

# Capacitive sensor

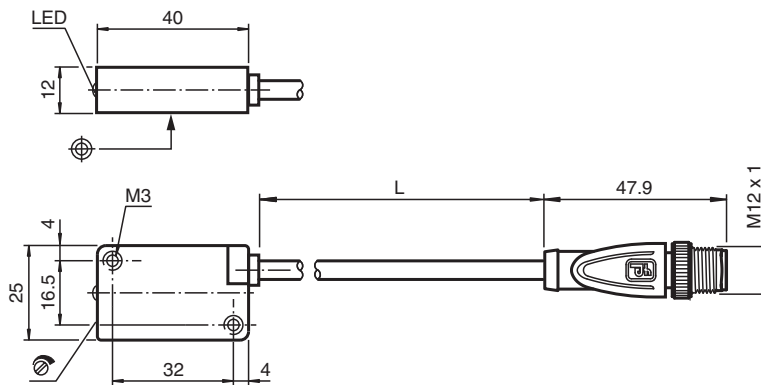
## CBN15-F64-A2-1M-V1



- 15 mm non-flush
- Flat housing
- Switching distance adjustable between 2 mm ... 15 mm



### Dimensions



### Technical Data

General specifications		
Switching function		complementary
Output type		PNP
Rated operating distance	$s_n$	15 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 10.8 mm
Actual operating distance	$s_r$	13.5 ... 16.5 mm
Output type		4-wire
Nominal ratings		
Installation conditions		
B		15 mm
C		30 mm
F		45 mm / 60 mm
Operating voltage	$U_B$	10 ... 30 V DC
Switching frequency	f	0 ... 100 Hz
Hysteresis	H	1 ... 10 typ. 5 %

Release date: 2022-05-25 Date of issue: 2022-05-25 Filename: 263269\_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

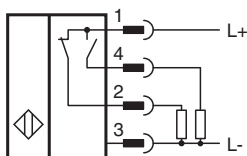
Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

## Technical Data

Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing $I_{\max} \leq 500 \text{ mA}$
Voltage drop	$U_d$	$\leq 2 \text{ V}$
Repeat accuracy	R	$\leq 1.5 \text{ mm}$
Operating current	$I_L$	0 ... 100 mA
Off-state current	$I_r$	0 ... 50 $\mu\text{A}$ typ. 5 $\mu\text{A}$
No-load supply current	$I_0$	$\leq 15 \text{ mA}$
Switching state indicator		LED, yellow
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		941 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
<b>Indicators/operating means</b>		
Potentiometer		sensitivity adjustment
<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, General Purpose
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)
Pollution degree		3
<b>Mechanical specifications</b>		
Connection type		Cable connector M12 x 1 , 4-pin PUR , L = 1 m
Core cross section		0.34 mm <sup>2</sup>
Housing material		PBT
Sensing face		PBT
Degree of protection		IP67
Tightening torque, housing screws		$\leq 2 \text{ Nm}$
Note		Screw-in depth of housing screws, max. 8 mm

## Connection



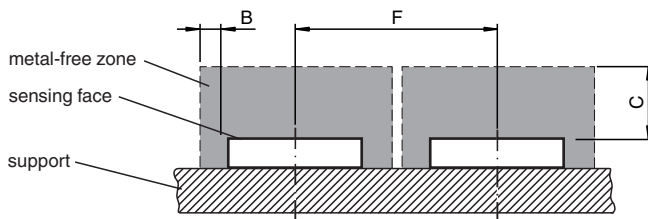
## Connection Assignment



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

## Installation Conditions



## Accessories

	<p><b>MH-F64</b></p>	<p>Mounting plate</p>
--	----------------------	-----------------------