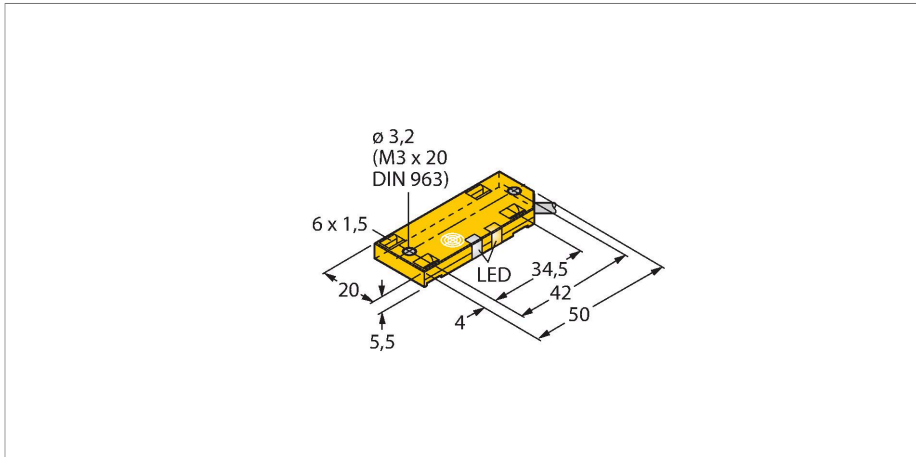


BC3.5-QF5.5-AP6X2/S250

Capacitive Sensor



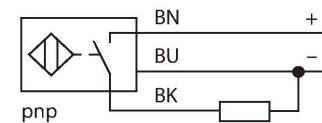
Technical data

Type	BC3.5-QF5.5-AP6X2/S250
ID	100015373
Rated switching distance (flush)	3.5 mm
Rated switching distance (non-flush)	3.5 mm
Secured operating distance	$\leq (0.72 \times S_n)$
Hysteresis	1...20 %
Repeat accuracy	$\leq 2\%$ of full scale
Ambient temperature	-25...+70 °C
Electrical data	
Operating voltage U_b	30 VDC
Ripple U_{rs}	$\leq 10\%$ U_{Bmax}
DC rated operating current I_b	≤ 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, PNP
Short-circuit protection	yes/Cyclic
Voltage drop at I_b	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Tests/approvals	
Approvals	UL

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

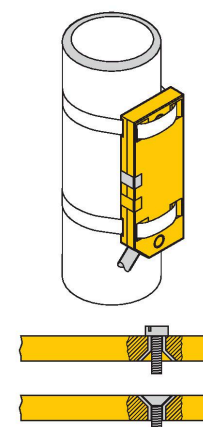


Functional principle

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

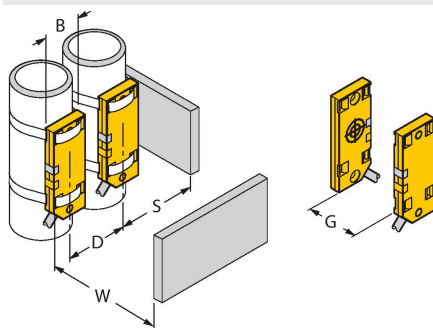
Technical data

UL registration number	E210608
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, 2 m
Core cross-section	3 x 0.14 mm ²
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 Stück
Power-on indication	LED, Green
Switching state	LED, Yellow
Included in delivery	2 cable ties



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.