

# Inductive sensor

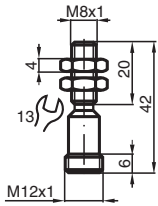
## NJ1,5-8GM-N-V1



- 1.5 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	$s_n$	1.5 mm
Installation		flush
Assured operating distance	$s_a$	0 ... 1.215 mm
Actual operating distance	$s_r$	1.35 ... 1.65 mm typ.
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 $\Omega$ )
Switching frequency	f	0 ... 5000 Hz
Hysteresis	H	1 ... 10 typ. 5 %
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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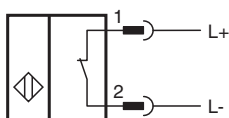
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## Technical Data

Measuring plate not detected	min. 3 mA
Measuring plate detected	≤ 1 mA
<b>Functional safety related parameters</b>	
Safety Integrity Level (SIL)	SIL 2
<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 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
UL approval	cULus Listed, General Purpose
CCC approval	
Hazardous Location	2020322315002256
NEPSI approval	
NEPSI certificate	GYJ16.1393X
CML approval	on request
ANZEx	18.3018X
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	20 mm
Diameter	8 mm
<b>General information</b>	
Use in the hazardous area	see instruction manuals

## Connection



## Connection Assignment



Wire colors in accordance with EN 60947-5-6

1		BN	(brown)
2		BU	(blue)