



### Model Number

CCB10-30GS55-N1

### Features

- 10 mm flush
- The switching distance can be set over a wide range with the potentiometer

### Accessories

BF 30  
Mounting flange, 30 mm

## Technical Data

### General specifications

Switching function	Normally open (NO)
Output type	NAMUR
Rated operating distance	$s_n$ 10 mm
Installation	flush
Output type	2-wire

### Nominal ratings

Installation conditions	
A	0 mm
B	0 mm
C	20 mm
F	60 mm
Nominal voltage	$U_o$ 8.2 V ( $R_i$ approx. 1 k $\Omega$ )
Operating voltage	$U_B$ 5 ... 15 V
Switching frequency	f 0 ... 50 Hz
Reverse polarity protection	reverse polarity protected
Current consumption	
Measuring plate not detected	$\leq$ 1.5 mA
Measuring plate detected	$\geq$ 2.5 mA
Switching state indicator	LED, yellow

### Functional safety related parameters

MTTF <sub>d</sub>	1134 a
Mission Time (T <sub>M</sub> )	20 a
Diagnostic Coverage (DC)	0 %

### Ambient conditions

Ambient temperature	-20 ... 70 °C (-4 ... 158 °F)
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### Mechanical specifications

Connection type	cable PUR, 2 m
Core cross-section	0.75 mm <sup>2</sup>
Housing material	Stainless steel 1.4305 / AISI 303
Sensing face	PTFE
Degree of protection	IP67

### General information

Use in the hazardous area	see instruction manuals
Category	1G; 1D

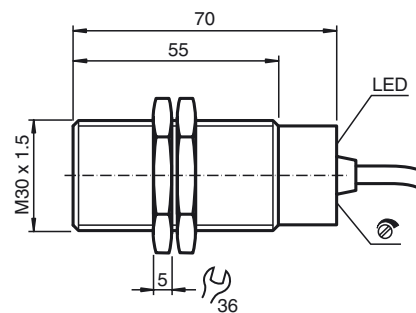
### Compliance with standards and directives

Standard conformity	
NAMUR	EN 60947-5-6:2000 IEC 60947-5-6:1999
Standards	EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012

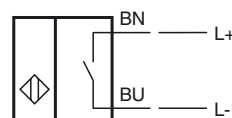
### Approvals and certificates

ETL approval	cETLus
CCC approval	CCC approval / marking not required for products rated $\leq$ 36 V

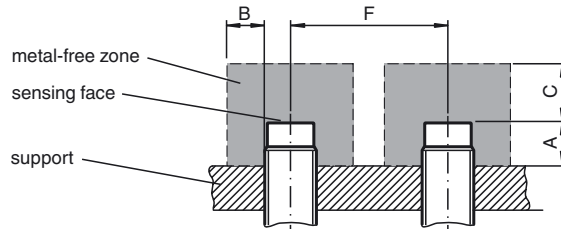
## Dimensions



## Electrical Connection



**Installation Conditions**



**Equipment protection level Ga**

CE marking	CE 0102	
ATEX marking	II 1G Ex ia IIC T1-T6 Ga	
Standards	EN 60079-0:2012, EN 60079-11:2012, EN 60079-26:2007 Ignition protection "Intrinsic safety"	
Appropriate type	CCB10-30GS55-N1...	
Effective internal capacitance	$C_i$	$\leq 250 \text{ nF}$
Effective internal inductance	$L_i$	$\leq 200 \mu\text{H}$
<b>Highest permissible ambient temperature</b>		
T6 when $P_i = 100 \text{ mW}$ , $U_i = 15 \text{ V}$ , $I_i = 30 \text{ mA}$	40 °C (104 °F)	
T5 when $P_i = 100 \text{ mW}$ , $U_i = 15 \text{ V}$ , $I_i = 30 \text{ mA}$	40 °C (104 °F)	
T4 when $P_i = 100 \text{ mW}$ , $U_i = 15 \text{ V}$ , $I_i = 30 \text{ mA}$	80 °C (176 °F)	
T3, T2, T1 when $P_i = 100 \text{ mW}$ , $U_i = 15 \text{ V}$ , $I_i = 30 \text{ mA}$	100 °C (212 °F)	
<b>Special conditions</b>		

**Equipment protection level Da**

CE marking	CE 0102	
ATEX marking	II 1D Ex ia IIC T101°C Da	
Standards	EN 60079-0:2012; EN 60079-11:2012 type of protection intrinsic safety "ia"	
Appropriate type	CCB10-30GS55-N1...	
Effective internal capacitance	$C_i$	$\leq 250 \text{ nF}$
Effective internal inductance	$L_i$	$\leq 200 \mu\text{H}$
<b>Special conditions</b>		

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