Inductive slot sensor

SJ3,5-SN

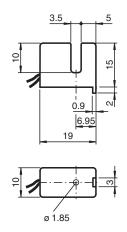
- 3.5 mm slot width
- Usable up to SIL 3 acc. to IEC 61508
- Extended temperature range







Dimensions



Technical Data

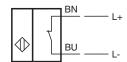
General specifications		
Switching function		Normally closed (NC)
Output type		NAMUR with safety function
Slot width		3.5 mm
Depth of immersion (lateral)		5 7 typ. 6 mm
Reference target		10 x 7 x 0.3 mm ³ , Al
Safety Integrity Level (SIL)		up to SIL3 acc. to IEC 61508 Danger! In safety-related applications 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_{\circ}	8.2 V
Switching frequency	f	0 3000 Hz
Hysteresis	Н	with NAMUR switch amplifier: 0.045 mm (e. g. Pepperl+Fuchs KCD2-SR-Ex1.LB) with safety switch amplifier 0.025 mm (e. g. Pepperl+Fuchs KFD2-SH-Ex1)
Suitable for 2:1 technology		yes , with reverse polarity protection diode

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Rate of current rise	-4.5 mA / mm
Current consumption	
Measuring plate not detected	≥ 3 mA
Measuring plate detected	0.2 1 mA
Functional safety related parameters	
Safety Integrity Level (SIL)	SIL 3
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	
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
Ambient conditions	
Ambient temperature	-50 100 °C (-58 212 °F) Safety application: -40 100 °C
Mechanical specifications	
Connection type	flexible leads LiY, 500 mm
Core cross-section	$0.14~\text{mm}^2$
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

Connection



Danger!

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