

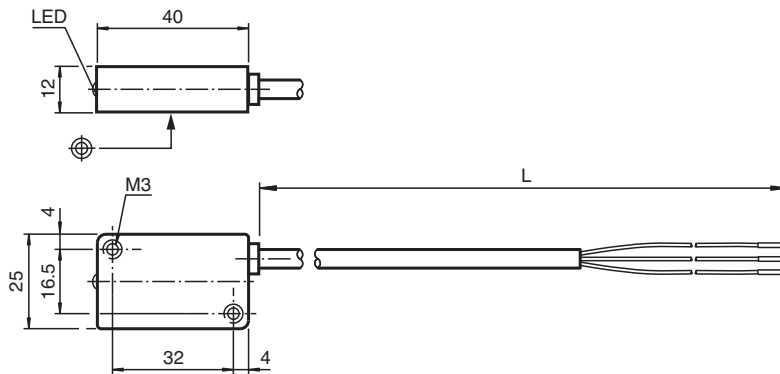
# Capacitive sensor CBN15-F64-E2-Y263270



- 12 mm non-flush
- Flat housing
- 3-wire DC



## Dimensions



## Technical Data

| General specifications     |       |                    |
|----------------------------|-------|--------------------|
| Switching function         |       | Normally open (NO) |
| Output type                |       | PNP                |
| Rated operating distance   | $s_n$ | 12 mm              |
| Installation               |       | non-flush          |
| Output polarity            |       | DC                 |
| Assured operating distance | $s_a$ | 0 ... 9.5 mm       |
| Actual operating distance  | $s_r$ | 13.5 ... 16.5 mm   |
| Output type                |       | 3-wire             |
| 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       |

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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**PEPPERL+FUCHS**

## Technical Data

|                             |       |                                             |
|-----------------------------|-------|---------------------------------------------|
| Hysteresis                  | H     | 1 ... 10 typ. 5 %                           |
| Reverse polarity protection |       | reverse polarity protected                  |
| Short-circuit protection    |       | pulsing<br>$I_{\max} \leq 500 \text{ mA}$   |
| Voltage drop                | $U_d$ | $\leq 2 \text{ V}$                          |
| Repeat accuracy             | R     | $\leq 1.5 \text{ mm}$                       |
| Operating current           | $I_L$ | 0 ... 100 mA                                |
| Off-state current           | $I_r$ | 0 ... 50 $\mu\text{A}$ typ. 5 $\mu\text{A}$ |
| No-load supply current      | $I_0$ | $\leq 15 \text{ mA}$                        |
| 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 %   |

### Compliance with standards and directives

|                     |  |                                                                                             |
|---------------------|--|---------------------------------------------------------------------------------------------|
| Standard conformity |  |                                                                                             |
| Standards           |  | EN 60947-5-2:2007<br>EN 60947-5-2/A1:2012<br>IEC 60947-5-2:2007<br>IEC 60947-5-2 AMD 1:2012 |

### Approvals and certificates

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

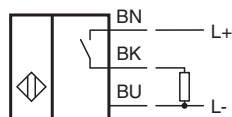
### Ambient conditions

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

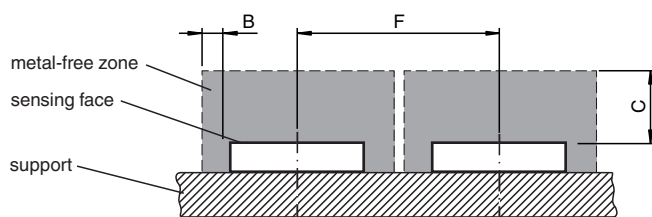
### Mechanical specifications

|                                   |  |                                             |
|-----------------------------------|--|---------------------------------------------|
| Connection type                   |  | cable PUR, L = 3.12 m                       |
| Core cross-section                |  | 0.34 mm <sup>2</sup>                        |
| Housing material                  |  | PBT                                         |
| Sensing face                      |  | PBT                                         |
| Degree of protection              |  | IP67                                        |
| Tightening torque, housing screws |  | $\leq 2 \text{ Nm}$                         |
| Note                              |  | Screw-in depth of housing screws, max. 8 mm |

## Connection



## Installation



Accessories

|                                                                                   |        |                |
|-----------------------------------------------------------------------------------|--------|----------------|
|  | MH-F64 | Mounting plate |
|-----------------------------------------------------------------------------------|--------|----------------|

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