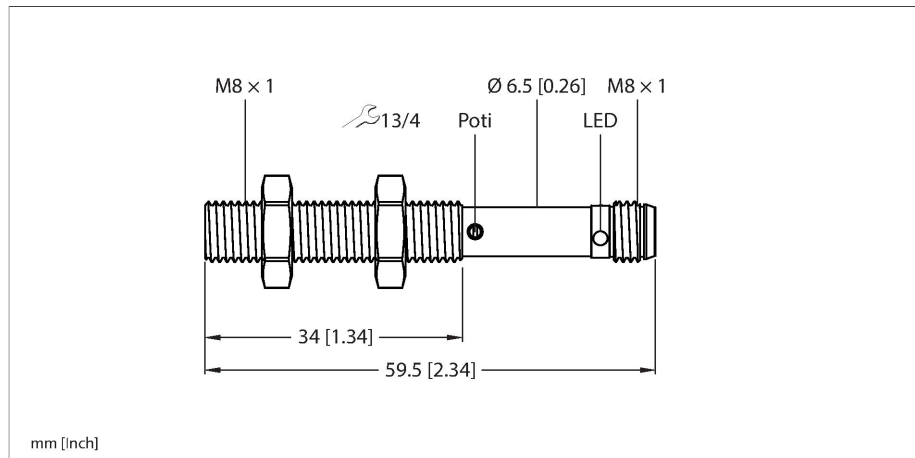


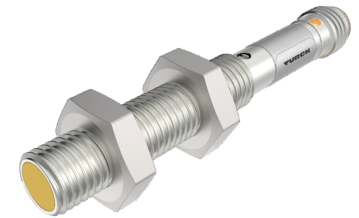
BC2-EM08-UN8X-V1131

Capacitive Sensor



Technical data

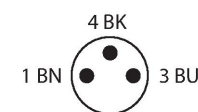
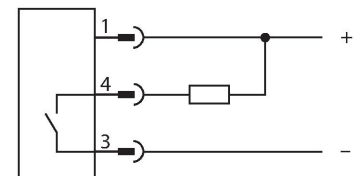
Type	BC2-EM08-UN8X-V1131
ID	100021820
Rated switching distance (flush)	2 mm
Hysteresis	10...20 %
Ambient temperature	-25...+70 °C
Medium temperature	-25...+70 °C
Electrical data	
Operating voltage U_B	18...30 VDC
DC rated operating current I_o	≤ 100 mA
No-load current	≤ 15 mA
Switching frequency	0.1 kHz
Isolation test voltage	0.5 kV
Number of digital outputs	1
Output function	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
Tests/approvals	
Mechanical data	
Design	Threaded barrel, M8 x 1
Dimensions	59.5 mm
Housing material	Stainless steel
Active area material	PBT, yellow
Electrical connection	Connector, M8 x 1
Protection class	IP67



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 connector device, M8 x 1

Wiring diagram



Functional principle

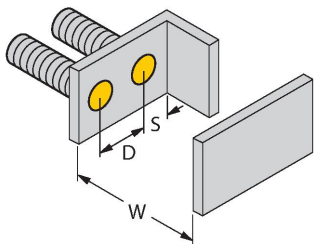
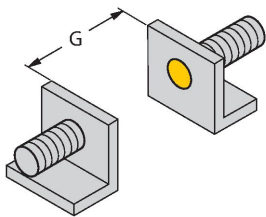
Capacitive proximity switches are designed for non-contact and wear-free detection of electrically conductive as well as non-conductive metal objects.

Technical data

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

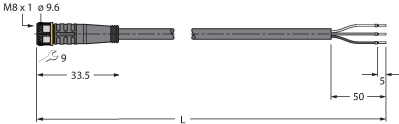
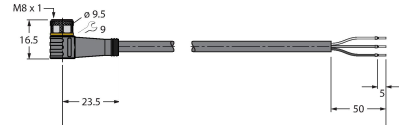
The given minimum distances have been checked against the standard switching distance.
Should the sensitivity of the sensors be changed via potentiometer, the data sheet specifications no longer apply.

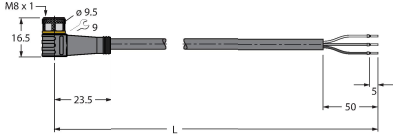
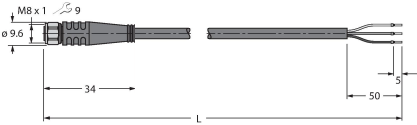
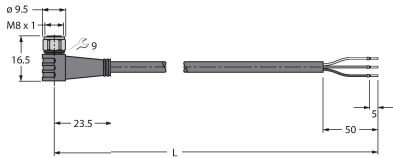
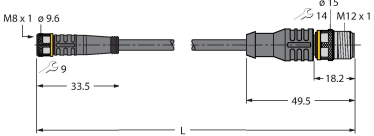
LED status indicators

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)

Accessories

Dimension drawing	Type	ID	
	PKG3M-2/TEL	6625058	Connection cable, M8 female connector, straight, 3-pin, cable length: 2 m, jacket material: PVC, black; cULus approval
	PKW3M-2/TEL	6625064	Connection cable, M8 female connector, angled, 3-pin, cable length: 2 m, jacket material: PVC, black; cULus approval
	PKGV3M-2/TEL	6625385	Connection cable, M8 female connector, straight, 3-pin, stainless steel coupling nut, cable length: 2 m, jacket material: PVC, black; cULus approval
	PKWV3M-2/TEL	6625391	Connection cable, M8 female connector, angled, 3-pin, stainless steel coupling nut, cable length: 2 m, jacket material: PVC, black; cULus approval
	PKG3M-2/TXL	6625550	Connection cable, M8 female connector, straight, 3-pin, cable length: 2 m, jacket material: PUR, black; cULus approval

Dimension drawing	Type	ID	
	PKW3M-2/TXL	6625556	Connection cable, M8 female connector, angled, 3-pin, cable length: 2 m, jacket material: PUR, black; cULus approval
	PKGV3M-2/TXL	6627803	Connection cable, M8 female connector, straight, 3-pin, stainless steel coupling nut, cable length: 2 m, jacket material: PUR, black; cULus approval
	PKWV3M-2/TXL	6628798	
	PKG4M-2-RSC4.4T/TXL	6627063	Extension cable, M8 female connector, straight, 4-pin to M12 male connector, straight, 4-pin, cable length: 2 m, jacket material: PUR, black; cULus approval