



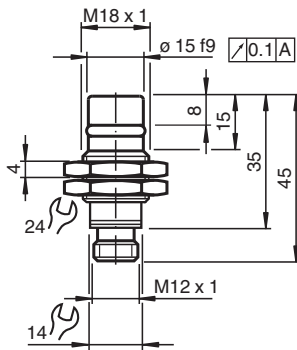
# Inductive sensor

## 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 $\Omega$ )
Switching frequency	$f$	0 ... 400 Hz
Hysteresis	$H$	typ. %
Current consumption		
Measuring plate not detected		min. 3 mA
Measuring plate detected		$\leq 1$ mA

#### Limit data

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

Release date: 2024-05-27 Date of issue: 2024-05-29 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 <sub>d</sub>	10887 a
Mission Time (T <sub>M</sub> )	20 a
Diagnostic Coverage (DC)	0 %
<b>Compliance with standards and directives</b>	
Standard conformity	
NAMUR	EN 60947-5-6:2000 IEC 60947-5-6:1999
Standards	EN IEC 60947-5-2
<b>Approvals and certificates</b>	
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
<b>Ambient conditions</b>	
Ambient temperature	-25 ... 85 °C (-13 ... 185 °F)
<b>Mechanical specifications</b>	
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
<b>General information</b>	
Use in the hazardous area	see instruction manuals

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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](http://www.pepperl-fuchs.com). This information describes the necessary geometry of the installation space!

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