Inductive sensor NJ10-30GK-SN-25M



10 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

General specifications		
•		
Switching function		Normally closed (NC)
Output type		NAMUR with safety function
Rated operating distance	Sn	10 mm
Installation		flush
Assured operating distance	sa	0 8.1 mm
Reduction factor r _{AI}		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	0 300 Hz

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

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Current consumptionImage: Current consumptionMeasuring plate not detected \geq 3 mAMeasuring plate not detected \geq 1 mAMeasuring plate detected \leq 1 mAFunctional safety related parameters \leq 1 mASafety Integrity Level (SIL)SIL 3MTTFq11850 aMission Time (T _M)20 aDiagnostic Coverage (DC)0 %Compliance with standards and directivesStandard conformity $EN 60947-5-6:2000$ IEC 60947-5-6:1999StandardsEN 60947-5-2:2007 IEC 60947-5-	Technical Data	
Measuring plate not detected $2 3 \text{ mA}$ Measuring plate detected $\leq 1 \text{ mA}$ Functional safety related parameters $\leq 1 \text{ mA}$ Safety Integrity Level (SL) $\leq SL 3$ MTTFa11850 aMission Time (Ta) 20 a Diagnostic Coverage (DC) 0% Compliance with standards and directivesStandard conformityNAMUR $EN 60947-5-6:2000$ EIC 60947-5-6:2007 EIC 60947-5-6:2007 EIC 60947-5-6:2007 EIC 60947-5-6:2007 EIC 60947-5-2:2007 EIC 60947-6:2:007 EIC 60947-6:2:007 EIC ComplexityAbitent conditions $III - 0454$ Coracity (EIC 100 CIC 4000 CIC 4000 CIC 4000 CIC 4000 CIC 4000 CIC 4000 CIC 40000CIC 40000CIC 4		
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MTTF _a 11850 a Mission Time (T _M) 20 a Diagnostic Coverage (DC) 0% Compliance with standards and directives Standard conformity EN 60947-5-6:2000 NAMUR EN 60947-5-6:2007 Standards EN 60947-5-6:2007 Standards EN 60947-5-6:2007 Standards EN 60947-5-2:2007 EX 60047-5:2:2007 EN 60947-5-2:2007 EX 60047-5:2:2007 EN 60947-5:2:2007 EX 60047-5:2:2007 EX 6:0:4:1:2012 Ambien Coettion EX 60:0:2:2:	Functional safety related parameters	
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Housing material Crastin (PBT), black Sensing face Crastin (PBT), black Degree of protection IP68 Cable IP68 Cable diameter 6 mm ± 0.2 mm Bending radius > 10 x cable diameter	Connection type	cable silicone , 25 m
Sensing face Crastin (PBT), black Degree of protection IP68 Cable Cable diameter Cable diameter 6 mm ± 0.2 mm Bending radius > 10 x cable diameter General information - 10 x cable diameter	Core cross-section	0.75 mm ²
Degree of protection IP68 Cable 6 mm ± 0.2 mm Cable diameter 6 mm ± 0.2 mm Bending radius > 10 x cable diameter	Housing material	Crastin (PBT), black
Cable 6 mm ± 0.2 mm Cable diameter 6 mm ± 0.2 mm Bending radius > 10 x cable diameter General information	Sensing face	Crastin (PBT), black
Cable diameter 6 mm ± 0.2 mm Bending radius > 10 x cable diameter General information - 10 x cable diameter	Degree of protection	IP68
Bending radius > 10 x cable diameter General information > 10 x cable diameter	Cable	
General information	Cable diameter	6 mm ± 0.2 mm
	Bending radius	> 10 x cable diameter
Use in the hazardous area see instruction manuals	General information	
	Use in the hazardous area	see instruction manuals

Connection



Accessories

BF 30

Mounting flange, 30 mm

Release date: 2020-05-06 Date of issue: 2020-05-06 Filename: 250941_eng.pdf

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.

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