

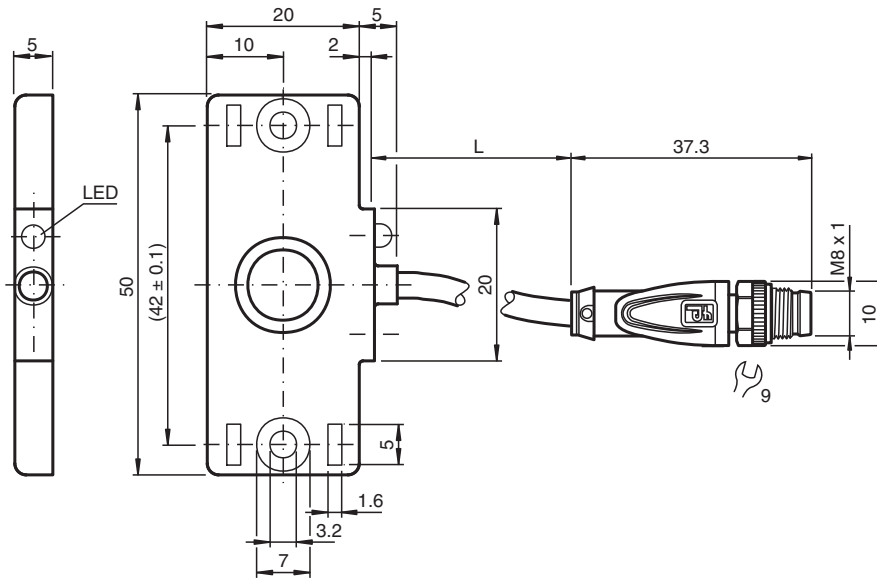
# Capacitive sensor

## CBN7-F46-E1-Y291652

- 7 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 closed (NC)
Output type		NPN
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		0 mm
C		10 mm
F		20 mm / 50 mm

Release date: 2023-06-13 Date of issue: 2023-06-13 Filename: 291652\_eng.pdf

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

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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
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

### Compliance with standards and directives

Standard conformity		
Standards		EN 60947-5-2:2007 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

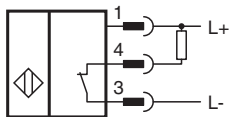
### Ambient conditions

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

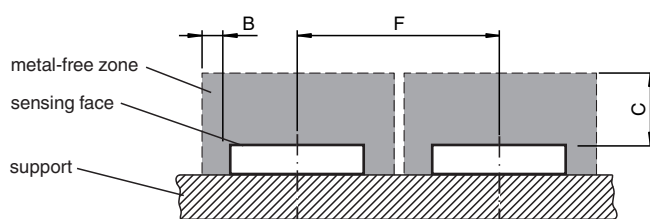
### Mechanical specifications

Connection type		Cable connector M8 x 1 PVC , L = 100 mm +/- 5 mm
Core cross section		0.14 mm <sup>2</sup>
Housing material		PBT
Sensing face		PBT
Degree of protection		IP67

## Connection



## Installation Conditions



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**Accessories**

	<p><b>MH V3-SCREWDRIVER</b></p>	<p>Torque screwdriver (0.4 Nm)</p>
	<p><b>MH V3-BIT M8</b></p>	<p>plug-in cap for M8</p>

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