

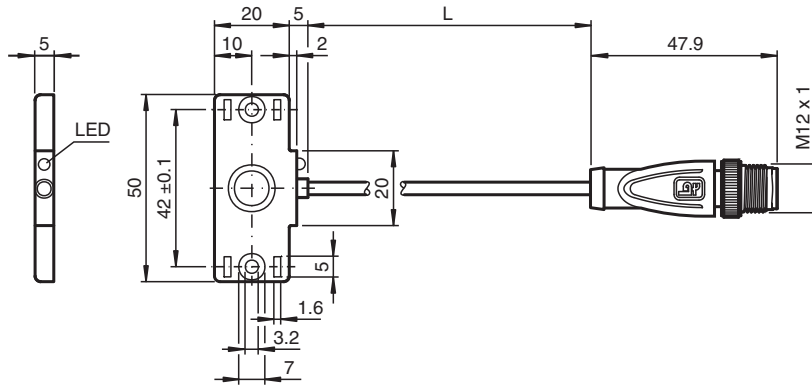
# Capacitive sensor

## CBN5-F46-E3-0,76M-V1-Y

- 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 closed (NC)
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
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	$U_d$	≤ 2 V
Operating current	$I_L$	0 ... 100 mA

Release date: 2022-07-13 Date of issue: 2022-07-13 Filename: 70110609\_eng.pdf

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

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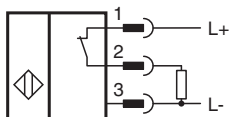
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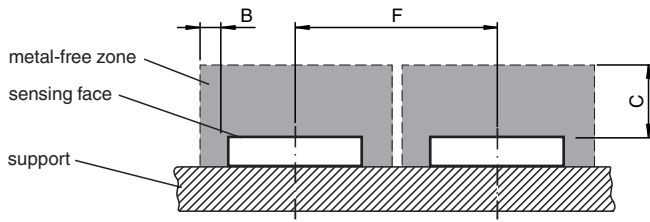
## Technical Data

Lowest operating current	$I_m$	0 mA
Off-state current	$I_r$	0 ... 0.5 mA typ. 0.01 mA
Off-state current $T_U = 40\text{ °C}$ , switching element off		$\leq 100\text{ }\mu\text{A}$
No-load supply current	$I_0$	$\leq 15\text{ mA}$
Time delay before availability	$t_v$	$\leq 120\text{ ms}$
Switching state indicator		LED, yellow
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		672 a
Mission Time ( $T_M$ )		20 a
Diagnostic Coverage (DC)		0 %
<b>Compliance with standards and directives</b>		
Standard conformity		
Standards		EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012
<b>Approvals and certificates</b>		
UL approval		cULus Listed, 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 ... 70 °C (-13 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
<b>Mechanical specifications</b>		
Connection type		fixed cable with plug
Housing material		PBT
Sensing face		PBT
Degree of protection		IP67
Connector		
Threading		M12 x 1
Cable		
Cable diameter		3.5 mm $\pm$ 0.2 mm
Bending radius		> 10 x cable diameter
Material		PUR
Color		black
Number of cores		3
Core cross section		0.14 mm <sup>2</sup>
Length	L	L = 760 mm
Mass		35 g

## Connection



## Installation Conditions



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