

Inductive sensor

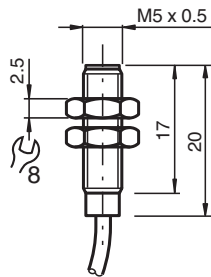
NJ0,8-5GM-N-5M



- Comfort series
- 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	0.8 mm
Installation		flush
Assured operating distance	s_a	0 ... 0.65 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 V
Operating voltage	U_B	5 ... 25 V
Switching frequency	f	0 ... 5000 Hz
Hysteresis	H	typ. %
Suitable for 2:1 technology		yes , Reverse polarity protection diode not required

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

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Technical Data

Current consumption		
Measuring plate not detected		≥ 3 mA at nominal voltage
Measuring plate detected		≤ 1 mA at nominal voltage
Functional safety related parameters		
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		
EAC conformity		TR CU 012/2011
UL approval		
Ordinary Location		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 PVC , 5 m
Core cross-section		0.14 mm ²
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
Equipment protection level Ga		
CE marking		[*PD-Z02585A*]
ATEX marking		⊕ II 1G Ex ia IIC T6...T1 Ga The Ex-related marking can also be printed on the enclosed label.
Standards		EN 60079-0:2012+A11:2013 EN 60079-11:2012 Ignition protection "Intrinsic safety" Use is restricted to the following stated conditions
Appropriate type		NJ 0,8-5GM-N...
Effective internal capacitance	C _i	max. 30 nF ; a cable length of 10 m is considered.
Effective internal inductance	L _i	max. 50 μH ; a cable length of 10 m is considered.
Ambient temperature		Details of the correlation between the type of circuit connected, the maximum permissible ambient temperature, the temperature class, and the effective internal reactance values can be found on the EC-type examination certificate. Note: Use the temperature table for category 1 !!! The 20 % reduction in accordance with EN 1127-1 has already been applied to the temperature table for category 1.
Equipment protection level Gb		
CE marking		[*PD-Z02585A*]
ATEX marking		⊕ II 1G Ex ia IIC T6...T1 Ga The Ex-related marking can also be printed on the enclosed label.
Standards		EN 60079-0:2012+A11:2013 EN 60079-11:2012 Ignition protection "Intrinsic safety" Use is restricted to the following stated conditions
Appropriate type		NJ0,8-5GM-N...
Effective internal capacitance	C _i	max. 30 nF ; a cable length of 10 m is considered.
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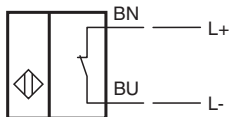
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Technical Data

Maximum permissible ambient temperature	T_{amb}	Details of the correlation between the type of circuit connected, the maximum permissible ambient temperature, the temperature class, and the effective internal reactance values can be found on the EC-type examination certificate.
Equipment protection level Da		
CE marking		[*PD-Z02585A*]
ATEX marking		Ⓔ II 1D Ex ia IIIC T135°C Da The Ex-related marking can also be printed on the enclosed label.
Standards		EN 60079-0:2012+A11:2013 EN 60079-11:2012 Ignition protection "Intrinsic safety" Use is restricted to the following stated conditions
Appropriate type		NJ0,8-5GM-N...
Effective internal capacitance	C_i	max. 30 nF ; a cable length of 10 m is considered.
Effective internal inductance	L_i	max. 50 μ H ; a cable length of 10 m is considered.
Maximum permissible ambient temperature	T_{amb}	Details of the correlation between the type of circuit connected, the maximum permissible ambient temperature, the surface temperature, and the effective internal reactance values can be found on the EC-type-examination certificate. The maximum permissible ambient temperature of the data sheet must be noted, in addition, the lower of the two values must be maintained.
General information		
Use in the hazardous area		see instruction manuals
Category		1G; 2G; 1D

Connection



Accessories

	BF 5	Mounting flange, 5 mm
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