

Capacitive sensor

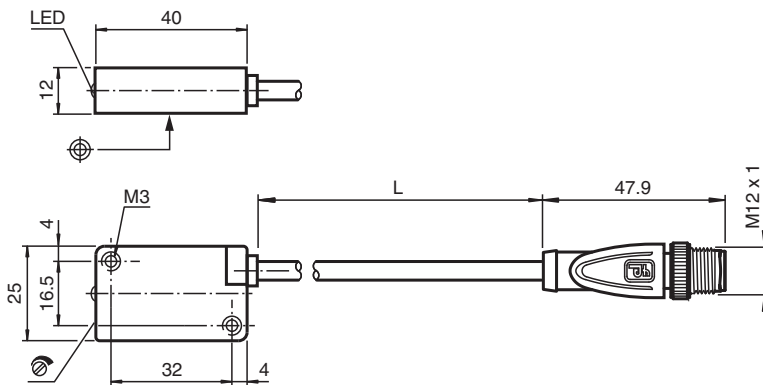
CBN15-F64-A2-1M-V1



- 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 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing $I_{max} \leq 500 \text{ mA}$

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

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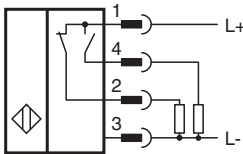
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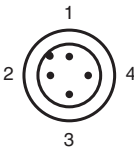
Technical Data

Voltage drop	U_d	$\leq 2 \text{ V}$
Repeat accuracy	R	$\leq 1.5 \text{ mm}$
Operating current	I_L	$0 \dots 100 \text{ mA}$
Off-state current	I_r	$0 \dots 50 \mu\text{A typ. } 5 \mu\text{A}$
No-load supply current	I_0	$\leq 15 \text{ mA}$
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		941 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
Indicators/operating means		
Potentiometer		sensitivity adjustment
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		$-25 \dots 70 \text{ }^\circ\text{C}$ ($-13 \dots 158 \text{ }^\circ\text{F}$)
Storage temperature		$-40 \dots 85 \text{ }^\circ\text{C}$ ($-40 \dots 185 \text{ }^\circ\text{F}$)
Pollution degree		3
Mechanical specifications		
Connection type		fixed cable with plug
Housing material		PBT
Sensing face		PBT
Degree of protection		IP67
Connector		
Threading		M12 x 1
Number of pins		4
Cable		
Cable diameter		$4.8 \text{ mm} \pm 0.2 \text{ mm}$
Bending radius		$> 10 \times \text{cable diameter}$
Material		PUR
Color		grey
Number of cores		4
Core cross section		0.34 mm^2
Length	L	1 m
Tightening torque, housing screws		$\leq 2 \text{ Nm}$
Dimensions		
Height		12 mm
Width		25 mm
Length		40 mm
Note		Screw-in depth of housing screws, max. 8 mm

Connection



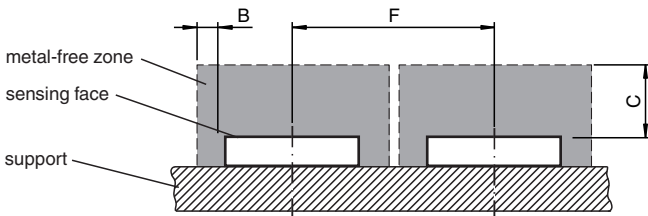
Connection Assignment



Wire colors in accordance with EN 60947-5-2

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

Installation Conditions



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