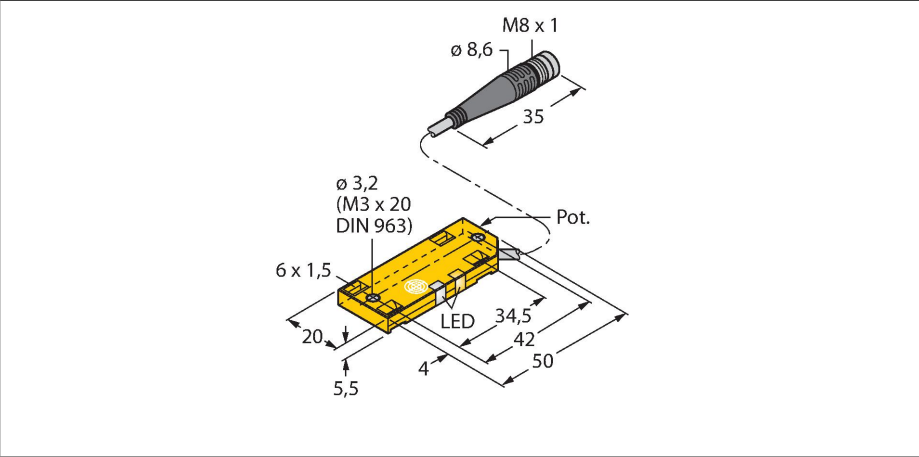


BCE10-QF5.5-AN6X2-0.3-PSG3M

Capacitive Sensor

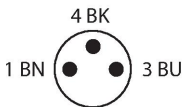
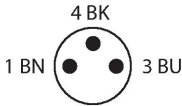


Technical data

Type	BCE10-QF5.5-AN6X2-0.3-PSG3M
ID	100029094
Rated switching distance (flush)	10 mm
Rated switching distance (non-flush)	10 mm
Secured operating distance	≤ (0.72 × Sn) mm
Hysteresis	1...20 %
Temperature drift	Typical 20 %
Repeat accuracy	≤ 5 % of full scale
Ambient temperature	-10...+60 °C
Electrical data	
Operating voltage U _B	10...30 VDC
Ripple U _{ss}	≤ 10 % U _{Bmax}
DC rated operating current I _e	≤ 100 mA
No-load current	≤ 15 mA
Residual current	≤ 0.1 mA
Switching frequency	0.05 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 _e	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Tests/approvals	
Approvals	UL
UL registration number	E210608

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
- M8 × 1 connector



Functional principle

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

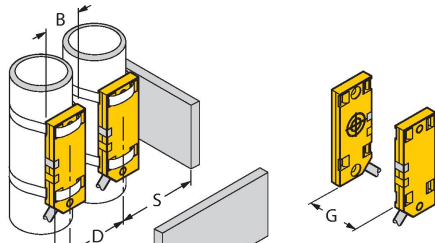
Technical data

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 with connector, M8 x 1
Cable quality	Ø 3 mm, LifYY-11Y, PUR, 0.3 m
Core cross-section	3 x 0.14 mm²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP65
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 QF5,5 sensor. The isometric view on the left shows the sensor (yellow) mounted on a surface (grey). Dimension D is the distance from the mounting surface to the sensor's active area. Dimension W is the width of the sensor. Dimension S is the distance from the sensor's active area to the mounting surface. Dimension B is the diameter of the active area. The side view on the right shows the sensor's profile, with dimension G indicating the distance from the mounting surface to the sensor's active area.

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.