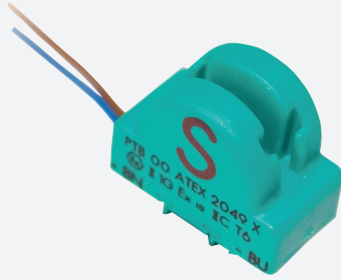


# Inductive slot sensor

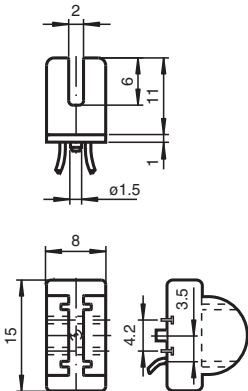
## SJ2-SN



- 2 mm slot width
- Usable up to SIL 3 acc. to IEC 61508



### Dimensions



### Technical Data

#### General specifications

Switching function	Normally closed (NC)	
Output type	NAMUR with safety function	
Slot width	2 mm	
Depth of immersion (lateral)	5 ... 7 typ. 6 mm	
Reference target	5 x 8 x 0.5 mm <sup>3</sup> , Al	
Safety Integrity Level (SIL)	up to SIL3 acc. to IEC 61508 <b>Danger!</b> In safety-related applications the sensor must be operated with a qualified fail safe interface from Pepperl+Fuchs, such as KFD2-SH-EX1. Consider the "exida Functional Safety Assessment" document which is available on <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> as an integral part of this product's documentation.	
Output type	2-wire	

#### Nominal ratings

Nominal voltage	U <sub>o</sub>	8.2 V
Switching frequency	f	0 ... 5000 Hz

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

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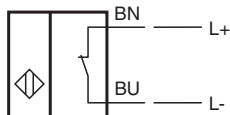
Singapore: +65 6779 9091  
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**PEPPERL+FUCHS**

## Technical Data

Hysteresis	H	with NAMUR switch amplifier: 0.02 mm (e. g. Pepperl+Fuchs KCD2-SR-Ex1.LB) with safety switch amplifier 0.01 mm (e. g. Pepperl+Fuchs KFD2-SH-Ex1)
Suitable for 2:1 technology		yes , with reverse polarity protection diode
Rate of current rise		-11 mA / mm
Current consumption		
Measuring plate not detected		≥ 3 mA
Measuring plate detected		0.2 ... 1 mA
<b>Functional safety related parameters</b>		
Safety Integrity Level (SIL)		SIL 3
MTTF <sub>d</sub>		11800 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
<b>Compliance with standards and directives</b>		
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
<b>Approvals and certificates</b>		
EAC conformity		TR CU 012/2011
FM approval		
Control drawing		116-0165
UL approval		cULus Listed, General Purpose
Ordinary Location		E87056
Hazardous Location		E501628
Control drawing		116-0454
CCC approval		CCC approval / marking not required for products rated ≤36 V
<b>Ambient conditions</b>		
Ambient temperature		-40 ... 100 °C (-40 ... 212 °F)
<b>Mechanical specifications</b>		
Connection type		flexible leads LIFYW , 500 mm
Core cross-section		0.06 mm <sup>2</sup>
Housing material		PBT
Degree of protection		IP67
Mass		2.5 g
Note		adjustable stop
<b>General information</b>		
Use in the hazardous area		see instruction manuals

## Connection



## Application

**Danger!**

In security applications, the sensor must be operated on a qualified safety switch amplifier from Pepperl+Fuchs (e.g., KFD2-SH-Ex1). Observe the "exida Functional Safety Assessment" document, which belongs to this sensor and is available as part of the product documentation from [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com).

**Attention!**

NAMUR-compliant switch amplifiers can, due to a low current consumption at the recorded measuring plate (0.2 mA ... 1 mA), incorrectly report cable breaks (required in accordance with EN 60947-5-6:2000: 0.4 mA ... 1 mA).