

# Inductive sensor

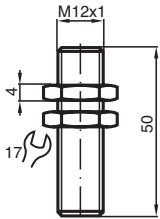
## NJ2-12GM-N-V1



- 2 mm flush
- 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	$s_n$		2 mm
Installation			flush
Assured operating distance	$s_a$		0 ... 1.62 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 ( $R_i$ approx. 1 k $\Omega$ )
Operating voltage	$U_B$		5 ... 25 V
Switching frequency	$f$		0 ... 2000 Hz
Hysteresis	$H$		3 %
Suitable for 2:1 technology			yes , Reverse polarity protection diode not required
Current consumption			

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

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## Technical Data

Measuring plate not detected	≥ 3 mA at nominal voltage
Measuring plate detected	≤ 1 mA at nominal voltage
<b>Functional safety related parameters</b>	
Safety Integrity Level (SIL)	SIL 2
MTTF <sub>d</sub>	5887 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 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012
<b>Approvals and certificates</b>	
IECEX approval	
Equipment protection level Ga	IECEX PTB 11.0037X
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 Ga	PTB 00 ATEX 2048 X
Equipment protection level Gb	PTB 00 ATEX 2048 X
Equipment protection level Da	PTB 00 ATEX 2048 X
UL approval	
Ordinary Location	E87056
Hazardous Location	E501628
Control drawing	116-0452
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 TAA00001A5
<b>Ambient conditions</b>	
Ambient temperature	-25 ... 100 °C (-13 ... 212 °F)
<b>Mechanical specifications</b>	
Connection type	Connector plug
Housing material	Stainless steel 1.4305 / AISI 303
Sensing face	PBT
Degree of protection	IP67
Connector	
Threading	M12 x 1
Number of pins	4
Dimensions	
Length	50 mm
Diameter	12 mm
<b>General information</b>	
Scope of delivery	2 self locking nuts in scope of delivery
Use in the hazardous area	see instruction manuals

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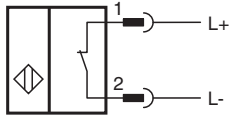
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## Connection



## Connection Assignment



Wire colors in accordance with EN 60947-5-6

1		BN	(brown)
2		BU	(blue)