

Inductive sensor

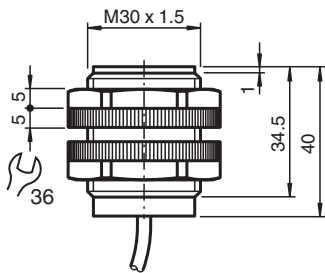
NJ5-30GK-S1N-15M



- Nonferrous targets
- 5 mm flush in ST37 / 1.0037
- Usable up to SIL 3 acc. to IEC 61508
- Degree of protection IP68
- ATEX-/IECEx-approvals for zone 0/1/20/21 (Ex i)
- ATEX-/IECEx-approvals for zone 2/22 (Ex ec/tc)
- 15 m connection cable



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_{Al}		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 (R_f approx. 1 k Ω)
Switching frequency	f	0 ... 150 Hz
Current consumption		

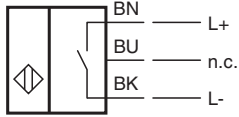
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Technical Data

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 IEC 60947-5-2
Approvals and certificates	
IECEX approval	
Equipment protection level Ga	IECEX PTB 11.0092X
Equipment protection level Gb	IECEX PTB 11.0092X
Equipment protection level Gc (ec)	IECEX TUR 21.0017X
Equipment protection level Da	IECEX PTB 11.0092X
Equipment protection level Dc (tc)	IECEX TUR 21.0018X
Equipment protection level Mb	IECEX PTB 11.0092X
ATEX approval	
Equipment protection level Ga	PTB 00 ATEX 2049 X
Equipment protection level Gb	PTB 00 ATEX 2049 X
Equipment protection level Gc (ec)	TÜV 20 ATEX 8523 X
Equipment protection level Da	PTB 00 ATEX 2049 X
Equipment protection level Dc (tc)	TÜV 20 ATEX 8524 X
UL approval	
Ordinary Location	E87056
Hazardous Location	E501628
Control drawing	116-0454
CCC approval	
Hazardous Location	2020322315002308 2024322315005947 2024322315005860
Ambient conditions	
Ambient temperature	-25 ... 100 °C (-13 ... 212 °F)
Mechanical specifications	
Connection type	cable
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
Material	silicone
Core cross section	0.75 mm ²
Length	L 15 m
Dimensions	
Length	40 mm
Diameter	30 mm
Note	only for non-ferrous metal
General information	
Scope of delivery	Supplied with 2 nuts
Use in the hazardous area	see instruction manuals

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Connection Assignment



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Application

**Danger!**

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