



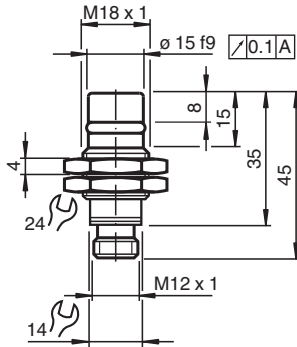
Inductive sensor

NJ1,5-18GM-N-D-V1

- 1.5 mm flush
- Compression proof up to 350 bar, dynamic on active surface
- Usable up to SIL 2 acc. to IEC 61508



Dimensions



Technical Data

General specifications

Switching function		Normally closed (NC)
Output type		NAMUR
Rated operating distance	s_n	1.5 mm
Installation		flush
Assured operating distance	s_a	0 ... 1.22 mm
Reduction factor r_{Al}		0
Reduction factor r_{Cu}		0
Reduction factor r_{304}		0.55
Output type		2-wire

Nominal ratings

Nominal voltage	U_o	8.2 V (R_i approx. 1 k Ω)
Switching frequency	f	0 ... 400 Hz
Hysteresis	H	typ. %
Current consumption		
Measuring plate not detected		min. 3 mA
Measuring plate detected		≤ 1 mA

Limit data

Operating pressure		350 bar (5076.4 psi)
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Functional safety related parameters

Release date: 2024-01-09 Date of issue: 2024-01-09 Filename: 70133017_eng.pdf

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

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Technical Data

Safety Integrity Level (SIL)	SIL 2
MTTF _d	10887 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 Gb	IECEX PTB 11.0037X
Equipment protection level Da	IECEX PTB 11.0037X
Equipment protection level Mb	IECEX PTB 11.0037X
ATEX approval	
Equipment protection level Gb	PTB 00 ATEX 2048 X
Equipment protection level Da	PTB 00 ATEX 2048 X
FM approval	
Control drawing	116-0165
UL approval	cULus Listed, General Purpose
CCC approval	
Hazardous Location	2020322315002255
NEPSI approval	
NEPSI certificate	GYJ16.1393X
CML approval	on request
ANZEx	18.3018X
KCC approval	
Hazardous Location	19-AV4BO-0227
Marine approval	DNVGL TAA0000106
Ambient conditions	
Ambient temperature	-25 ... 85 °C (-13 ... 185 °F)
Mechanical specifications	
Connection type	Connector plug
Housing material	Stainless steel 1.4305 / AISI 303
Sensing face	Ceramic
Degree of protection	IP66 / IP67
Connector	
Threading	M12 x 1
Number of pins	4
Mass	41.81 g
Dimensions	
Length	35 mm
Diameter	18 mm
General information	
Use in the hazardous area	see instruction manuals

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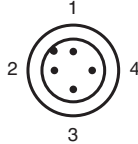
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Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-6

1		BN	(brown)
2		BU	(blue)

Installation

Note

Please refer to the technical information about this product at www.pepperl-fuchs.com. This information describes the necessary geometry of the installation space!

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