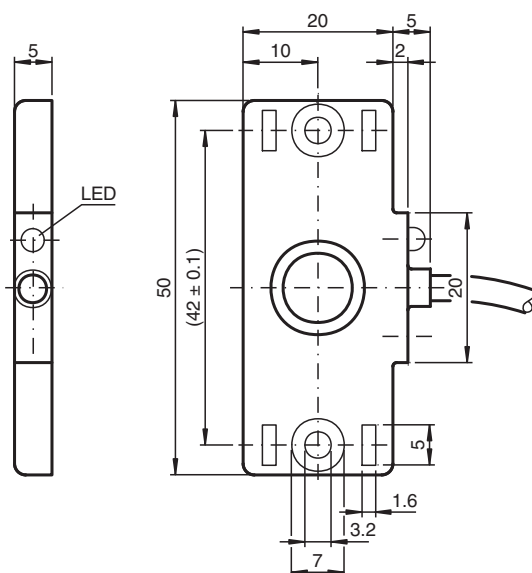


Capacitive sensor CBN10-F46-E3

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



Dimensions



Technical Data

General specifications

Switching function	Normally closed (NC)
Output type	PNP
Rated operating distance	s_n 10 mm
Installation	non-flush
Output polarity	DC
Assured operating distance	s_a 0 ... 7 mm
Output type	3-wire

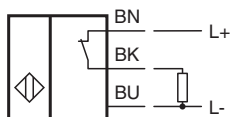
Nominal ratings

Installation conditions	
B	5 mm
C	20 mm

Technical Data

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 on	U_d	0.8 ... 2.2 V typ. 1.4 V
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	≤ 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 %
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
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

Connection Assignment



Installation

