

Model Number

CJ1-12GK-N

Features

- 1 mm non-flush

Accessories

BF 12

Mounting flange, 12 mm

Technical Data

General specifications

Switching function		Normally open (NO)
Output type		NAMUR
Rated operating distance	s_n	1 mm
Installation		non-flush
Assured operating distance	s_a	0 ... 0.72 mm
Output type		2-wire

Nominal ratings

Installation conditions		
A		5 mm
B		15 mm
C		12 mm
F		70 mm
Nominal voltage	U_o	8.2 V (R_i approx. 1 k Ω)
Operating voltage	U_B	7 ... 12 V
Switching frequency	f	0 ... 1 Hz
Current consumption		
Measuring plate not detected		\leq 1 mA
Measuring plate detected		\geq 2.4 mA

Functional safety related parameters

MTTF _d		5670 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %

Ambient conditions

Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
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Mechanical specifications

Connection type		cable PVC , 2 m
Core cross-section		0,34 mm ²
Housing material		PBT
Sensing face		PBT
Degree of protection		IP68
Cable		
Bending radius		> 10 x cable diameter

General information

Use in the hazardous area		see instruction manuals
Category		1G; 2G; 1D

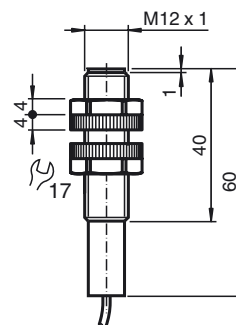
Compliance with standards and directives

Standard conformity		
NAMUR		EN 60947-5-6:2000 IEC 60947-5-6:1999
Standards		EN 60947-5-2:2007 IEC 60947-5-2:2007

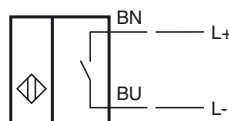
Approvals and certificates

FM approval		
Control drawing		116-0165
UL approval		cULus Listed, General Purpose
CSA approval		cCSAus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated \leq 36 V

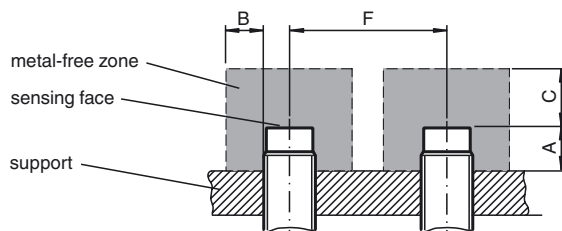
Dimensions



Electrical Connection



Installation Conditions



Equipment protection level Ga

CE marking	CE 0102	
ATEX marking	II 1G Ex ia IIC T6...T1 Ga The Ex-related marking can also be printed on the enclosed label.	
Standards	EN 60079-0:2012+A11:2013, EN 60079-11:2012 Ignition protection "Intrinsic safety" Use is restricted to the following stated conditions	
Appropriate type	CJ1-12GK-N...	
Effective internal capacitance C_i	≤ 60 nF ; a cable length of 10 m is considered.	
Effective internal inductance L_i	negligibly small A cable length of 10 m is considered.	
Highest permissible ambient temperature	Details of the correlation between the type of circuit connected, the maximum permissible ambient temperature, the temperature class, and the effective internal reactance values can be found on the EU-type examination certificate. Note: Use the temperature table for category 1 !!! The 20 % reduction in accordance with EN 1127-1 has already been applied to the temperature table for category 1.	

Special conditions

Equipment protection level Gb

CE marking	CE 0102	
ATEX marking	II 1G Ex ia IIC T6...T1 Ga The Ex-related marking can also be printed on the enclosed label.	
Standards	EN 60079-0:2012+A11:2013, EN 60079-11:2012 Ignition protection "Intrinsic safety" Use is restricted to the following stated conditions	
Appropriate type	CJ1-12GK-N...	
Effective internal capacitance C_i	≤ 60 nF ; a cable length of 10 m is considered.	
Effective internal inductance L_i	negligibly small A cable length of 10 m is considered.	
Maximum permissible ambient temperature T_{amb}	Details of the correlation between the type of circuit connected, the maximum permissible ambient temperature, the temperature class, and the effective internal reactance values can be found on the EU-type examination certificate.	

Special conditions

Equipment protection level Da

CE marking	CE 0102	
ATEX marking	II 1D Ex ia IIC T135°C Da The Ex-related marking can also be printed on the enclosed label.	
Standards	EN 60079-0:2012+A11:2013, EN 60079-11:2012 Ignition protection "Intrinsic safety" Use is restricted to the following stated conditions	
Appropriate type	CJ1-12GK-N...	
Effective internal capacitance C_i	≤ 60 nF ; a cable length of 10 m is considered.	
Effective internal inductance L_i	negligibly small A cable length of 10 m is considered.	

Special conditions

Release date: 2019-05-15 17:09 Date of issue: 2019-05-15 106257_eng.xml