



### Model Number

**CBN15-F64-A2-V31-Y290300**

### Features

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

### Accessories

**MH-F64**  
Mounting plate

## 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
		$I_{max} \leq 500$ mA
Voltage drop	$U_d$	$\leq 2$ V
Repeat accuracy	R	$\leq 1.5$ mm
Design data		
Operating current	$I_L$	0 ... 100 mA
Off-state current	$I_r$	0 ... 50 $\mu$ A typ. 5 $\mu$ A
No-load supply current	$I_0$	$\leq 15$ mA
Switching state indicator		LED, yellow

### Functional safety related parameters

MTTF <sub>d</sub>	941 a
Mission Time (T <sub>M</sub> )	20 a
Diagnostic Coverage (DC)	0 %

### Indicators/operating means

Potentiometer	sensitivity adjustment
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### Ambient conditions

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

### Mechanical specifications

Connection type	Connector plug M8 x 1, 4-pin
Housing material	PBT
Sensing face	PBT
Degree of protection	IP67
Tightening torque, housing screws	$\leq 2$ Nm
Note	Screw-in depth of housing screws, max. 8 mm

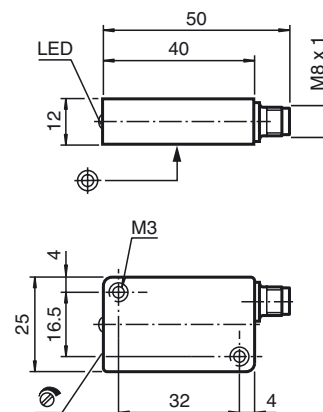
### Compliance with standards and directives

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

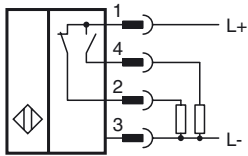
### Approvals and certificates

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

## Dimensions



**Electrical Connection**



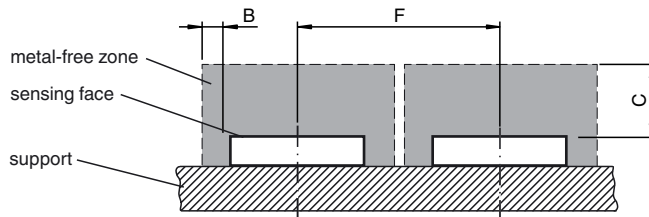
**Pinout**



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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