

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

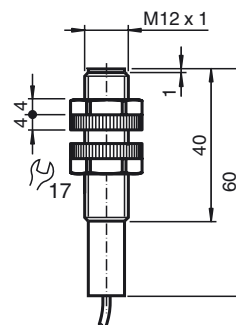
Compliance with standards and directives

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

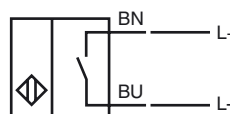
Approvals and certificates

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

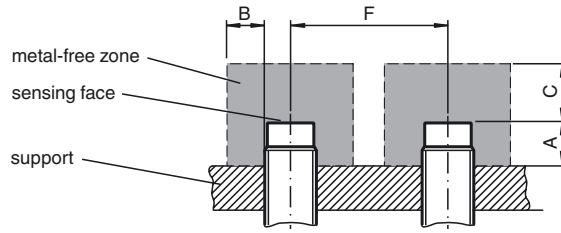
Dimensions



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 inductivity	C_i	$\leq 60 \text{ nF}$; 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 inductivity	C_i	$\leq 60 \text{ nF}$; 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 inductivity	C_i	$\leq 60 \text{ nF}$; 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

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