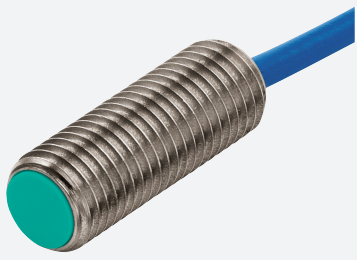


# Inductive sensor

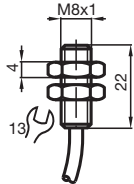
## NJ1,5-8GM-N-10M



- 1.5 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	$s_n$	1.5 mm
Installation		flush
Assured operating distance	$s_a$	0 ... 1.215 mm
Actual operating distance	$s_r$	1.35 ... 1.65 mm typ.
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 $\Omega$ )
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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	1 ... 10 typ. 5 %
Suitable for 2:1 technology		yes , Reverse polarity protection diode not required
Current consumption		
Measuring plate not detected		min. 3 mA
Measuring plate detected		≤ 1 mA
<b>Compliance with standards and directives</b>		
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
<b>Approvals and certificates</b>		
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
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 100 °C (-13 ... 212 °F)
<b>Mechanical specifications</b>		
Connection type		cable PVC , 10 m
Core cross-section		0.14 mm <sup>2</sup>
Housing material		Stainless steel 1.4305 / AISI 303
Sensing face		PBT
Degree of protection		IP66 / IP67
Cable		
Cable diameter		2.6 mm ± 0.2 mm
Bending radius		> 10 x cable diameter
<b>Equipment protection level Ga</b>		
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		NJ1,5-8GM-N...
Effective internal capacitance	C <sub>i</sub>	max. 30 nF ; a cable length of 10 m is considered.
Effective internal inductance	L <sub>i</sub>	max. 50 μH ; a cable length of 10 m is considered.
Highest permissible 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 EU-type examination certificate. <b>Note:</b> 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.
<b>Equipment protection level Gb</b>		
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		NJ1,5-8GM-N...
Effective internal capacitance	C <sub>i</sub>	max. 30 nF ; a cable length of 10 m is considered.
Effective internal inductance	L <sub>i</sub>	max. 50 μH ; a cable length of 10 m is considered.

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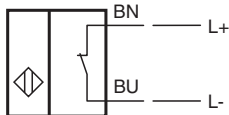
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 **PEPPERL+FUCHS**

## 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 EU-type examination certificate.
<b>Equipment protection level Da</b>		
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		NJ1,5-8GM-N...
Effective internal capacitance	$C_i$	max. 30 $\mu$ F A cable length of 10 m is considered.
Effective internal inductance	$L_i$	max. 50 $\mu$ H A cable length of 10 m is considered.
<b>General information</b>		
Use in the hazardous area		see instruction manuals
Category		1G; 2G

## Connection



## Accessories

	<b>BF 8</b>	Mounting flange, 8 mm
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