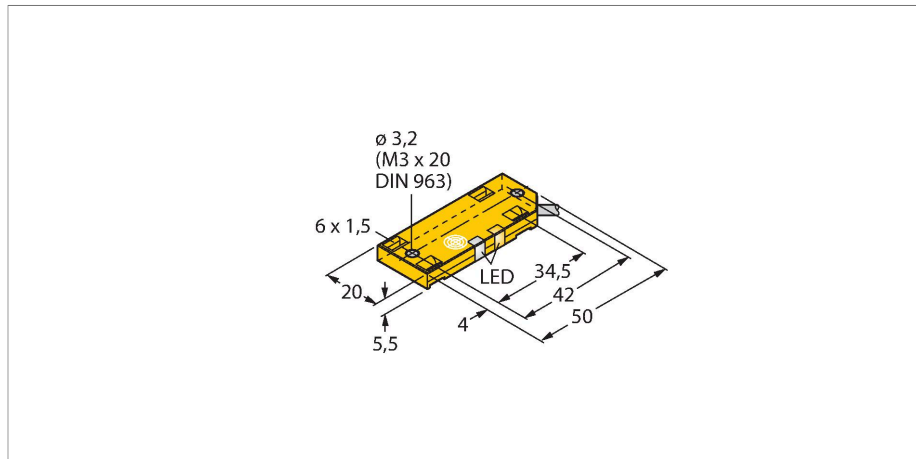


# BC5-QF5.5-RP6X2/S250

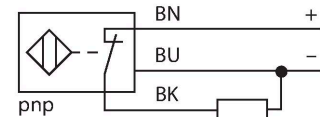
## Capacitive Sensor



### Features

- Rectangular, height 5.5 mm
- Large active face, marked for correct installation
- Plastic, PP
- Fixed settings
- DC 3-wire, 10...30 VDC
- NC contact, PNP output
- Cable connection

### Wiring diagram

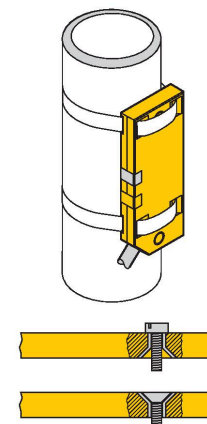


### Technical data

|   |                          |
|---|--------------------------|
| Type                                      | BC5-QF5.5-RP6X2/S250     |
| Ident. no.                                | 2620127                  |
| Rated switching distance (flush)          | 5 mm                     |
| Rated switching distance (non-flush)      | 5 mm                     |
| Secured operating distance                | $\leq (0.72 \times Sn)$  |
| 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              | $\leq 200$ mA            |
| No-load current                           | $\leq 15$ mA             |
| Residual current                          | $\leq 0.1$ mA            |
| Switching frequency                       | 0.1 kHz                  |
| Isolation test voltage                    | $\leq 0.5$ kV            |
| Output function                           | 3-wire, NC contact, PNP  |
| Short-circuit protection                  | yes / Cyclic             |
| Voltage drop at $I_o$                     | $\leq 1.8$ V             |
| Wire breakage/Reverse polarity protection | yes / Complete           |
| Approvals                                 | UL                       |

### Functional principle

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

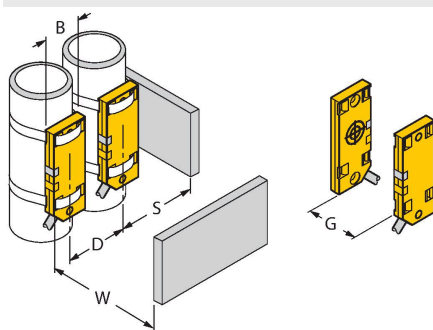


## Technical data

| 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, 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



|                        |         |
|------------------------|---------|
| 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.