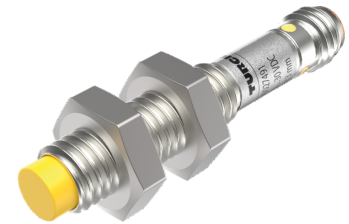
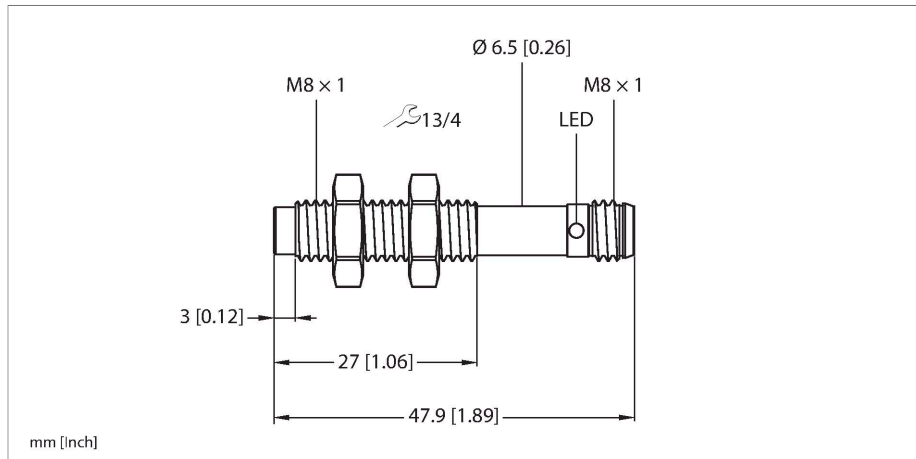


# NCT3-M08-IOL-V1131

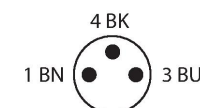
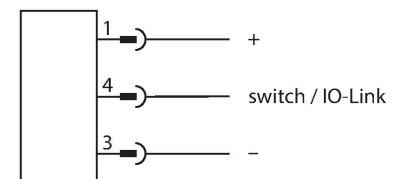
## Capacitive Sensor



### 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                         |
| <b>Electrical data</b>         |                                      |
| Operating voltage              | 18...30 VDC                          |
| 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 <sub>o</sub> | ≤ 2 V                                |
| Insulation class               | III                                  |
| <b>Tests/approvals</b>         |                                      |
| <b>IO-Link</b>                 |                                      |
| 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                               |

## Technical data

|                            |  |
|----------------------------|--|
| Measured value information | 12 bit                                     |
| Frame type                 | 2.2  |
| Included in the SIDI GSDML | Yes  |
| <b>Mechanical data</b>     |  |
| 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.