

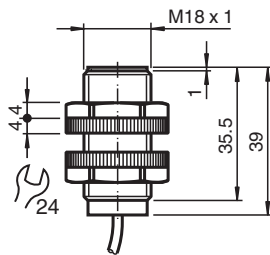
Inductive sensor NJ8-18GK-SN-50M



- 8 mm non-flush
- 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	s _n	8 mm
Installation		non-flush
Assured operating distance	s _a	0 ... 6.48 mm
Reduction factor r _{AI}		0.4
Reduction factor r _{Cu}		0.3
Reduction factor r ₃₀₄		0.85
Output type		2-wire
Nominal ratings		
Nominal voltage	U _o	8.2 V
Switching frequency	f	0 ... 200 Hz
Current consumption		
Measuring plate not detected		≥ 3 mA
Measuring plate detected		≤ 1 mA

Release date: 2020-05-13 Date of issue: 2020-05-13 Filename: 70114965_eng.pdf

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

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Technical Data

Functional safety related parameters

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 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

IECEx approval	
Equipment protection level Ga	IECEx PTB 11.0092X
Equipment protection level Gb	IECEx PTB 11.0092X
Equipment protection level Da	IECEx PTB 11.0092X
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 (ic)	PF13CERT2895 X
Equipment protection level Gc (nA)	PF15CERT3754X
Equipment protection level Da	PTB 00 ATEX 2049 X
Equipment protection level Dc (tc)	PF15CERT3774X
EAC conformity	TR CU 012/2011
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)
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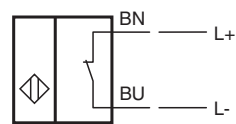
Mechanical specifications

Connection type	cable
Housing material	Crastin (PBT), black
Sensing face	Crastin (PBT), black
Degree of protection	IP68
Cable	
Wire end ferrules	yes
Cable diameter	6 mm ± 0.2 mm
Bending radius	> 10 x cable diameter
Material	silicone
Number of cores	2
Core cross-section	0.75 mm²
Length	L 50 m

General information

Use in the hazardous area	see instruction manuals
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Connection



Accessories

	BF 18	Mounting flange, 18 mm
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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.