



## Model Number

NJ25-50-N

## Features

- 25 mm non-flush

## Technical Data

### General specifications

Switching function		Normally closed (NC)
Output type		NAMUR
Rated operating distance	$s_n$	25 mm
Installation		non-flush
Assured operating distance	$s_a$	0 ... 20.25 mm
Reduction factor $r_{AI}$		0.4
Reduction factor $r_{Cu}$		0.3
Reduction factor $r_{304}$		0.85
Output type		2-wire

### Nominal ratings

Nominal voltage	$U_o$	8.2 V ( $R_i$ approx. 1 k $\Omega$ )
Switching frequency	f	0 ... 250 Hz

### Current consumption

Measuring plate not detected	$\geq 3$ mA
Measuring plate detected	$\leq 1$ mA

### Functional safety related parameters

MTTF <sub>d</sub>	10360 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 , 2 m
Core cross-section	0.75 mm <sup>2</sup>
Housing material	PBT
Sensing face	PBT
Degree of protection	IP67
Cable	

Bending radius	> 10 x cable diameter
Mass	250 g

### General information

Use in the hazardous area	see instruction manuals
Category	2G

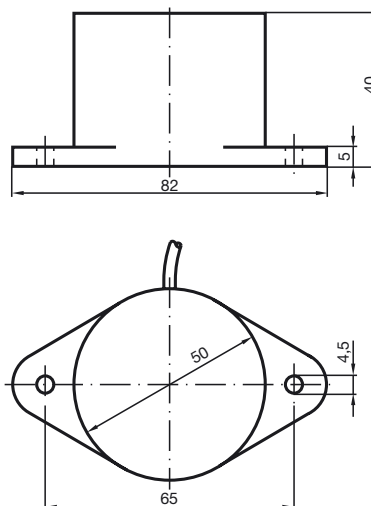
### Compliance with standards and directives

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

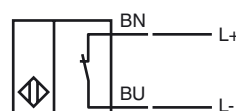
### Approvals and certificates

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



**Equipment protection level Gb**

CE marking	CE 0102	
ATEX marking	 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	NJ 25-50-N...	
Effective internal capacitance	$C_i$	$\leq 150 \text{ nF}$ ; a cable length of 10 m is considered.
Effective internal inductance	$L_i$	$\leq 140 \text{ }\mu\text{H}$ ; 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 EU-type examination certificate.	

**Special conditions****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	NJ 25-50-N...	
Effective internal capacitance	$C_i$	$\leq 150 \text{ }\mu\text{F}$ A cable length of 10 m is considered.
Effective internal inductance	$L_i$	$\leq 140 \text{ }\mu\text{H}$ A cable length of 10 m is considered.

**Special conditions**