



## Model Number

NJ6-F-N

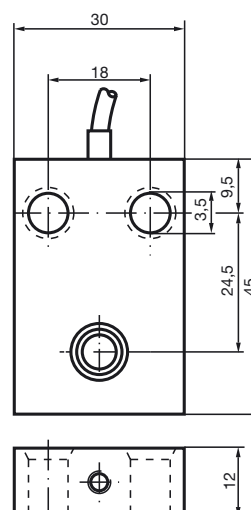
## Features

- Comfort series
- 6 mm flush

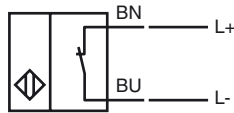
## Technical Data

General specifications	
Switching function	Normally closed (NC)
Output type	NAMUR
Rated operating distance	$s_n$ 6 mm
Installation	flush
Assured operating distance	$s_a$ 0 ... 4.8 mm
Actual operating distance	$s_r$ 5.4 ... 6.6 mm typ.
Reduction factor $r_{AI}$	0.4
Reduction factor $r_{CU}$	0.3
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 ... 5000 Hz
Hysteresis	H 0 ... 0.3 typ. 0.1 %
Reverse polarity protection	reverse polarity protected
Current consumption	
Measuring plate not detected	$\geq 3$ mA
Measuring plate detected	$\leq 1$ mA
Functional safety related parameters	
MTTF <sub>d</sub>	4540 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 PUR, 2 m
Core cross-section	0,34 mm <sup>2</sup>
Housing material	PBT
Sensing face	PBT
Degree of protection	IP67
Cable	
Bending radius	> 10 x cable diameter
Mass	78 g
General information	
Use in the hazardous area	see instruction manuals
Category	2G
Compliance with standards and directives	
Standard conformity	
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	
Effective internal inductivity	$C_i$	$\leq 70 \text{ nF}$ ; a cable length of 10 m is considered.
Effective internal inductance	$L_i$	$\leq 100 \text{ }\mu\text{H}$ ; a cable length of 10 m is considered.
Maximum permissible ambient temperature $T_{\text{amb}}$	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.	

**Equipment protection level Da**

CE marking	CE 0102	
Effective internal inductivity	$C_i$	$\leq 70 \text{ }\mu\text{F}$ A cable length of 10 m is considered.
Effective internal inductance	$L_i$	$\leq 100 \text{ }\mu\text{H}$ A cable length of 10 m is considered.

Release date: 2017-05-30 10:38 Date of issue: 2017-07-24 106462\_eng.xml