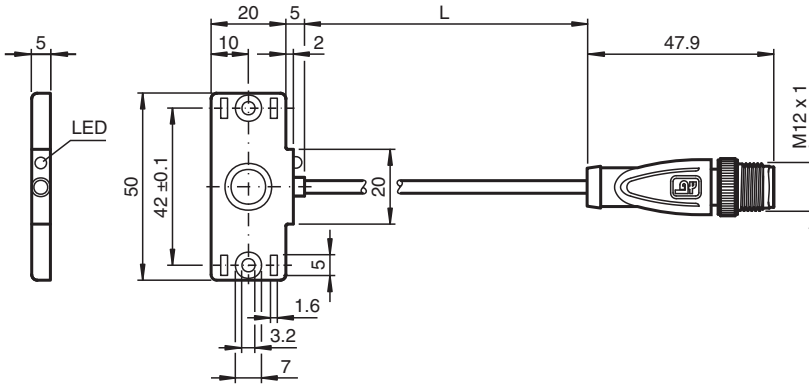


Capacitive sensor CBN5-F46-E3-0,76M-V1-Y

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



Dimensions



Technical Data

General specifications

Switching function		Normally closed (NC)
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

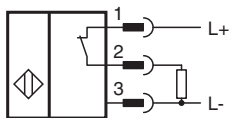
Installation conditions		
B		0 mm
C		10 mm
F		20 mm / 50 mm
Operating voltage	U_B	10 ... 30 V DC
Switching frequency	f	0 ... 10 Hz
Hysteresis	H	1 ... 10 % typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 2 V
Operating current	I_L	0 ... 100 mA
Lowest operating current	I_m	0 mA
Off-state current	I_r	0 ... 0.5 mA typ. 0.01 mA

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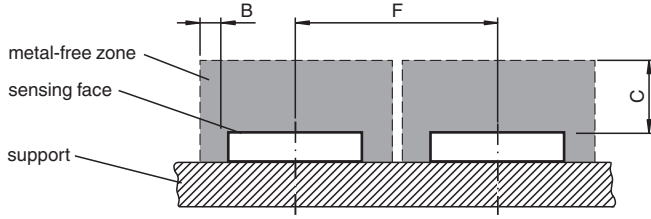
Technical Data

Off-state current $T_U=40\text{ °C}$, switching element off		$\leq 100\ \mu\text{A}$
No-load supply current	I_0	$\leq 15\ \text{mA}$
Time delay before availability	t_v	$\leq 120\ \text{ms}$
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		672 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
Standards		EN IEC 60947-5-2
Approvals and certificates		
UL approval		cULus Listed Circuitry: Class 2 Power Source Enclosure Type Rating: Type 1 Supply/Switching Voltage: 30 V DC Output Switching Current: 100 mA
CCC approval		CCC approval / marking not required for products rated $\leq 36\ \text{V}$
Ambient conditions		
Ambient temperature		$-25 \dots 70\text{ °C}$ ($-13 \dots 158\text{ °F}$)
Storage temperature		$-40 \dots 85\text{ °C}$ ($-40 \dots 185\text{ °F}$)
Mechanical specifications		
Connection type		fixed cable with plug
Housing material		PBT
Sensing face		PBT
Degree of protection		IP67
Connector		
Threading		M12 x 1
Number of pins		4
Cable		
Cable diameter		$3.5\ \text{mm} \pm 0.2\ \text{mm}$
Bending radius		$> 10 \times$ cable diameter
Material		PUR
Color		black
Number of cores		3
Core cross section		$0.14\ \text{mm}^2$
Length	L	0.76 m
Mass		35 g
Dimensions		
Height		20 mm
Width		50 mm
Length		5 mm

Connection Assignment



Installation Conditions



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