

Inductive sensor

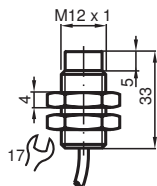
NJ4-12GM-N



- 4 mm non-flush
- Usable up to SIL 2 acc. to IEC 61508



Dimensions



Technical Data

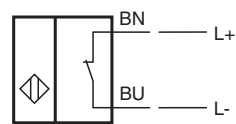
General specifications		
Switching function		Normally closed (NC)
Output type		NAMUR
Rated operating distance	s _n	4 mm
Installation		non-flush
Assured operating distance	s _a	0 ... 3.24 mm
Reduction factor r _{Al}		0.4
Reduction factor r _{Cu}		0.3
Reduction factor r ₃₀₄		0.85
Output type		2-wire
Nominal ratings		
Nominal voltage	U _o	8.2 V (R _i approx. 1 kΩ)
Switching frequency	f	0 ... 1500 Hz
Hysteresis	H	3 %

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

Technical Data

Current consumption		
Measuring plate not detected		min. 3 mA
Measuring plate detected		≤ 1 mA
Functional safety related parameters		
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
EAC conformity		TR CU 012/2011
FM approval		
Control drawing		116-0165
UL approval		
Ordinary Location		cULus Listed, General Purpose E87056
Hazardous Location		E501628
Control drawing		116-0452
CSA approval		
		cCSAus Listed, General Purpose
CCC approval		
		CCC approval / marking not required for products rated ≤36 V
Ambient conditions		
Ambient temperature		-25 ... 100 °C (-13 ... 212 °F)
Mechanical specifications		
Connection type		cable
Housing material		Stainless steel 1.4305 / AISI 303
Sensing face		PBT
Degree of protection		IP67
Cable		
Cable diameter		4.8 mm ± 0.2 mm
Bending radius		> 10 x cable diameter
Material		PVC
Core cross-section		0.34 mm ²
Length	L	2 m
General information		
Use in the hazardous area		see instruction manuals

Connection



Accessories

	BF 12	Mounting flange, 12 mm
---	--------------	------------------------

Release date: 2020-07-13 Date of issue: 2020-07-13 Filename: 106422_eng.pdf