



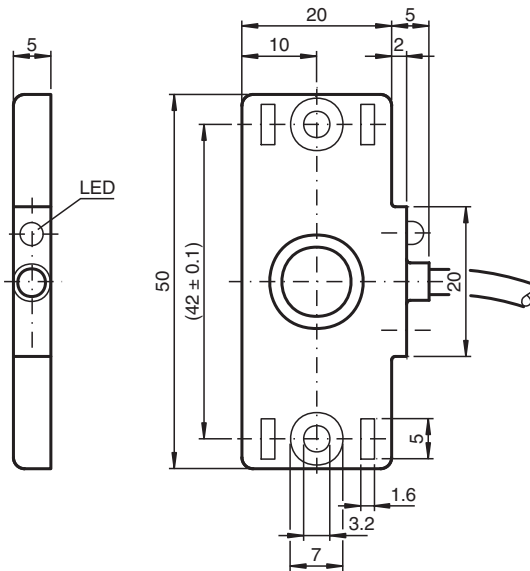
## Capacitive sensor

### CBN5-F46-E2

- 5 mm non-flush
- 3-wire DC
- Flat housing
- Mounting slots for cable ties
- Thru-holes for screw mounting



## Dimensions



## Technical Data

### General specifications

Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	$s_n$	5 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 3.5 mm
Output type		3-wire

### Nominal ratings

Installation conditions		
B		0 mm
C		10 mm
F		20 mm / 50 mm

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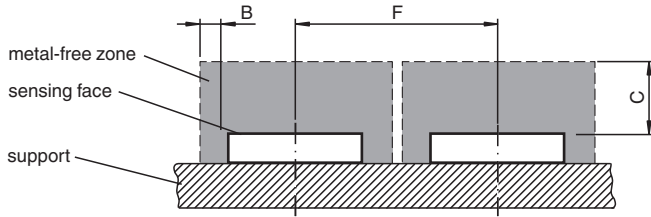
## Technical Data

Operating voltage	$U_B$	10 ... 30 V DC
Switching frequency	f	0 ... 10 Hz
Hysteresis	H	1 ... 10 % typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 2$ 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	$I_o$	$\leq 15$ 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>		1200 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
<b>Compliance with standards and directives</b>		
Standard conformity		
Standards		EN IEC 60947-5-2
<b>Approvals and certificates</b>		
UL approval		cULus Listed Enclosure Type Rating: Type 1 Supply/Switching Voltage: 30 V DC Output Switching Current: 100 mA
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
Cable		
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
Dimensions		
Height		5 mm
Width		50 mm
Length		25 mm

## Connection Assignment



## Installation Conditions



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