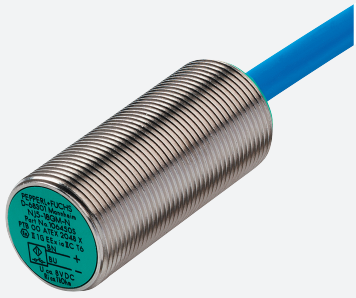


# Inductive sensor

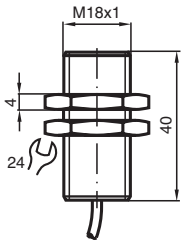
## NJ5-18GM-N



- 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 $r_{AI}$			0.21
Reduction factor $r_{Cu}$			0.18
Reduction factor $r_{304}$			0.63
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 ... 500 Hz
Hysteresis	$H$		3 %
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>		
Safety Integrity Level (SIL)	SIL 2	
MTTF <sub>d</sub>	4566 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 IEC 60947-5-2	
<b>Approvals and certificates</b>		
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	
UL approval		
Ordinary Location	E87056	
Hazardous Location	E501628	
Control drawing	116-0452	
CCC approval		
Hazardous Location	2020322315002255	
NEPSI approval		
NEPSI certificate	GYJ16.1393X	
CML approval	on request	
ANZEx	18.3018X	
KCC approval		
Hazardous Location	19-AV4BO-0227	
Marine approval	DNVGL TAA00001A5	
<b>Ambient conditions</b>		
Ambient temperature	-25 ... 100 °C (-13 ... 212 °F)	
<b>Mechanical specifications</b>		
Connection type	cable	
Housing material	Stainless steel 1.4305 / AISI 303	
Sensing face	PBT	
Degree of protection	IP66 / IP67	
Cable		
Cable diameter	6 mm ± 0.2 mm	
Bending radius	> 10 x cable diameter	
Material	PVC	
Core cross section	0.75 mm <sup>2</sup>	
Length	L	2 m
Dimensions		
Length	40 mm	
Diameter	18 mm	
<b>General information</b>		
Use in the hazardous area	see instruction manuals	

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 **PEPPERL+FUCHS**

## Connection



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