



Model Number

CCB10-30GS55-N1-V1

Features

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

Accessories

BF 30

Mounting flange, 30 mm

V1-W-N4-2M-PVC

Female cordset, M12, 4-pin, NAMUR, PVC cable

V1-W-N4-5M-PVC

Female cordset, M12, 4-pin, NAMUR, PVC cable

V1-G-N4-5M-PVC

Female cordset, M12, 4-pin, NAMUR, PVC cable

V1-G-N4-5M-PUR

Female cordset, M12, 4-pin, NAMUR, PUR cable

V1-W-N4-5M-PUR

Female cordset, M12, 4-pin, NAMUR, PUR cable

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 Ω)
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	≤ 1.5 mA
Measuring plate detected	≥ 2.5 mA
Switching state indicator	LED, yellow

Functional safety related parameters

MTTF _d	1134 a
Mission Time (T_M)	20 a
Diagnostic Coverage (DC)	0 %

Ambient conditions

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

Connection type	Connector plug M12 x 1, 4-pin
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

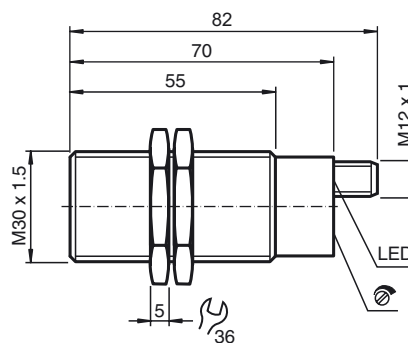
Compliance with standards and directives

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

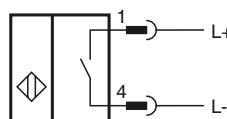
Approvals and certificates

ETL approval	cETLus
CCC approval	CCC approval / marking not required for products rated ≤ 36 V

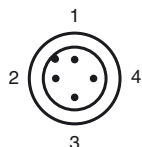
Dimensions



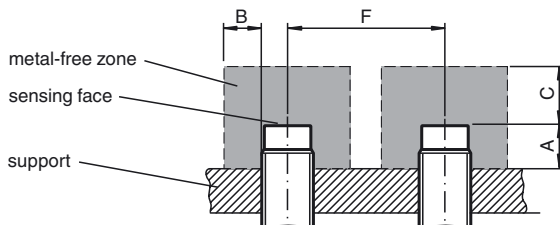
Electrical Connection



Pinout



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	$\leq 200 \mu\text{H}$
Highest permissible ambient temperature		
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)	
Special conditions		

Equipment protection level Da

CE marking	CE 0102	
ATEX marking	II 1D Ex ia IIIC 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	$\leq 200 \mu\text{H}$
Special conditions		

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