

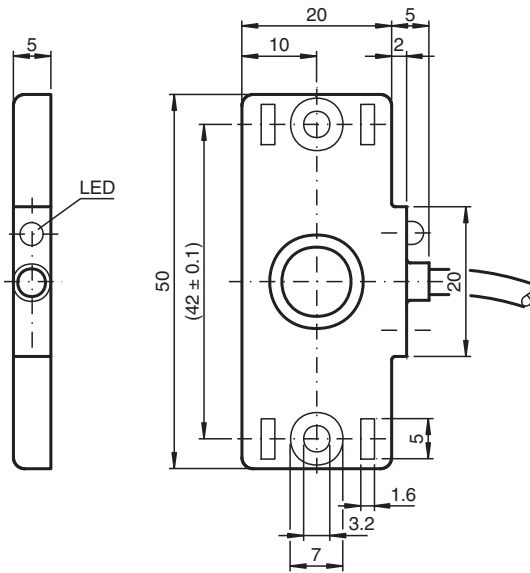
## Capacitive sensor

### CBN7-F46-E2

- 7 mm non-flush
- Flat housing
- Mounting slots for cable ties



## Dimensions



## Technical Data

### General specifications

Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	$s_n$	7 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 5.67 mm
Output type		3-wire

### Nominal ratings

Installation conditions		
B		5 mm
C		20 mm
F		20 mm / 50 mm

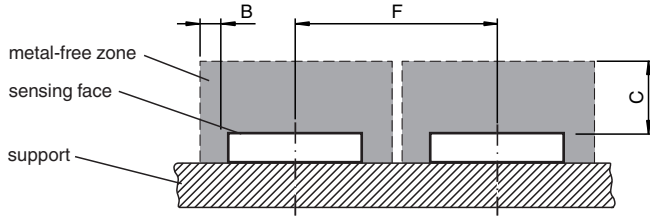
## Technical Data

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
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		673 a
Mission Time ( $T_M$ )		20 a
Diagnostic Coverage (DC)		0 %
<b>Indicators/operating means</b>		
LED yellow		indication switching state
<b>Compliance with standards and directives</b>		
Standard conformity		
Standards		EN IEC 60947-5-2
<b>Approvals and certificates</b>		
CCC approval		CCC approval / marking not required for products rated $\leq 36$ V
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
<b>Mechanical specifications</b>		
Connection type		cable
Housing material		PBT
Sensing face		PBT
Degree of protection		IP67
<b>Cable</b>		
Wire end ferrules		yes
Cable diameter		3.5 mm $\pm$ 0.2 mm
Bending radius		> 10 x cable diameter
Material		PVC
Color		grey
Number of cores		3
Core cross section		0.14 mm <sup>2</sup>
Length	$L$	2 m
<b>Dimensions</b>		
Height		5 mm
Width		50 mm
Length		25 mm

## Connection



## Installation Conditions



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