Inductive sensor

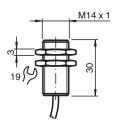
NJ2-11-SN-G-5M

- 2 mm flush
- Usable up to SIL 3 acc. to IEC 61508
- ATEX approval Ex-i and Ex-nA/tc for zone 0-2 and zone 20-22
- Degree of protection IP68





Dimensions



Technical Data

Switchi Output Rated c Installa

General specifications		
Switching function		Normally closed (NC)
Output type		NAMUR with safety function
Rated operating distance	Sn	2 mm
Installation		flush
Assured operating distance	Sa	0 1.62 mm
Reduction factor r _{Al}		0.4
Reduction factor r _{Cu}		0.3
Reduction factor r ₃₀₄		0.85
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	Uo	8.2 V
Switching frequency	f	0 3000 Hz

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

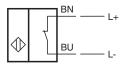
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Technical Data	
Suitable for 2:1 technology	yes, with reverse polarity protection diode
Current consumption	
Measuring plate not detected	≥ 3 mA
Measuring plate detected	≤ 1 mA
Functional safety related parameters	
Safety Integrity Level (SIL)	SIL 3
MTTF _d	10660 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	-40 100 °C (-40 212 °F)
Mechanical specifications	
Connection type	cable silicone , 5 m
Core cross-section	0.34 mm ²
Housing material	stainless steel (303/1.4305)
Sensing face	Valox (PBT) , black
Degree of protection	IP68
Cable	
Bending radius	> 10 x cable diameter
General information	
Use in the hazardous area	see instruction manuals

Connection



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

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Application



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.

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

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