

Inductive sensor

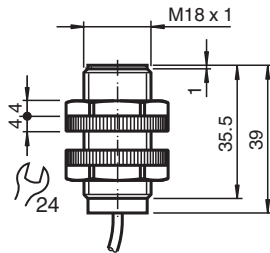
NJ5-18GK-N



- 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	5 mm
Installation		flush
Assured operating distance	s_a	0 ... 4.05 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	8.2 V (R_i approx. 1 k Ω)
Switching frequency	f	0 ... 500 Hz
Hysteresis	H	1 ... 10 typ. 5 %
Current consumption		
Measuring plate not detected		min. 3 mA

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

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Technical Data

Measuring plate detected		≤ 1 mA
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
FM approval		
Control drawing		116-0165
UL approval		cULus Listed, General Purpose
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 , 2 m
Core cross-section		0.75 mm ²
Housing material		PBT/PPS
Sensing face		PBT
Degree of protection		IP66 / IP68
Cable		
Cable diameter		6 mm ± 0.2 mm
Bending radius		> 10 x cable diameter
Equipment protection level Gb		
CE marking		[*PD-Z02585A*]
ATEX marking		⊕ II 2G Ex ia IIC T6...T1 Gb 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 5-18GK-N...
Effective internal capacitance	C _i	max. 70 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.
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		NJ 5-18GK-N...
Effective internal capacitance	C _i	max. 70 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.
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		2G; 1D

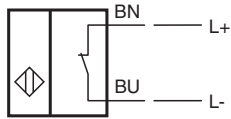
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Connection



Accessories

	<p>BF 18</p>	<p>Mounting flange, 18 mm</p>
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