

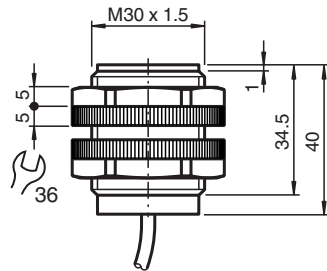
Inductive sensor NJ5-30GK-S1N-5M



- Nonferrous targets
- 5 mm flush in ST37 / 1.0037
- 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 open (NO)
Output type		NAMUR with safety function
Rated operating distance	s_n	5 mm
Installation		flush in mild steel
Assured operating distance	s_a	0 ... 4.05 mm
Reduction factor r_{AI}		1
Reduction factor r_{Cu}		1
Reduction factor r_{304}		0
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_o	8.2 V
Switching frequency	f	0 ... 150 Hz

Release date: 2020-05-06 Date of issue: 2020-05-06 Filename: 250948_eng.pdf

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

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

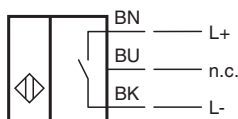
Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

Technical Data

Suitable for 2:1 technology		yes , with reverse polarity protection diode
Current consumption		
Measuring plate not detected		≤ 1 mA
Measuring plate detected		≥ 3 mA
Functional safety related parameters		
Safety Integrity Level (SIL)		SIL 3
MTTF _d		11850 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
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		-25 ... 100 °C (-13 ... 212 °F)
Mechanical specifications		
Connection type		cable silicone , 5 m
Core cross-section		0.75 mm ²
Housing material		Crastin (PBT), black
Sensing face		Crastin (PBT), black
Degree of protection		IP68
Cable		
Cable diameter		6.8 mm ± 0.2 mm
Bending radius		> 10 x cable diameter
Note		only for non-ferrous metal
General information		
Use in the hazardous area		see instruction manuals

Connection



Accessories

	BF 30	Mounting flange, 30 mm
---	--------------	------------------------

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.