



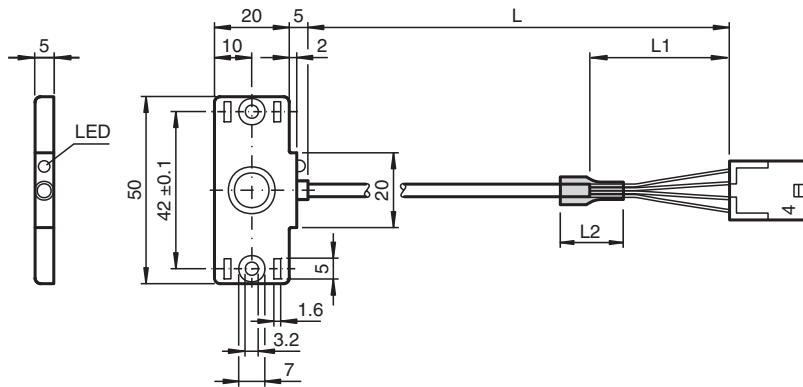
## Capacitive sensor

### CBN5-F46-E2-360MM-4MOL-Y

- 5 mm non-flush
- 3-wire DC with additional wire for Teach-In
- Adjustable measurement range via external teach input
- Mounting slots for cable ties
- Thru-holes for screw mounting
- Molex connector



## Dimensions



## Technical Data

General specifications		
Switching function		Normally open (NO)
Output type		PNP
<b>Identification Number</b>		6200337 REV. A
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
Operating voltage	$U_B$	10 ... 30 V DC
Switching frequency	f	0 ... 50 Hz
Hysteresis	H	5 ... 15 typ. 10 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 2$ V

Release date: 2022-12-02 Date of issue: 2022-12-02 Filename: 70156340\_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

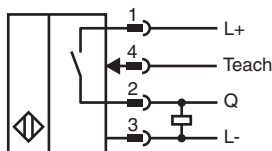
Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

**PF** PEPPERL+FUCHS

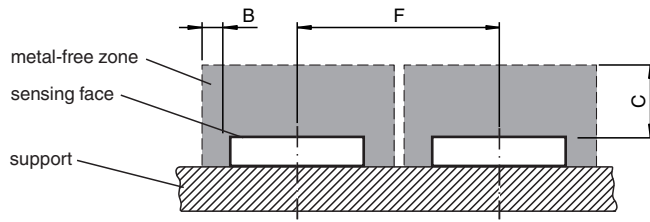
## Technical Data

Operating current	$I_L$	0 ... 100 mA
Lowest operating current	$I_m$	0 mA
Off-state current	$I_r$	0 ... 0.5 mA typ. 0.04 mA
Off-state current $T_U = 40\text{ °C}$ , switching element off		$\leq 100\ \mu\text{A}$
No-load supply current	$I_0$	$\leq 15\text{ mA}$
Time delay before availability	$t_v$	$\leq 80\text{ ms}$
Switching state indicator		LED, yellow
<b>Compliance with standards and directives</b>		
Standard conformity		
Standards		EN IEC 60947-5-2
<b>Approvals and certificates</b>		
UL approval		cULus Listed, General Purpose, Class 2 Power Source
CCC approval		CCC approval / marking not required for products rated $\leq 36\text{ V}$
<b>Ambient conditions</b>		
Ambient temperature		$-25 \dots 70\text{ °C}$ ( $-13 \dots 158\text{ °F}$ )
Storage temperature		$-40 \dots 85\text{ °C}$ ( $-40 \dots 185\text{ °F}$ )
<b>Mechanical specifications</b>		
Connection type		fixed cable with plug
Housing material		PBT
Sensing face		PBT
Degree of protection		IP67
Connector		
Number of pins		4
Connection assembly		Molex connector 43640-0401 Molex contact 43031-0004
Cable		
Cable diameter		$3.5\text{ mm} \pm 0.2\text{ mm}$
Bending radius		$> 10 \times$ cable diameter
Material		PVC
Color		grey
Number of cores		4
Core cross section		$0.14\text{ mm}^2$
Length	L	$362\text{ mm} \pm 6\text{ mm}$ further length specifications: L1 = approx. 30 mm L2 = approx. 13 mm

## Connection



## Installation Conditions



Release date: 2022-12-02 Date of issue: 2022-12-02 Filename: 70156340\_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

 **PEPPERL+FUCHS**

## Teach-In

### Teach-In Instructions

1. For Teach-In connect pin WH to pin L+ with target at desired distance for 2.5 s ... 5 s.  
->LED is in green light mode.
2. Release connection between first (2.5 s) and second flash (5 s).  
-> LED will flash (5 times in quick succession) if process is successful.

### Note

Holding the connection 5 s ... 7.5 s resets the setting. If during Teach-In on product target is out of range (> 6 mm), LED (yellow light) will blink slowly 3 times. The taught sensing distance is stored in the sensor. The Teach-in value is still available when the power supply is turned off. The endurance of this non-volatile memory is rated for more than 100,000 teach-in repetitions.