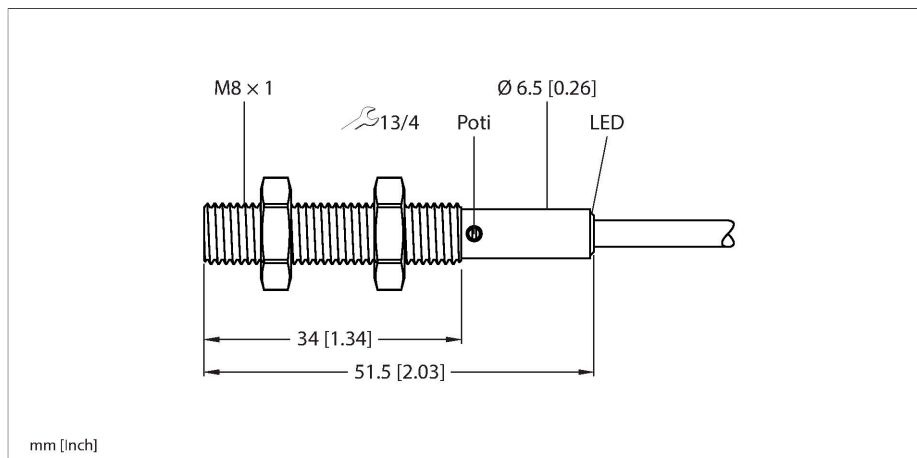


# BC2-EM08-UN8X

## Capacitive Sensor



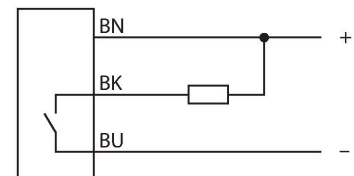
### Features

- M8 x 1 threaded barrel
- Stainless steel housing, probe made of PBT
- Fine adjustment via potentiometer
- DC 3-wire, 18...30 VDC
- Adjustable NC/NO contact
- Factory-set NO contact
- 3-pin cable connection, open strands

### Technical data

Type	BC2-EM08-UN8X
ID	100021822
Rated switching distance (flush)	2 mm
Hysteresis	10...20 %
Ambient temperature	-25...+70 °C
Medium temperature	-25...+70 °C
<b>Electrical data</b>	
Operating voltage $U_b$	18...30 VDC
DC rated operating current $I_o$	≤ 100 mA
No-load current	≤ 15 mA
Switching frequency	0.1 kHz
Isolation test voltage	0.5 kV
Number of digital outputs	1
Output function	3-wire, NO/NC (NO pre-set), NPN
Short-circuit protection	yes
Voltage drop at $I_o$	≤ 2.4 V
Wire break/reverse polarity protection	yes/Complete
Insulation class	III
<b>Tests/approvals</b>	
<b>Mechanical data</b>	
Design	Threaded barrel, M8 x 1
Dimensions	51.5 mm
Housing material	Stainless steel
Active area material	PBT, yellow
Electrical connection	Cable
Cable quality	Ø 3.4 mm, PUR, 2 m
Core cross-section	3 x 0.14 mm <sup>2</sup>

### Wiring diagram



### Functional principle

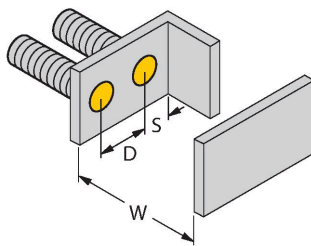
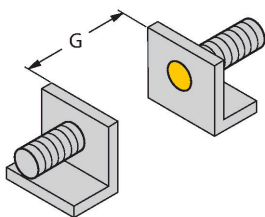
Capacitive proximity switches are designed for non-contact and wear-free detection of electrically conductive as well as non-conductive metal objects.

## Technical data

Protection class	IP67
MTTF	1080 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	Green
Switching state	LED, Yellow

## Mounting instructions

### Product features



Distance D	16 mm
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Distance W	8 mm
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Distance S	12 mm
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Distance G	16 mm
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Diameter active area B	Ø 8 mm
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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.

## LED status indicators

LED	Meaning
Yellow	Operating mode NO: Object detected
	Operating mode NC: Object not detected
Flashes yellow 1 ×	Potentiometer counterclockwise: Sensor at minimum switching distance
	Potentiometer clockwise: Sensor at maximum switching distance
Flashes yellow 3 ×	NO/NC switching successful

For a detailed description of the NO/NC switching, see Quick Start Guide BC2-EM08-Ux8X... (100034228.pdf)