



**Model Number**

**CBN5-F46-E2**

**Features**

- 5 mm non-flush
- 3-wire DC
- Flat housing
- Mounting slots for cable ties
- Thru-holes for screw mounting

**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**

<b>Installation conditions</b>		
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	$U_d$	$\leq 2$ V

**Design 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 $T_U = 40$ °C, switching element off		$\leq 100$ $\mu$ A
No-load supply current	$I_0$	$\leq 15$ mA
Time delay before availability	$t_v$	$\leq 50$ ms
Switching state indicator		LED, yellow

**Functional safety related parameters**

MTTF <sub>d</sub>	1200 a
Mission Time ( $T_M$ )	20 a
Diagnostic Coverage (DC)	0 %

**Ambient conditions**

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

**Mechanical specifications**

Connection type	cable PVC , 2 m
Core cross-section	0.14 mm <sup>2</sup>
Housing material	PBT
Sensing face	PBT
Degree of protection	IP67
Cable	
Cable diameter	3.5 mm $\pm$ 0.2 mm
Bending radius	> 10 x cable diameter

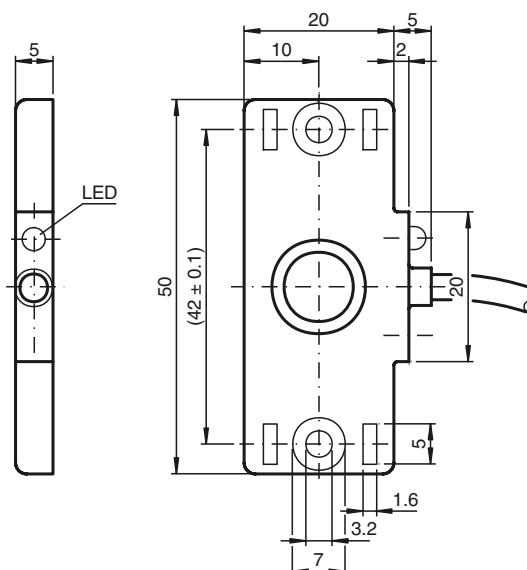
**Compliance with standards and directives**

<b>Standard conformity</b>	
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**

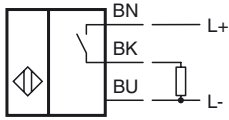
UL approval	cULus Listed, General Purpose
CSA approval	cCSAus Listed, General Purpose
CCC approval	CCC approval / marking not required for products rated $\leq 36$ V

**Dimensions**

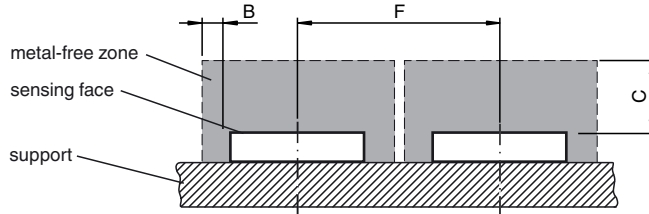


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Electrical Connection



Installation Conditions



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