



### Model Number

NCB1,5-6,5M25-N0

### Features

- 1.5 mm flush

### Accessories

#### BF 6,5

Mounting flange, 6.5 mm

## Technical Data

### General specifications

Switching function		Normally closed (NC)
Output type		NAMUR
Rated operating distance	$s_n$	1.5 mm
Installation		flush
Assured operating distance	$s_a$	0 ... 1.215 mm
Actual operating distance	$s_r$	1.35 ... 1.65 mm typ.
Reduction factor $r_{AI}$		0.22
Reduction factor $r_{CU}$		0.19
Reduction factor $r_{304}$		0.65
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	1 ... 10 typ. 3 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		yes
Suitable for 2:1 technology		yes, Reverse polarity protection diode not required
Current consumption		
Measuring plate not detected		$\geq 3$ mA
Measuring plate detected		$\leq 1$ mA
Switching state indicator		LED, yellow

### Functional safety related parameters

MTTF <sub>d</sub>	3330 a
Mission Time ( $T_M$ )	20 a
Diagnostic Coverage (DC)	0 %

### Ambient conditions

Ambient temperature	-25 ... 100 °C (-13 ... 212 °F)
Storage temperature	-40 ... 100 °C (-40 ... 212 °F)

### Mechanical specifications

Connection type	cable PVC, 2 m
Core cross-section	0.14 mm <sup>2</sup>
Housing material	Stainless steel 1.4305 / AISI 303
Sensing face	LCP
Degree of protection	IP67
Cable	
Cable diameter	2.6 mm $\pm$ 0.2 mm
Bending radius	> 10 x cable diameter

### General information

Use in the hazardous area	see instruction manuals
Category	2G

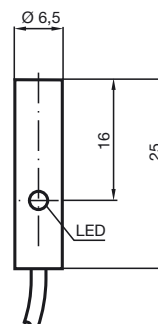
### Compliance with standards and directives

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

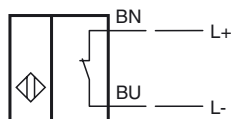
### Approvals and certificates

EAC conformity	TR CU 012/2011
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



## Equipment protection level Gb

CE marking	CE 0102	
ATEX marking	Ex II 2G Ex ia IIC T6...T1 Gb 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	NCB1,5...M...N0...	
Effective internal capacitance $C_i$	$\leq 90$ nF ; a cable length of 10 m is considered.	
Effective internal inductance $L_i$	$\leq 100$ $\mu$ H ; 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 EC-type examination certificate.	

## Equipment protection level Da

CE marking	CE 0102	
ATEX marking	Ex 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	NCB1,5...M...N0...	
Effective internal capacitance $C_i$	$\leq 90$ nF ; a cable length of 10 m is considered.	
Effective internal inductance $L_i$	$\leq 100$ $\mu$ H ; 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 surface temperature, and the effective internal reactance values can be found on the EC-type-examination certificate. <b>The maximum permissible ambient temperature of the data sheet must be noted, in addition, the lower of the two values must be maintained.</b>	



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