



### Model Number

NCB2-V3-N0-Y244943

### Features

- 2 mm flush
- Usable up to SIL 2 acc. to IEC 61508

## Technical Data

### General specifications

Switching function		Normally closed (NC)
Output type		NAMUR
Rated operating distance	$s_n$	2 mm
Installation		flush
Assured operating distance	$s_a$	0 ... 1.62 mm
Reduction factor $r_{AI}$		0.3
Reduction factor $r_{Cu}$		0.2
Reduction factor $r_{304}$		0.7
Output type		2-wire

### Nominal ratings

Nominal voltage	$U_o$	8.2 V ( $R_i$ approx. 1 k $\Omega$ )
Switching frequency	f	0 ... 2000 Hz
Hysteresis	H	typ. 3 %
Current consumption		
Measuring plate not detected		≥ 3 mA
Measuring plate detected		≤ 1 mA
Switching state indicator		LED, yellow

### Functional safety related parameters

MTTF <sub>d</sub>		2180 a
Mission Time ( $T_M$ )		20 a
Diagnostic Coverage (DC)		0 %

### Ambient conditions

Ambient temperature		-25 ... 100 °C (-13 ... 212 °F)
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### Mechanical specifications

Connection type		cable PVC , 130 mm Insulated wire end ferrule with 8 mm pin length
Core cross-section		0.14 mm <sup>2</sup>
Housing material		PBT
Sensing face		PBT
Degree of protection		IP67
Cable		
Bending radius		> 10 x cable diameter

### General information

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

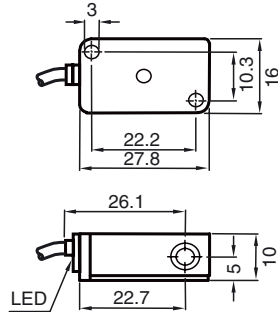
### Compliance with standards and directives

Standard conformity		
NAMUR		EN 60947-5-6:2000 IEC 60947-5-6:1999
Electromagnetic compatibility Standards		NE 21:2007 EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012

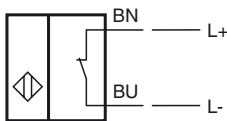
### Approvals and certificates

UL approval		
Ordinary Location		E87056
Hazardous Location		E501628
Control drawing		116-0451
CSA approval		cCSAus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated ≤36 V

Dimensions



Electrical Connection



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	NCB2-V3-N0...	
Effective internal capacitance	$C_i$	$\leq 100 \text{ nF}$
Effective internal inductance	$L_i$	$\leq 100 \mu\text{H}$
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 EC-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.	

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	NCB2-V3-N0...	
Effective internal capacitance	$C_i$	$\leq 100 \text{ nF}$
Effective internal inductance	$L_i$	$\leq 100 \mu\text{H}$
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 EC-type examination certificate.	

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**Equipment protection level Da**

CE marking	CE 0102	
ATEX marking	 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	NCB2-V3-N0...	
Effective internal capacitance	$C_i$	$\leq 100$ nF
Effective internal inductance	$L_i$	$\leq 100$ $\mu$ H

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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