



### Model Number

**CBN10-F46-E2-0,4M-V3**

### Features

- 10 mm non-flush
- 3-wire DC
- Flat housing
- Mounting slots for cable ties
- Cable with M8 plug

## Technical Data

### General specifications

|                            |                    |
|----------------------------|--------------------|
| Switching function         | Normally open (NO) |
| Output type                | PNP                |
| Rated operating distance   | $s_n$ 10 mm        |
| Installation               | non-flush          |
| Output polarity            | DC                 |
| Assured operating distance | $s_a$ 0 ... 7 mm   |
| Output type                | 3-wire             |

### Nominal ratings

|                                                        |                                 |
|--------------------------------------------------------|---------------------------------|
| Installation conditions                                |                                 |
| B                                                      | 5 mm                            |
| C                                                      | 20 mm                           |
| F                                                      | 20 mm / 50 mm                   |
| Operating voltage                                      | $U_B$ 10 ... 30 V DC            |
| Switching frequency                                    | $f$ 0 ... 5 Hz                  |
| Hysteresis                                             | H 1 ... 10 typ. 5 %             |
| Reverse polarity protection                            | reverse polarity protected      |
| Short-circuit protection                               | pulsing                         |
| Voltage drop                                           | $U_d$ $\leq 2$ V                |
| Voltage drop at $I_L$                                  |                                 |
| Voltage drop $I_L = 10$ mA, switching element on $U_d$ | 0.8 ... 2.2 V typ. 1.4 V        |
| Operating current                                      | $I_L$ 0 ... 100 mA              |
| Lowest operating current                               | $I_m$ 0 mA                      |
| Off-state current                                      | $I_r$ 0 ... 0.5 mA typ. 0.01 mA |
| Off-state current $T_U = 40$ °C, switching element off | $\leq 100$ $\mu$ A              |
| No-load supply current                                 | $I_0$ $\leq 15$ mA              |
| Time delay before availability                         | $t_v$ $\leq 50$ ms              |
| Switching state indicator                              | LED, yellow                     |

### Functional safety related parameters

|                          |        |
|--------------------------|--------|
| MTTF <sub>d</sub>        | 1210 a |
| Mission Time ( $T_M$ )   | 20 a   |
| Diagnostic Coverage (DC) | 0 %    |

### Ambient conditions

|                     |                                |
|---------------------|--------------------------------|
| Ambient temperature | -25 ... 70 °C (-13 ... 158 °F) |
| Storage temperature | -40 ... 85 °C (-40 ... 185 °F) |

### Mechanical specifications

|                      |                                                                                     |
|----------------------|-------------------------------------------------------------------------------------|
| Connection type      | Cable connector M8 x 1, with integrated connection cable PVC, L = 362 mm $\pm$ 5 mm |
| Core cross-section   | 0.14 mm <sup>2</sup>                                                                |
| Housing material     | PBT                                                                                 |
| Sensing face         | PBT                                                                                 |
| Degree of protection | IP67                                                                                |

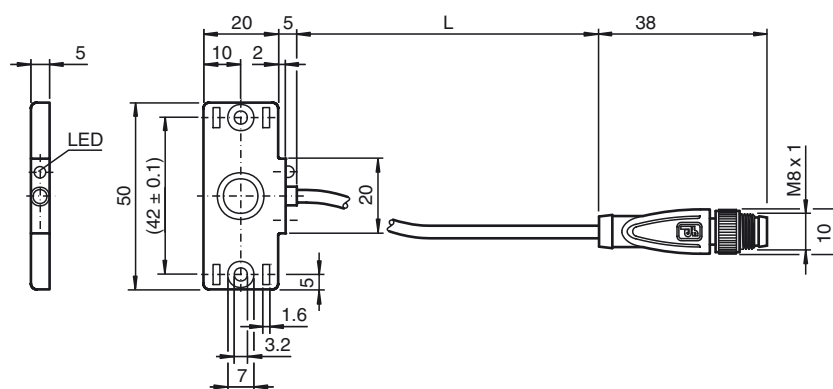
### Compliance with standards and directives

|                     |                                         |
|---------------------|-----------------------------------------|
| Standard conformity |                                         |
| Standards           | EN 60947-5-2:2007<br>IEC 60947-5-2:2007 |

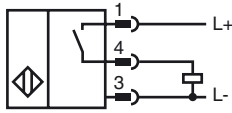
### Approvals and certificates

|              |                                                                    |
|--------------|--------------------------------------------------------------------|
| UL approval  | cULus Listed, General Purpose                                      |
| CSA approval | cCSAus Listed, General Purpose                                     |
| CCC approval | CCC approval / marking not required for products rated $\leq 36$ V |

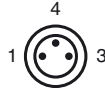
## Dimensions



## Electrical Connection



## Pinout



Wire colors in accordance with EN 60947-5-2

|   |    |         |
|---|----|---------|
| 1 | BN | (brown) |
| 3 | BU | (blue)  |
| 4 | BK | (black) |

## Installation Conditions

