

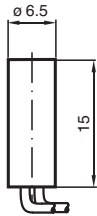
# Inductive sensor

## NJ1,5-6,5-15-N-Y180094

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



### Dimensions



### 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 ... 1.35 mm
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 ... 5000 Hz
Hysteresis	H	typ. 5%
Suitable for 2:1 technology		yes, Reverse polarity protection diode not required
Current consumption		
Measuring plate not detected		$\geq 2.2$ mA
Measuring plate detected		$\leq 0.95$ mA

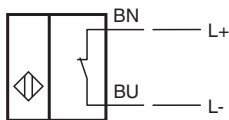
#### Functional safety related parameters

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## Technical Data

Safety Integrity Level (SIL)	SIL 2		
<b>Compliance with standards and directives</b>			
Standard conformity			
NAMUR		EN 60947-5-6 IEC 60947-5-6:1999	
Standards	EN IEC 60947-5-2		
<b>Approvals and certificates</b>			
IECEX approval			
Equipment protection level Gb		IECEX PTB 11.0037X	
Equipment protection level Da		IECEX PTB 11.0037X	
Equipment protection level Mb		IECEX PTB 11.0037X	
ATEX approval			
Equipment protection level Gb		PTB 00 ATEX 2048 X	
Equipment protection level Da		PTB 00 ATEX 2048 X	
UL approval		cULus Listed, General Purpose	
CCC approval			
Hazardous Location		2020322315002256	
CML approval		on request	
ANZEx		18.3018X	
<b>Ambient conditions</b>			
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)	
<b>Mechanical specifications</b>			
Connection type		flexible leads PVC	
Housing material		Stainless steel 1.4305 / AISI 303	
Sensing face		PBT	
Degree of protection		IP67	
Cable			
Material		PVC	
Core cross section		0.14 mm <sup>2</sup>	
Length	L	110 mm	
Dimensions			
Length		15 mm	
Diameter		6.5 mm	
<b>General information</b>			
Use in the hazardous area		see instruction manuals	

## Connection Assignment



## Mounting

**Mounting details:**

- non embeddable mounting  
--> increase factor  $S_R = 1.15$
- embeddable mounting in aluminium  
--> reduction factor  $S_R = 0.75$
- embeddable mounting in steel  
--> mounting hole lowered at  
the front face  $0.5 \times 45^\circ$