



Model Number

CBN2-F46-E2

Features

- 2 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	2 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s_a	0 ... 1.4 mm
Output type		3-wire

Nominal ratings

Installation conditions		
B		0 mm
C		5 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
Voltage drop at I_L		
Voltage drop $I_L = 10$ mA, switching element on U_d		0.8 ... 2.2 V typ. 1.4 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		≤ 100 μ A
No-load supply current	I_0	≤ 15 mA
Time delay before availability	t_v	≤ 50 ms
Switching state indicator		LED, yellow

Functional safety related parameters

MTTF _d	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 ²
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

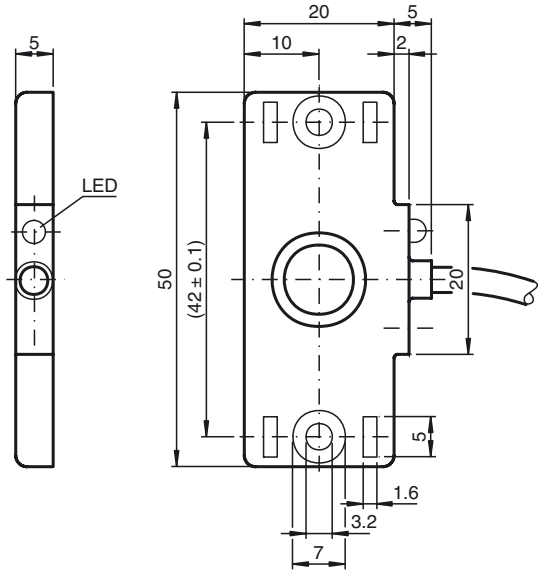
Compliance with standards and directives

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

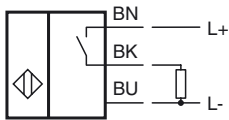
Approvals and certificates

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

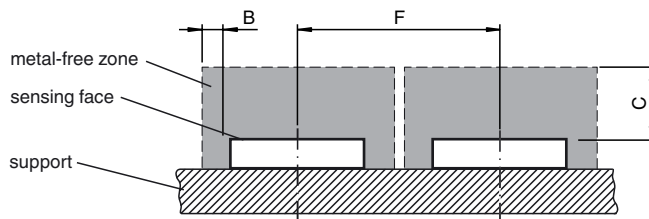
Dimensions



Electrical Connection



Installation Conditions





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