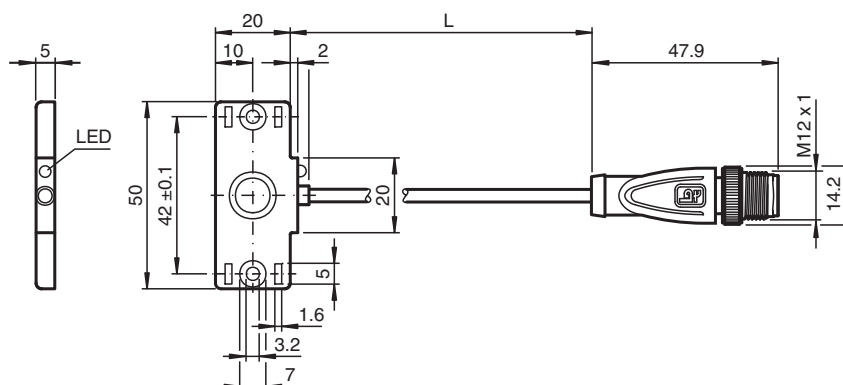


Capacitive sensor CBN5-F46-E2-Y320222

- 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
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

Release date: 2020-03-24 Date of issue: 2020-03-30 Filename: 320222_eng.pdf

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

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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. 0.01 mA
Off-state current $T_U = 40^\circ\text{C}$, switching element off		$\leq 100\ \mu\text{A}$
No-load supply current	I_0	$\leq 15\ \text{mA}$
Time delay before availability	t_v	$\leq 50\ \text{ms}$
Switching state indicator		LED, yellow

Functional safety related parameters

MTTF _d	1200 a
Mission Time (T_M)	20 a
Diagnostic Coverage (DC)	0 %

Compliance with standards and directives

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

Approvals and certificates

UL approval	cULus Listed, General Purpose
CCC approval	CCC approval / marking not required for products rated $\leq 36\ \text{V}$

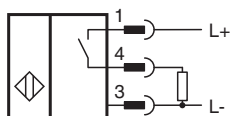
Ambient conditions

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

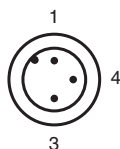
Mechanical specifications

Connection type	Cable connector M12 x 1, 3-pin with PVC cable, L = 2 m
Core cross-section	0.14 mm ²
Housing material	PBT
Sensing face	PBT
Degree of protection	IP67

Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
3	BU	(blue)
4	BK	(black)

Installation

