

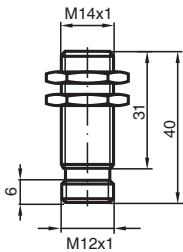
# Inductive sensor

## NJ2,5-14GM-N-V1-Y21146

- Usable up to SIL 2 acc. to IEC 61508
- 2.5 mm flush
- NAMUR output



### Dimensions



### Technical Data

#### General specifications

Switching function		Normally closed (NC)
Output type		NAMUR
Rated operating distance	$s_n$	2.5 mm
Installation		flush
Assured operating distance	$s_a$	0 ... 2.02 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 $\Omega$ )
Switching frequency	$f$	0 ... 1500 Hz
Current consumption		
Measuring plate not detected		min. 3 mA
Measuring plate detected		≤ 1 mA

#### Functional safety related parameters

Safety Integrity Level (SIL)		SIL 2
MTTF <sub>d</sub>		5887 a
Mission Time ( $T_M$ )		20 a
Diagnostic Coverage (DC)		0 %

#### Compliance with standards and directives

Release date: 2024-10-09 Date of issue: 2024-10-09 Filename: 70133054\_eng.pdf

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

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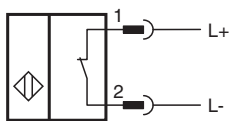
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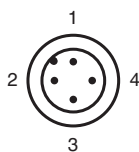
## Technical Data

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
UL approval	
cULus Listed, General Purpose	
CCC approval	
Hazardous Location	2020322315002258
CML approval	
on request	
ANZEx	
18.3018X	
<b>Ambient conditions</b>	
Ambient temperature	0 ... 90 °C (32 ... 194 °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	40 mm
Diameter	14 mm
<b>General information</b>	
Use in the hazardous area	see instruction manuals

## Connection



## Connection Assignment



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## Connection Assignment

Wire colors in accordance with EN 60947-5-6

1		BN	(brown)
2		BU	(blue)