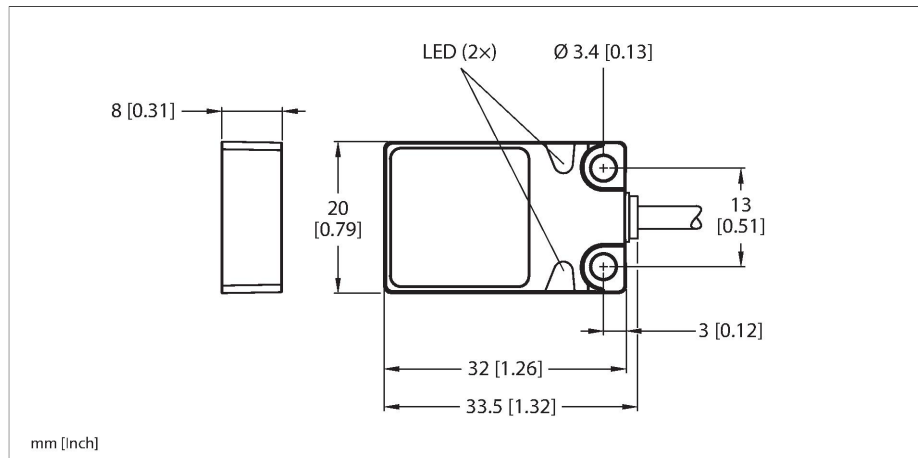


BC5-Q08-AP6X2/S250

Capacitive Sensor



Technical data

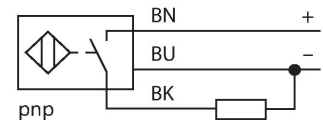
Type	BC5-Q08-AP6X2/S250
ID	26200
Rated switching distance (flush)	5 mm
Rated switching distance (non-flush)	5 mm
Secured operating distance	$\leq (0.72 \times S_n)$ mm
Hysteresis	1...20 %
Temperature drift	Typical 20 %
Repeat accuracy	≤ 2 % of full scale
Ambient temperature	-25...+70 °C
Electrical data	
Operating voltage U_B	10...30 VDC
Ripple U_{ss}	≤ 10 % U_{Bmax}
DC rated operating current I_o	≤ 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_o	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Tests/approvals	
Approvals	UL
UL registration number	E210608



Features

- Rectangular, height 8 mm
- Active face on top
- Metal, Zamak, nickel plated
- 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

Mechanical data	
Design	Rectangular, Q08
Dimensions	32 x 20 x 8 mm
Housing material	Metal, Zamak, Nickel Plated
Active area material	Plastic, PP, yellow
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	IP68
MTTF	1080 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	LED, Green
Switching state	LED, Yellow

Mounting instructions

Product features

An isometric technical drawing of a sensor assembly. The sensor is a rectangular block with a circular active area on its front face. It is mounted on a base plate. Dimension lines indicate the following: 'B' is the diameter of the active area; 'W' is the width of the sensor block; 'S' is the distance from the front face of the sensor to the front face of the base plate; 'G' is the distance from the front face of the sensor to the front face of a vertical plate; and 'D' is the distance from the top of the sensor block to the top of the vertical plate.

Distance D	40 mm
Distance W	15 mm
Distance S	30 mm
Distance G	30 mm
Diameter active area B	Ø 15 mm