

Inductive sensor

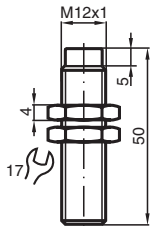
NJ4-12GM-N-V1



- 4 mm non-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		4 mm
Installation			non-flush
Assured operating distance	s_a		0 ... 3.24 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 Ω)
Switching frequency	f		0 ... 1500 Hz
Hysteresis	H		3 %
Current consumption			
Measuring plate not detected			min. 3 mA
Measuring plate detected			≤ 1 mA

Release date: 2023-08-01 Date of issue: 2023-08-01 Filename: 70133253_eng.pdf

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

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

Technical Data

Functional safety related parameters

Safety Integrity Level (SIL)	SIL 2
MTTF _d	11774 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 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	cULus Listed, General Purpose
Ordinary Location	E87056
Hazardous Location	E501628
Control drawing	116-0452
CCC approval	
Hazardous Location	2020322315002255
NEPSI approval	
NEPSI certificate	GYJ16.1393X
TIIS approval	on request
ANZEx	18.3018X
KCC approval	
Hazardous Location	19-AV4BO-0227
Marine approval	DNVGL TAA00001A5

Ambient conditions

Ambient temperature	-25 ... 100 °C (-13 ... 212 °F)
---------------------	---------------------------------

Mechanical specifications

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

General information

Scope of delivery	2 self locking nuts in scope of delivery
Use in the hazardous area	see instruction manuals

Release date: 2023-08-01 Date of issue: 2023-08-01 Filename: 70133253_eng.pdf

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

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

 PEPPERL+FUCHS

Connection







Connection Assignment



Wire colors in accordance with EN 60947-5-6

- 1 | BN (brown)
- 2 | BU (blue)

Accessories

	BF 12	Mounting flange, 12 mm
	V1-G-N-2M-PUR	Female cordset single-ended M12 straight A-coded, 2-pin, PUR cable blue, NAMUR
	V1-G-N-5M-PUR	Female cordset single-ended M12 straight A-coded, 2-pin, PUR cable blue, NAMUR
	V1-G-N-10M-PUR	Female cordset single-ended M12 straight A-coded, 2-pin, PUR cable blue, NAMUR

Release date: 2023-08-01 Date of issue: 2023-08-01 Filename: 70133253_eng.pdf

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