

Inductive sensor

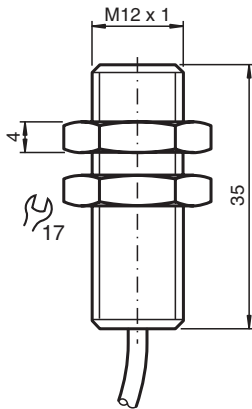
NJ2-12GM-N



- 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_{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 k Ω)
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
Functional safety related parameters	
Safety Integrity Level (SIL)	SIL 2
MTTF _d	5887 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	E87056
Hazardous Location	E501628
Control drawing	116-0452
CSA approval	cCSAus Listed, General Purpose
CCC approval	
Hazardous Location	2020322315002255
NEPSI approval	
NEPSI certificate	GYJ16.1393X
ANZEx	18.3018X
Marine approval	DNVGL TAA00001A5
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	IP66 / 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	
Scope of delivery	2 self locking nuts in scope of delivery

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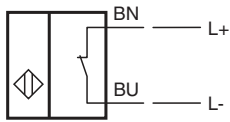
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Technical Data

Use in the hazardous area

see instruction manuals

Connection



Accessories

	BF 12	Mounting flange, 12 mm
	EXG-12	Quick mounting bracket with dead stop

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