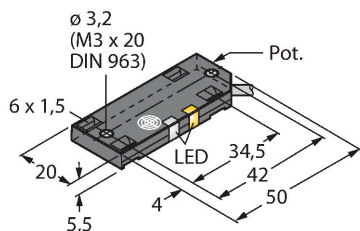


# BC5-QF5.5-AP6X2/S250

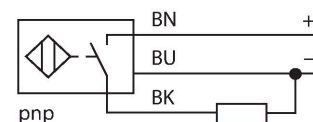
## Capacitive Sensor



### Features

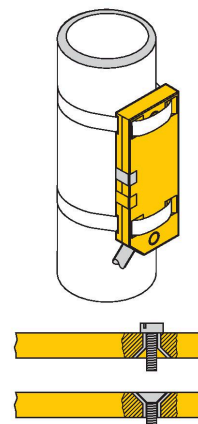
- Rectangular, height 5.5 mm
- Large active face, marked for correct installation
- Plastic, PP
- Fixed settings
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Cable connection

### 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.



### Technical data

Type	BC5-QF5.5-AP6X2/S250
Ident. no.	2620116
Rated switching distance (flush)	5 mm
Rated switching distance (non-flush)	5 mm
Secured operating distance	$\leq (0.72 \times \text{Sn})$
Hysteresis	2...20 %
Temperature drift	type 20 %
Repeat accuracy	$\leq 2 \%$ of full scale
Ambient temperature	-25...+70 °C
<b>Electrical data</b>	
Operating voltage	10...30 VDC
Residual ripple	$\leq 10 \%$ $U_{ss}$
DC rated operational current	$\leq 200 \text{ mA}$
No-load current	$\leq 15 \text{ mA}$
Residual current	$\leq 0.1 \text{ mA}$
Switching frequency	0.1 kHz
Isolation test voltage	$\leq 0.5 \text{ kV}$
Output function	3-wire, NO contact, PNP
Short-circuit protection	yes / Cyclic
Voltage drop at $I_o$	$\leq 1.8 \text{ V}$
Wire breakage/Reverse polarity protection	yes / Complete
Approvals	UL

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, black
Electrical connection	Cable
Cable quality	Ø 3 mm, LifYY-11Y, PUR, 2 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



The technical drawing illustrates the dimensions of the BC5-QF5.5-AP6X2/S250 sensor. It includes a side view of two sensors mounted on a surface, showing dimensions D (distance between sensors), S (distance from sensor to surface), and B (diameter of the active area). A top-down view shows dimension G (distance from sensor to surface).

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

BC5-QF5.5-AP6X2/S250 | 12/10/2020 12-35 | technical changes reserved