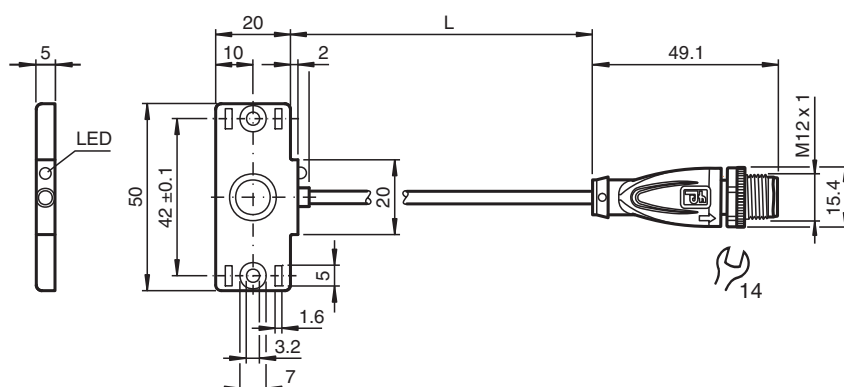


Capacitive sensor CBN5-F46-E2-Y320222

- 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
Operating current	I_L	0 ... 100 mA

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

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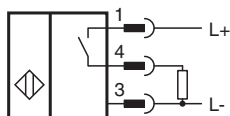
Singapore: +65 6779 9091
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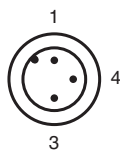
Technical Data

Lowest operating current	I_m	0 mA
Off-state current	I_r	0 ... 0.5 mA typ. 0.01 mA
Off-state current $T_U = 40^\circ\text{C}$, 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 IEC 60947-5-2
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		$-25 \dots 70^\circ\text{C}$ ($-13 \dots 158^\circ\text{F}$)
Storage temperature		$-40 \dots 85^\circ\text{C}$ ($-40 \dots 185^\circ\text{F}$)
Mechanical specifications		
Connection type		fixed cable with plug
Housing material		PBT
Sensing face		PBT
Degree of protection		IP67
Connector		
Threading		M12 x 1
Tightening torque		0.6 Nm
Number of pins		3
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		$0.14\ \text{mm}^2$
Length	L	2 m
Mass		59 g
Dimensions		
Height		5 mm
Width		50 mm
Length		22 mm

Connection



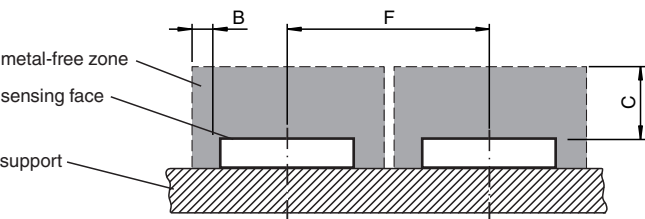
Connection Assignment



Wire colors in accordance with EN 60947-5-2

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

Installation Conditions



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