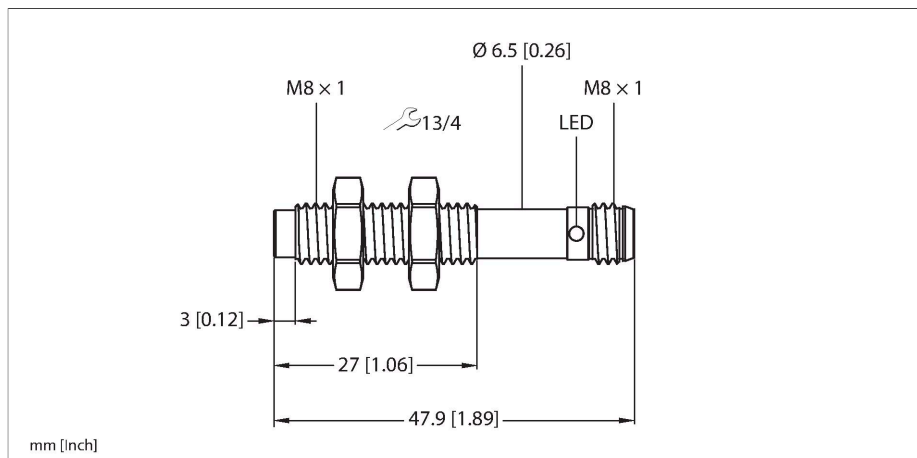


NCT3-M08-IOL-V1131

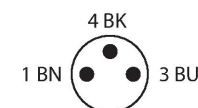
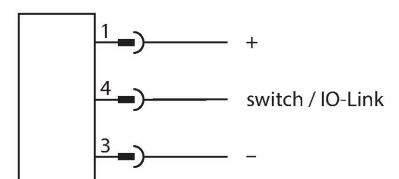
Capacitive Sensor



Features

- Detection of metallic and non-metallic objects
- Detection of liquids, powders and solid materials
- All functions can be parameterized via IO-Link
- Three different types of object teaching (one value, two value, dynamic) possible
- Available counting function whose content can be called up via IO-Link
- Switching status indicated by four LEDs arranged all around the device
- Male connector, M8 × 1, 3-pin
- Robust, compact housing made of nickel-plated brass
- M8 threaded design, non-flush, switching distance = 3 mm

Wiring diagram



Technical data

Type	NCT3-M08-IOL-V1131
ID	100027491
Hysteresis	10...20 %
Ambient temperature	-25...+70 °C
Medium temperature	-25...+70 °C
Electrical data	
Operating voltage	18...30 VDC
	In IO-Link mode
DC rated operational current	≤ 100 mA
Switching frequency	0.2 kHz
Isolation test voltage	≤ 0.5 kV
Communication protocol	IO-Link
SIO mode-compatible	Yes
Number of digital outputs	1
Output function	3-pin, NO/NC programmable, PNP/NPN
Voltage drop at I _o	≤ 2 V
Insulation class	III
Tests/approvals	
IO-Link	
IO-Link specification	V 1.1
Programming	FDT/DTM
Transmission physics	corresponds to 3-wire physics (PHY2)
Transmission rate	COM 2/38.4 kbps
Process data width	16 bit
Measured value information	12 bit
Frame type	2.2
Included in the SIDI GSDML	Yes

Technical data

Mechanical data	
Design	Threaded barrel, M8 x 1
Dimensions	47.9 mm
Housing material	Metal, Nickel-plated brass
Active area material	yellow
Electrical connection	Connector, M8 x 1
Protection class	IP67
MTTF	1080 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED, 4 x yellow

