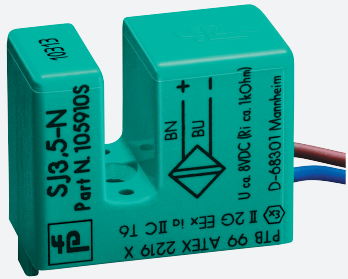


# Inductive slot sensor

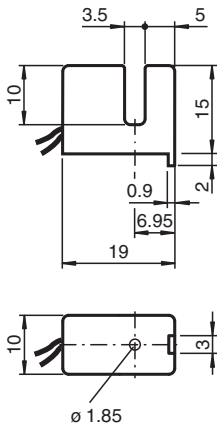
## SJ3,5-N-BU



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



### Dimensions



### Technical Data

#### General specifications

Switching function	Normally closed (NC)
Output type	NAMUR
Slot width	3.5 mm
Depth of immersion (lateral)	5 ... 7 typ. 6 mm
Output type	2-wire

#### Nominal ratings

Nominal voltage	$U_o$	8.2 V ( $R_i$ approx. 1 k $\Omega$ )
Operating voltage	$U_B$	5 ... 25 V
Switching frequency	f	0 ... 3000 Hz
Hysteresis	H	0.21 ... 0.4 mm
Suitable for 2:1 technology		yes , Reverse polarity protection diode not required
Current consumption		
Measuring plate not detected		$\geq 3$ mA at nominal voltage
Measuring plate detected		$\leq 1$ mA at nominal voltage

#### Functional safety related parameters

Safety Integrity Level (SIL)		SIL 2
MTTF <sub>d</sub>		11150 a

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## Technical Data

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 11.0091X
Equipment protection level Gb		IECEX PTB 11.0091X
Equipment protection level Da		IECEX PTB 11.0091X
Equipment protection level Mb		IECEX PTB 11.0091X
ATEX approval		
Equipment protection level Ga		PTB 99 ATEX 2219 X
Equipment protection level Gb		PTB 99 ATEX 2219 X
Equipment protection level Da		PTB 99 ATEX 2219 X
UL approval		
Ordinary Location		E87056
Hazardous Location		E501628
Control drawing		116-0453
CCC approval		
Hazardous Location		2020322315002306
NEPSI approval		
NEPSI certificate		GYJ16.1391X
<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
<b>General information</b>		
Use in the hazardous area		see instruction manuals

## Connection Assignment

