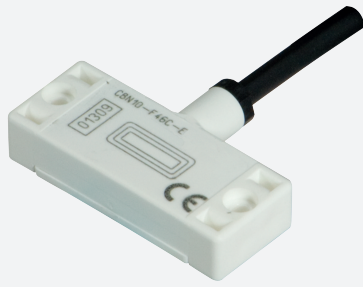


Capacitive sensor

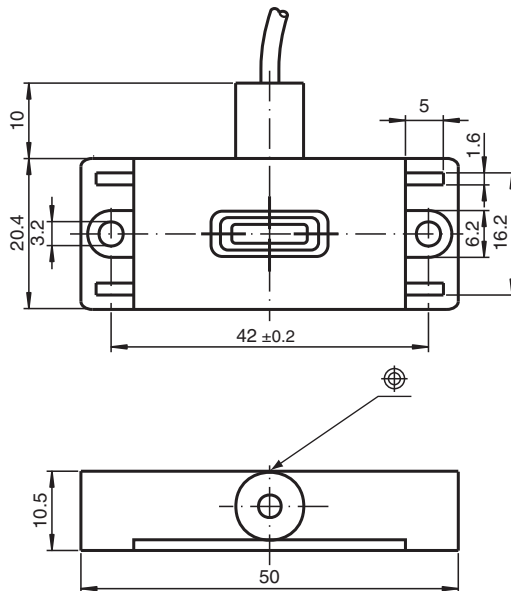
CBN10-F46C-EI



- Flat housing
- Insensitive to moisture condensation



Dimensions



Technical Data

General specifications

Output type		Digital current output
Rated operating distance	s_n	7 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s_a	0 ... 5 mm
Output type		3-wire

Nominal ratings

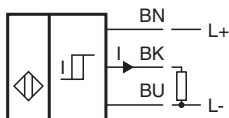
Installation conditions		
B		5 mm
C		20 mm
F		40 mm / 60 mm
Operating voltage	U_B	9 ... 30 V
Switching frequency	f	0 ... 5 Hz

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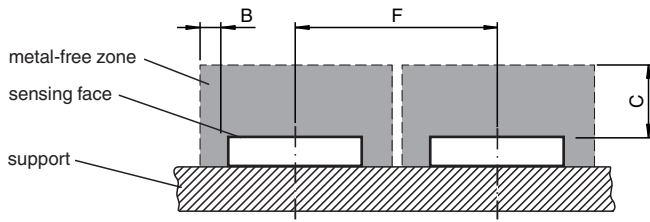
Technical Data

Hysteresis	H	1 ... 10 % typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		yes
No-load supply current	I_0	≤ 20 mA
Load resistor		0 ... 250 Ohm
Functional safety related parameters		
MTTF _d		660 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
Digital output		
Output value		object detected: 10 mA \pm 1 mA object not detected: 5 mA \pm 1 mA
Compliance with standards and directives		
Standard conformity		
Standards		EN IEC 60947-5-2
Approvals and certificates		
UL approval		UL 60947-5-2: 2014 Class 2 power source type rating 1
CCC approval		CCC approval / marking not required for products rated ≤ 36 V
Ambient conditions		
Ambient temperature		-40 ... 85 °C (-40 ... 185 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		cable
Housing material		PVDF
Sensing face		PVDF
Degree of protection		IP67
Cable		
Wire end ferrules		yes
Cable diameter		4.8 mm \pm 0.2 mm
Bending radius		> 10 x cable diameter
Material		PUR
Color		black
Number of cores		3
Core cross section		0.34 mm ²
Length	L	2 m
Mass		75 g
Dimensions		
Height		10.5 mm
Width		50 mm
Length		30.4 mm

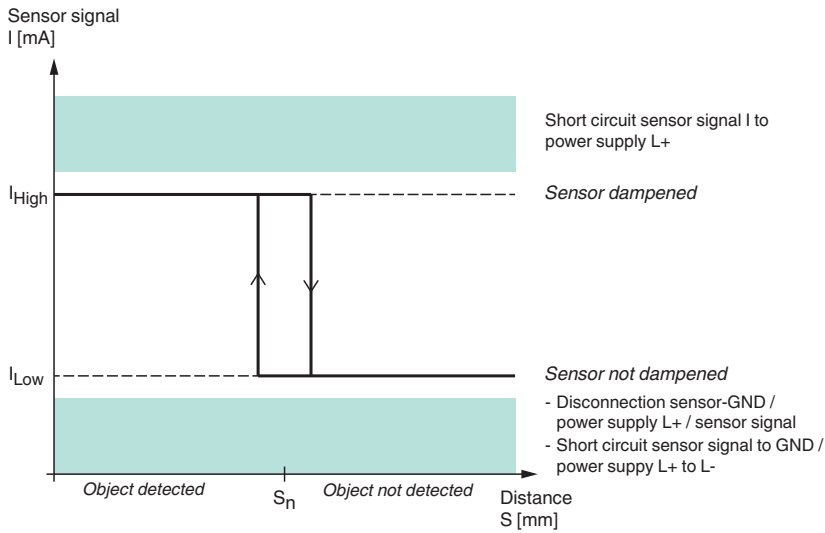
Connection



Installation Conditions



Characteristic Curve



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