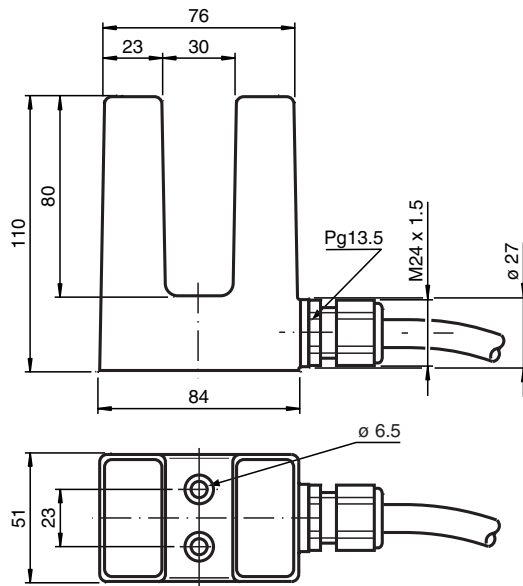


# Inductive slot sensor SJ30-N

- 30 mm slot width



## Dimensions



## Technical Data

### General specifications

Switching function	Normally closed (NC)
Output type	NAMUR
Slot width	30 mm
Depth of immersion (lateral)	27 ... 30 mm
Output type	2-wire

### Nominal ratings

Nominal voltage	$U_o$	8.2 V ( $R_i$ approx. 1 k $\Omega$ )
Operating voltage	$U_B$	5 ... 25 V
Switching frequency	f	0 ... 150 Hz
Hysteresis	H	0.1 ... 0.3 mm
Current consumption		
Measuring plate not detected		$\geq 3$ mA at nominal voltage

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

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## Technical Data

Measuring plate detected		≤ 1 mA at nominal voltage
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		5270 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
<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>		
FM approval		
Control drawing		116-0165
UL approval		
Ordinary Location		E87056
Hazardous Location		E501628
Control drawing		116-0453
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 ... 70 °C (-13 ... 158 °F)
<b>Mechanical specifications</b>		
Connection type		cable PVC , 2 m
Core cross-section		0.75 mm <sup>2</sup>
Housing material		ABS
Degree of protection		IP67
Cable		
Bending radius		> 10 x cable diameter
Mass		450 g
<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		SJ30-N...
Effective internal capacitance	C <sub>i</sub>	max. 150 nF ; a cable length of 10 m is considered.
Effective internal inductance	L <sub>i</sub>	max. 1250 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		SJ30-N...
Effective internal capacitance	C <sub>i</sub>	max. 150 nF ; a cable length of 10 m is considered.
Effective internal inductance	L <sub>i</sub>	max. 1250 μH ; a cable length of 10 m is considered.

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fa-info@us.pepperl-fuchs.comGermany: +49 621 776 1111  
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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 EU-type examination certificate.
<b>Equipment protection level Da</b>		
CE marking		[*PD-Z02585A*]
ATEX marking		Ⓔ II 1D Ex ia III C 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		SJ30-N...
Effective internal capacitance	$C_i$	max. 150 nF ; a cable length of 10 m is considered.
Effective internal inductance	$L_i$	max. 1250 $\mu$ H ; a cable length of 10 m is considered.
<b>General information</b>		
Use in the hazardous area		see instruction manuals
Category		1G; 2G; 1D

## Connection

