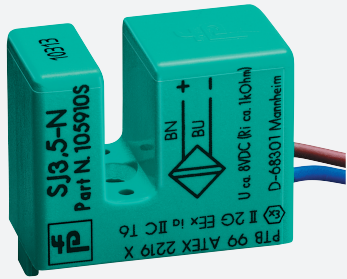


Inductive slot sensor

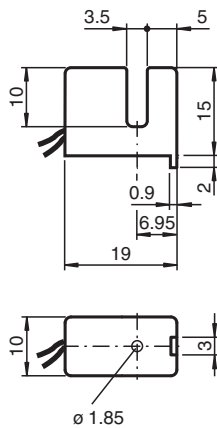
SJ3,5-SN-Y303204



- 3.5 mm slot width
- Usable up to SIL 2 acc. to IEC 61508
- Extended temperature range



Dimensions



Technical Data

General specifications

Switching function	Normally closed (NC)
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 SIL2 acc. to IEC 61508
Output type	2-wire

Nominal ratings

Nominal voltage	U _o	8.2 V (R _i approx. 1 kΩ)
Switching frequency	f	0 ... 3000 Hz
Hysteresis	H	with NAMUR switch amplifier: 0.09 mm (e. g. Pepperl+Fuchs KCD2-SR-Ex1.LB)
Suitable for 2:1 technology		yes, with reverse polarity protection diode
Rate of current rise		-4.5 mA / mm
Current consumption		
Measuring plate not detected		≥ 3 mA
Measuring plate detected		0.2 ... 1 mA

Release date: 2020-11-11 Date of issue: 2020-11-11 Filename: 303204_eng.pdf

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

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PEPPERL+FUCHS

Technical Data

Functional safety related parameters

Safety Integrity Level (SIL)	SIL 2
MTTF _d	11800 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 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012

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 Gc (ic)	PF13CERT2895 X
Equipment protection level Da	PTB 00 ATEX 2049 X
FM approval	
Control drawing	116-0165
UL approval	
Ordinary Location	E87056
Hazardous Location	E501628
Control drawing	116-0454

Ambient conditions

Ambient temperature	-50 ... 100 °C (-58 ... 212 °F) Safety application: -40 ... 100°C
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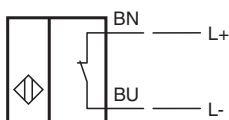
Mechanical specifications

Connection type	flexible leads LiY , 500 mm
Core cross-section	0.14 mm ²
Housing material	PBT
Degree of protection	IP67
Note	adjustable stop Security relevant only up to -40°C

General information

Use in the hazardous area	see instruction manuals
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Connection



Operation

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).