



### Model Number

**CBN15-F64-A0**

### Features

- 15 mm non-flush
- Flat housing
- Switching distance adjustable between 2 mm ... 15 mm

### Accessories

**MH-F64**  
Mounting base

## Technical Data

### General specifications

|                            |       |                  |       |
|----------------------------|-------|------------------|-------|
| Switching element function |       | NPN              | NO/NC |
| Rated operating distance   | $s_n$ | 15 mm            |       |
| Installation               |       | non-flush        |       |
| Output polarity            |       | DC               |       |
| Assured operating distance | $s_a$ | 0 ... 10.8 mm    |       |
| Actual operating distance  | $s_r$ | 13.5 ... 16.5 mm |       |

### Nominal ratings

|                             |       |                                 |  |
|-----------------------------|-------|---------------------------------|--|
| Installation conditions     |       |                                 |  |
| B                           |       | 15 mm                           |  |
| C                           |       | 30 mm                           |  |
| F                           |       | 45 mm / 60 mm                   |  |
| Operating voltage           | $U_B$ | 10 ... 30 V DC                  |  |
| Switching frequency         | f     | 0 ... 100 Hz                    |  |
| Hysteresis                  | H     | 1 ... 10 typ. 5 %               |  |
| Reverse polarity protection |       | reverse polarity protected      |  |
| Short-circuit protection    |       | pulsing                         |  |
|                             |       | $I_{max} \leq 500$ mA           |  |
| Voltage drop                | $U_d$ | $\leq 2$ V                      |  |
| Repeat accuracy             | R     | $\leq 1.5$ mm                   |  |
| Operating current           | $I_L$ | 0 ... 100 mA                    |  |
| Off-state current           | $I_r$ | 0 ... 50 $\mu$ A typ. 5 $\mu$ A |  |
| No-load supply current      | $I_0$ | $\leq 15$ mA                    |  |
| Switching state indicator   |       | LED, yellow                     |  |

### Functional safety related parameters

|                                |       |
|--------------------------------|-------|
| MTTF <sub>d</sub>              | 941 a |
| Mission Time (T <sub>M</sub> ) | 20 a  |
| Diagnostic Coverage (DC)       | 0 %   |

### Indicators/operating means

|               |                        |
|---------------|------------------------|
| Potentiometer | sensitivity adjustment |
|---------------|------------------------|

### Ambient conditions

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

### Mechanical specifications

|                                   |                      |
|-----------------------------------|----------------------|
| Connection type                   | cable PUR, L = 2 m   |
| Core cross-section                | 0.34 mm <sup>2</sup> |
| Housing material                  | PBT                  |
| Sensing face                      | PBT                  |
| Degree of protection              | IP67                 |
| Tightening torque, housing screws | $\leq 1$ Nm          |

### General information

|      |  |
|------|--|
| Note | Screw-in depth of housing screws, max. 10 mm |
|------|--|

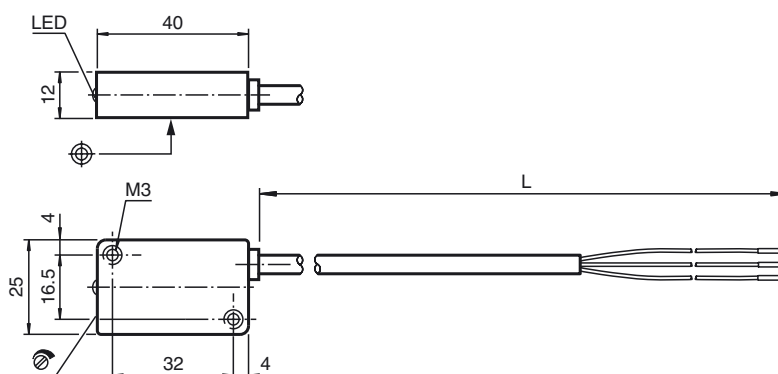
### Compliance with standards and directives

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

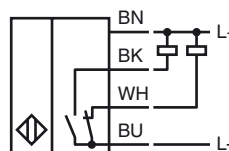
### Approvals and certificates

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

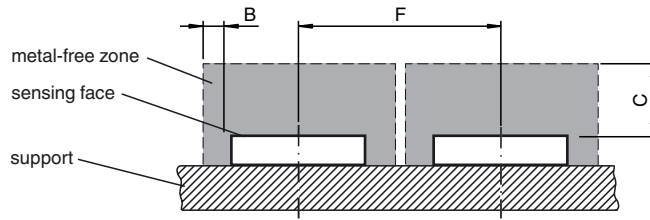
## Dimensions



## Electrical Connection



Installation Conditions



Release date: 2015-12-02 15:48 Date of issue: 2015-12-14 269264\_eng.xml