



Model Number

CBN10-F46-E3

Features

- 10 mm non-flush
- 3-wire DC
- Flat housing
- Mounting slots for cable ties

Technical Data

General specifications

Switching element function		PNP	NC
Rated operating distance	s_n	10 mm	
Installation		non-flush	
Output polarity		DC	
Assured operating distance	s_a	0 ... 7 mm	

Nominal ratings

Installation conditions			
B		5 mm	
C		20 mm	
F		20 mm / 50 mm	
Operating voltage	U_B	10 ... 30 V DC	
Switching frequency	f	0 ... 5 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 0.8 ... 2.2 V typ. 1.4 V on U_d			
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			
No-load supply current	I_0	≤ 15 mA	
Time delay before availability	t_v	≤ 120 ms	
Switching state indicator		LED, yellow	

Functional safety related parameters

MTTF _d	1190 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

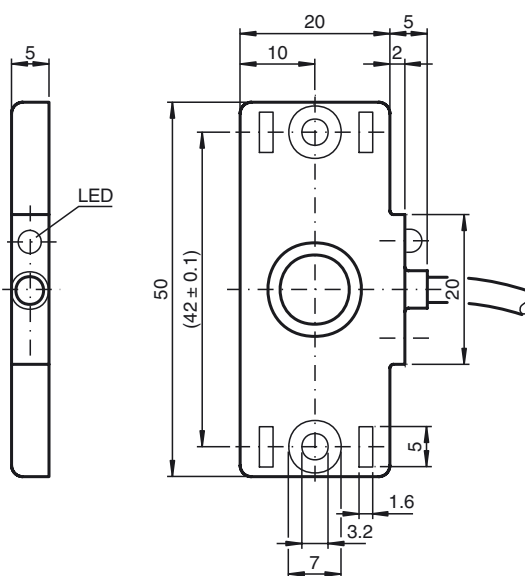
Compliance with standards and directives

Standard conformity	
Standards	EN 60947-5-2:2007 IEC 60947-5-2:2007

Approvals and certificates

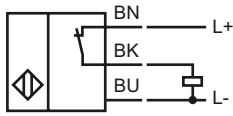
UL approval	cULus Listed, General Purpose
CSA approval	cCSAus Listed, General Purpose
CCC approval	CCC approval / marking not required for products rated ≤ 36 V

Dimensions

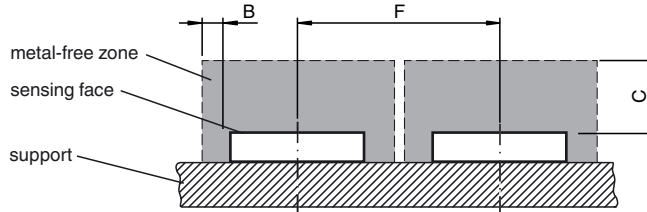


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Electrical Connection



Installation Conditions



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