

**Model Number**

**CJ4-12GK-N**

**Features**

- 4 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	$s_n$ 4 mm
Installation	non-flush
Assured operating distance	$s_a$ 0 ... 2.88 mm
Output type	2-wire

**Nominal ratings**

<b>Installation conditions</b>	
A	20 mm
B	80 mm
C	12 mm
F	70 mm
Nominal voltage	$U_o$ 8.2 V ( $R_i$ approx. 1 k $\Omega$ )
Operating voltage	$U_B$ 7 ... 12 V
Switching frequency	f 0 ... 1 Hz
<b>Current consumption</b>	
Measuring plate not detected	$\leq$ 1 mA
Measuring plate detected	$\geq$ 2.4 mA

**Functional safety related parameters**

MTTF <sub>d</sub>	3299 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 <sup>2</sup>
Housing material	PBT
Sensing face	PBT
Degree of protection	IP68
<b>Cable</b>	
Cable diameter	4.8 mm $\pm$ 0.2 mm
Bending radius	> 10 x cable diameter

**General information**

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

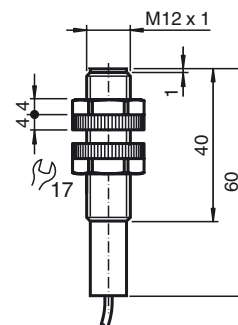
**Compliance with standards and directives**

<b>Standard conformity</b>	
NAMUR	EN 60947-5-6:2000 IEC 60947-5-6:1999
<b>Standards</b>	
	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**

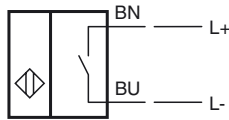
<b>FM approval</b>	
Control drawing	116-0165
UL approval	cULus Listed, General Purpose
CSA approval	cCSAus Listed, General Purpose
CCC approval	CCC approval / marking not required for products rated $\leq$ 36 V

**Dimensions**

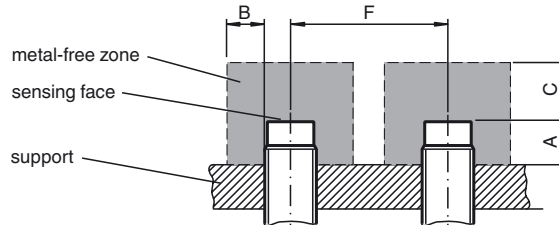


Release date: 2019-07-02 10:10 Date of issue: 2019-07-02 106262\_eng.xml

**Electrical Connection**



**Installation Conditions**



**Equipment protection level Ga**

CE marking	CE 0102	
ATEX marking	Ex 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	CJ4-12GK-N...	
Effective internal capacitance	$C_i$	$\leq 60 \text{ nF}$ ; 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. <b>Note:</b> 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	Ex 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	CJ4-12GK-N...	
Effective internal capacitance	$C_i$	$\leq 60 \text{ nF}$ ; 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	Ex II 1D Ex ia IIIC 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	CJ4-12GK-N...	
Effective internal capacitance	$C_i$	$\leq 60 \text{ nF}$ ; 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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