED, Green
Switching state	LED, Yellow

## Mounting instructions

### Product features



Distance D	40 mm
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Distance W	30 mm
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Distance S	30 mm
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Distance G	60 mm
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Diameter active area B	Ø 20 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.