

# BCT2-M08-IOL-V1131 Capacitive Sensor



#### Technical data

| Туре                           | BCT2-M08-IOL-V1131                   |
|--------------------------------|--------------------------------------|
| ID                             | 100027490                            |
| Hysteresis                     | 1020 %                               |
| Ambient temperature            | -25+70 °C                            |
| Medium temperature             | -25+70 °C                            |
| Electrical data                |                                      |
| Operating voltage              | 1830 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 <sub>e</sub> | ≤ 2 V                                |
| Insulation class               | Ш                                    |
| 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                                  |
|                                |                                      |



## 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, flush, switching distance = 2 mm







#### Technical data

| Mechanical data       |   |  |  |
|-----------------------|---|--|--|
| Design                | Threaded barrel, M8 x 1                       |  |  |
| Dimensions            | 44.8 mm                                       |  |  |
| Housing material      | Metal, Nickel-plated brass                    |  |  |
| Active area material  | yellow  |  |  |
| Electrical connection | Connector, M8 × 1                             |  |  |
| Protection class      | IP67  |  |  |
| MTTF                  | 1080 years acc. to SN 29500 (Ed. 99) 40<br>°C |  |  |
| Switching state       | LED, 4 × yellow                               |  |  |

## Mounting instructions

Product features 16 mm Distance D Distance W 8 mm Distance S 12 mm Distance G 16 mm Diameter active Ø8mm area B 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.

#### Accessories

| Dimension drawing  | Туре                | ID      |   |
|--|---------------------|---------|---|
| M8 x1 e 9.6<br>33.5 - 49. | PKG4M-2-RSC4.4T/TXL | 6627063 | Extension cable, M8 female connector,<br>straight, 4-pin to M12 male connector,<br>straight, 4-pin, cable length: 2 m, jacket<br>material: PUR, black; cULus approval |
| M8 x 1 o 9.6   | PKG3M-2/TEL         | 6625058 | Connection cable, M8 female<br>connector, straight, 3-pin, cable length:<br>2 m, jacket material: PVC, black; cULus<br>approval                                       |







## Accessories

| Dimension drawing   | Туре           | ID      |   |
|---|----------------|---------|---|
| mm Inct   | AD-MFK3-FSM4   | 6628083 | Adapter, M8 female connector, 3-pin to<br>M12 male connector, 3-pin |
|   | USB-2-IOL-0002 | 6825482 | IO-Link Master with integrated USB port                             |
| LED: USB-Mini<br>CH1 (C/Q)<br>CH2 (DI/DO)<br>Error<br>41<br>M12 × 1<br>16 |                |         |   |