

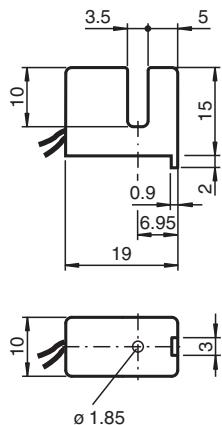
Inductive slot sensor

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 ³ , Al
Safety Integrity Level (SIL)	up to SIL3 acc. to IEC 61508 Danger! 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 www.pepperl-fuchs.com as an integral part of this product's documentation.
Output type	2-wire

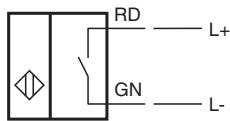
Nominal ratings

Nominal voltage	U _o	8.2 V (R _i 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		

Technical Data

Measuring plate not detected	0.2 ... 1 mA
Measuring plate detected	≥ 3 mA
Functional safety related parameters	
Safety Integrity Level (SIL)	SIL 3
MTTF _d	11850 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %
Compliance with standards and directives	
Standard conformity	
NAMUR	EN 60947-5-6:2000 IEC 60947-5-6:1999
Standards	EN IEC 60947-5-2
Approvals and certificates	
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	cULus Listed, General Purpose
Ordinary Location	E87056
Hazardous Location	E501628
Control drawing	116-0454
CCC approval	
Hazardous Location	2020322315002308
NEPSI approval	
NEPSI certificate	GYJ16.1392X
Ambient conditions	
Ambient temperature	-25 ... 100 °C (-13 ... 212 °F)
Mechanical specifications	
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 ²
Length	L 500 mm
Dimensions	
Height	15 mm
Width	10 mm
Length	19.5 mm
Note	only for non-ferrous metal Adjustable stop
General information	
Use in the hazardous area	see instruction manuals

Connection



Application

**Danger!**

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