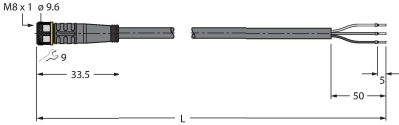


Mounting instructions

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	

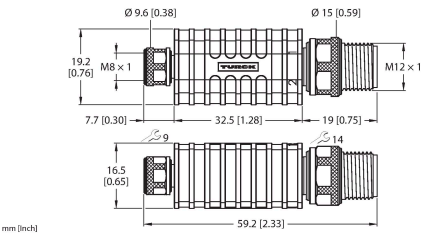
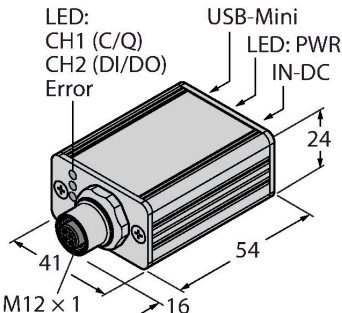
The given minimum distances have been checked against the standard switching distance.
Should the sensitivity of the sensors be changed, these data sheet specifications no longer apply.

Accessories

Dimension drawing	Type	ID	
	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
	PKG3M-2/TEL	6625058	Connection cable, M8 female connector, straight, 3-pin, cable length: 2 m, jacket material: PVC, black; cULus approval

Dimension drawing	Type	ID	
 <p>Dimension drawing of PKG3M-2/TXL cable. It shows a straight 3-pin M8 female connector on the left and a 3-wire cable on the right. Dimensions include a connector diameter of 9.6 mm, a connector length of 9 mm, a distance of 33.5 mm from the connector to the start of the cable jacket, and a cable length of 50 mm from the start of the jacket to the end of the wires.</p>	PKG3M-2/TXL	6625550	Connection cable, M8 female connector, straight, 3-pin, cable length: 2 m, jacket material: PUR, black; cULus approval
 <p>Dimension drawing of PKW3M-2/TEL cable. It shows an angled 3-pin M8 female connector on the left and a 3-wire cable on the right. Dimensions include a connector diameter of 9.5 mm, a connector length of 9 mm, a distance of 16.5 mm from the connector to the start of the cable jacket, a distance of 23.5 mm from the start of the jacket to the end of the wires, and a cable length of 50 mm from the start of the jacket to the end of the wires.</p>	PKW3M-2/TEL	6625064	Connection cable, M8 female connector, angled, 3-pin, cable length: 2 m, jacket material: PVC, black; cULus approval
 <p>Dimension drawing of PKW3M-2/TXL cable. It shows an angled 3-pin M8 female connector on the left and a 3-wire cable on the right. Dimensions include a connector diameter of 9.5 mm, a connector length of 9 mm, a distance of 16.5 mm from the connector to the start of the cable jacket, a distance of 23.5 mm from the start of the jacket to the end of the wires, and a cable length of 50 mm from the start of the jacket to the end of the wires.</p>	PKW3M-2/TXL	6625556	Connection cable, M8 female connector, angled, 3-pin, cable length: 2 m, jacket material: PUR, black; cULus approval

Accessories

Dimension drawing	Type	ID	
 <p>Dimension drawing of AD-MFK3-FSM4 adapter. It shows an M8 female connector on the left and an M12 male connector on the right. Dimensions include a diameter of 9.6 mm for the M8 connector, a diameter of 15 mm for the M12 connector, a length of 19.2 mm for the M8 connector, a length of 7.7 mm for the adapter body, a length of 32.5 mm for the M12 connector, and a total length of 59.2 mm. A note indicates 'mm [inch]'.</p>	AD-MFK3-FSM4	6628083	Adapter, M8 female connector, 3-pin to M12 male connector, 3-pin
 <p>Image of USB-2-IOL-0002 module. It is a rectangular module with an M12 x 1 connector on the left. Labels indicate: LED: CH1 (C/Q), LED: CH2 (DI/DO), Error, USB-Mini, LED: PWR, and IN-DC. Dimensions include a width of 41 mm, a height of 24 mm, a depth of 16 mm, and a total length of 54 mm.</p>	USB-2-IOL-0002	6825482	IO-Link Master with integrated USB port