

Capacitive sensor

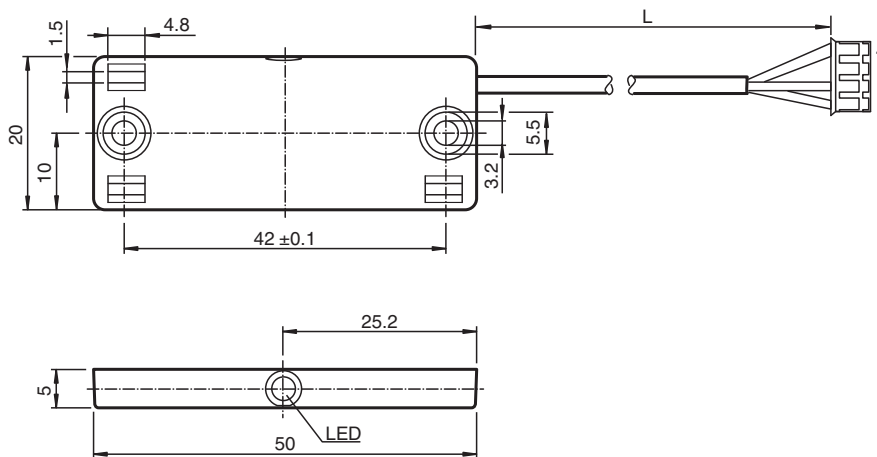
CBN10-F46E-E2-0,47M-Y70115830



- 10 mm non-flush
- 3-wire DC
- 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	10 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s_a	0 ... 7 mm
Output type		3-wire

Nominal ratings

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

Release date: 2024-12-10 Date of issue: 2024-12-10 Filename: 70115830_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

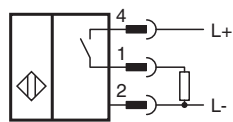
Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

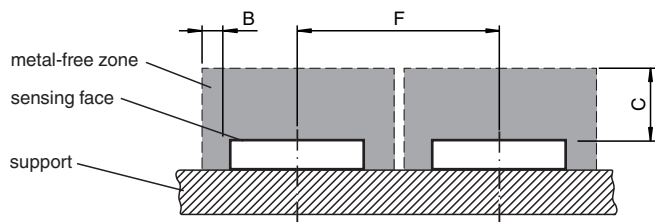
Technical Data

Short-circuit protection		pulsing
Voltage drop	U_d	$\leq 2 \text{ V}$
Voltage drop at I_L		
Voltage drop $I_L = 10 \text{ mA}$, switching element on	U_d	$0.8 \dots 2.2 \text{ V typ. } 1.4 \text{ V}$
Operating current	I_L	$0 \dots 100 \text{ mA}$
Lowest operating current	I_m	0 mA
Off-state current	I_r	$0 \dots 0.5 \text{ mA typ. } 0.01 \text{ mA}$
Off-state current $T_U = 40 \text{ }^\circ\text{C}$, 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	$\leq 50 \text{ ms}$
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		1210 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
Standards		EN IEC 60947-5-2
Approvals and certificates		
CCC approval		CCC approval / marking not required for products rated $\leq 36 \text{ V}$
Ambient conditions		
Ambient temperature		$-25 \dots 70 \text{ }^\circ\text{C} (-13 \dots 158 \text{ }^\circ\text{F})$
Storage temperature		$-40 \dots 85 \text{ }^\circ\text{C} (-40 \dots 185 \text{ }^\circ\text{F})$
Mechanical specifications		
Connection type		fixed cable with plug
Housing material		PBT
Sensing face		PBT
Degree of protection		IP67
Connector		
Number of pins		3
Connection assembly		JST connector, EHR-4 JST crimp, SEH-001T-P0.6P
Cable		
Cable diameter		$3.5 \text{ mm} \pm 0.2 \text{ mm}$
Bending radius		$> 10 \times \text{cable diameter}$
Material		PVC
Color		grey
Number of cores		3
Core cross section		0.14 mm^2
Length	L	0.47 m
Dimensions		
Height		20 mm
Width		50 mm
Length		5 mm

Connection



Installation Conditions



Release date: 2024-12-10 Date of issue: 2024-12-10 Filename: 70115830_eng.pdf