

Inductive sensor

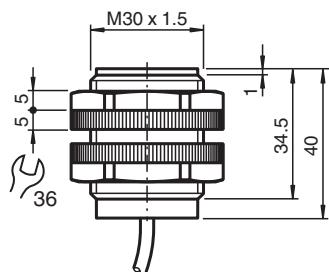
NJ15-30GK-SN



- 15 mm non-flush
- 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)



Dimensions



Technical Data

Release date: 2024-12-20 Date of issue: 2024-12-20 Filename: 70133155_eng.pdf

General specifications	
Switching function	Normally closed (NC)
Output type	NAMUR with safety function
Rated operating distance S _n	15 mm
Installation	non-flush
Assured operating distance S _a	0 ... 12.15 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	
Installation conditions	
A	18 mm
B	30 mm

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

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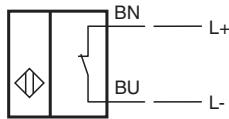
Technical Data

C	45 mm
F	90 mm
Nominal voltage	U_o 8.2 V (R_i approx. 1 k Ω)
Switching frequency	f 0 ... 100 Hz
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	11850 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 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	cULus Listed, General Purpose
Ordinary Location	E87056
Hazardous Location	E501628
Control drawing	116-0454
CCC approval	
Hazardous Location	2020322315002308 2024322315005947 2024322315005860
Ambient conditions	
Ambient temperature	-40 ... 100 °C (-40 ... 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 mm \pm 0.2 mm
Bending radius	> 10 x cable diameter
Material	silicone
Core cross section	0.75 mm ²
Length	L 2 m
Dimensions	
Length	40 mm

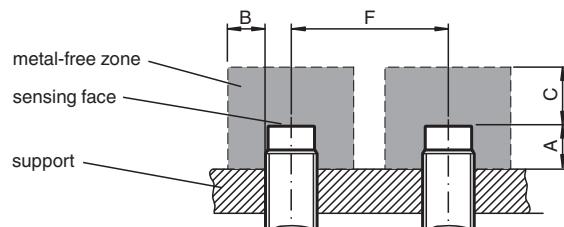
Technical Data

Diameter	30 mm
General information	
Use in the hazardous area	see instruction manuals

Connection



Installation



Application

Danger!

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