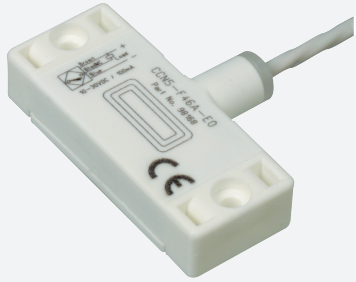


Capacitive sensor

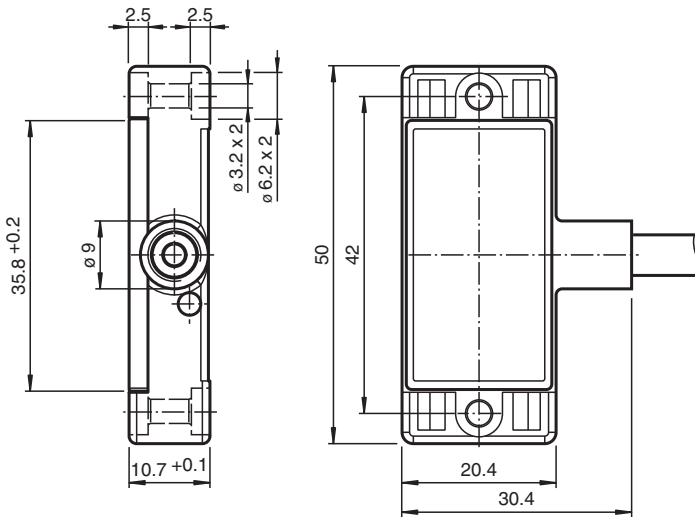
CCN5-F46A-E3



- 5 mm non-flush
- 3-wire DC
- Flat housing
- Chemically resistant PVDF housing
- Mounting slots for cable ties
- Degree of protection IP68
- 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

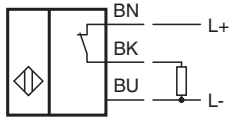
Installation conditions		
B		0 mm
C		10 mm
F		20 mm / 50 mm
Operating voltage	U_B	10 ... 30 V DC
Switching frequency	f	0 ... 10 Hz
Hysteresis	H	1 ... 10 % typ. 5 %

Release date: 2025-06-11 Date of issue: 2025-06-12 Filename: 103537_eng.pdf

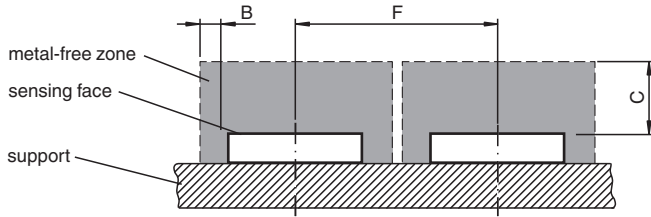
Technical Data

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
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		666 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 Load Type: General Purpose Enclosure Type Rating: Type 1
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
Housing material		PVDF
Sensing face		PVDF
Degree of protection		IP68
Cable		
Wire end ferrules		yes
Cable diameter		3 mm - 0.2 mm
Bending radius		> 12 x cable diameter
Material		FEP
Color		white
Number of cores		3
Core cross section		0.14 mm ²
Length	L	2 m
Dimensions		
Height		10.5 mm
Width		50 mm
Length		30.4 mm
Note		cable tensile strength 20 N

Connection Assignment



Installation Conditions



Release date: 2025-06-11 Date of issue: 2025-06-12 Filename: 103537_eng.pdf