

Inductive sensor

NJ0,8-5GM-N-Y287110



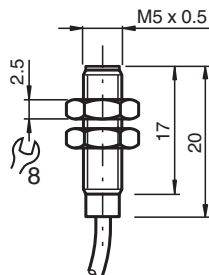
- 0.8 mm flush
- Usable up to SIL 2 acc. to IEC 61508



Function

The enclosure and transducer of this ultrasonic sensor form a hermetically sealed unit. For reliable operation, due to the special design of this sensor, solely the enclosed mounting accessories must be used. If the sensor is used in hazardous (classified) location, it will be necessary to follow the notes of the instruction manual.

Dimensions



Technical Data

General specifications

Switching function		Normally closed (NC)
Output type		NAMUR
Rated operating distance	s_n	0.8 mm
Installation		flush
Assured operating distance	s_a	0 ... 0.65 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

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

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Technical Data

Switching frequency	f	0 ... 5000 Hz
Hysteresis	H	3 %
Suitable for 2:1 technology		yes , Reverse polarity protection diode not required
Current consumption		
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		1050 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
ANZEx		18.3018X
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		2.6 mm ± 0.2 mm
Bending radius		> 10 x cable diameter
Material		PVC
Core cross section		0.14 mm ²
Length	L	0.085 m
General information		
Use in the hazardous area		see instruction manuals

Connection



Accessories

	BF 5	Mounting flange, 5 mm
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