

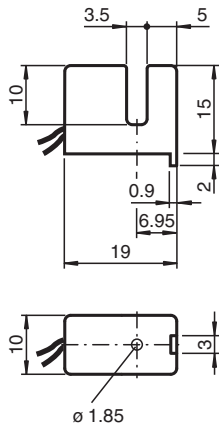
## Inductive slot sensor

### SJ3,5-S1N

- 3.5 mm slot width
- Usable up to SIL 3 acc. to IEC 61508
- Nonferrous targets



## Dimensions



## Technical Data

### General specifications

Switching function	Normally open (NO)
Output type	NAMUR with safety function
Slot width	3.5 mm
Depth of immersion (lateral)	5 ... 7 typ. 6 mm
Reference target	10 x 7 x 0.3 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 (R <sub>i</sub> approx. 1 kΩ)
Switching frequency	f	0 ... 2500 Hz
Hysteresis	H	with NAMUR switch amplifier: 0.09 mm (e. g. Pepperl+Fuchs KCD2-SR-Ex1.LB) with safety switch amplifier 0.05 mm (e. g. Pepperl+Fuchs KFD2-SH-Ex1)
Suitable for 2:1 technology		yes , with reverse polarity protection diode
Rate of current rise		2.1 mA / mm
Current consumption		

Release date: 2024-05-27 Date of issue: 2024-05-29 Filename: 70133007\_eng.pdf

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

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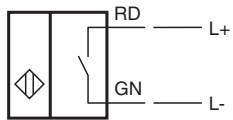
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## Technical Data

Measuring plate not detected		0.2 ... 1 mA
Measuring plate detected		≥ 3 mA
<b>Functional safety related parameters</b>		
Safety Integrity Level (SIL)		SIL 3
MTTF <sub>d</sub>		11850 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 IEC 60947-5-2
<b>Approvals and certificates</b>		
IECEx approval		
Equipment protection level Ga		IECEx PTB 11.0092X
Equipment protection level Gb		IECEx PTB 11.0092X
Equipment protection level Da		IECEx PTB 11.0092X
Equipment protection level Mb		IECEx PTB 11.0092X
ATEX approval		
Equipment protection level Ga		PTB 00 ATEX 2049 X
Equipment protection level Gb		PTB 00 ATEX 2049 X
Equipment protection level Da		PTB 00 ATEX 2049 X
UL approval		
Ordinary Location		E87056
Hazardous Location		E501628
Control drawing		116-0454
CCC approval		
Hazardous Location		2020322315002308
NEPSI approval		
NEPSI certificate		GYJ16.1392X
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 100 °C (-13 ... 212 °F)
<b>Mechanical specifications</b>		
Connection type		flexible leads LiY
Housing material		PBT
Degree of protection		IP67
Cable		
Cable diameter		1.1 mm ± 0.1 mm
Bending radius		> 10 x cable diameter
Material		PVC
Core cross section		0.14 mm <sup>2</sup>
Length	L	500 mm
Dimensions		
Height		15 mm
Width		10 mm
Length		19.5 mm
Note		only for non-ferrous metal Adjustable stop
<b>General information</b>		
Use in the hazardous area		see instruction manuals

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## Connection



## Application

**Danger!**

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