



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 µA
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 ± 0.2 mm
Bending radius	> 10 x cable diameter

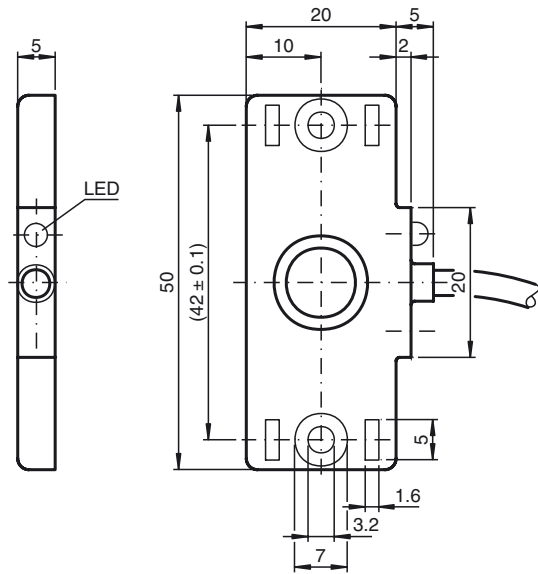
Compliance with standards and directives

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

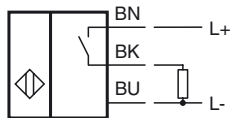
Approvals and certificates

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

