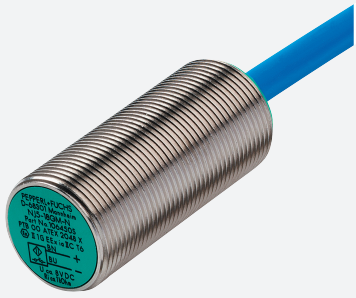


Inductive sensor

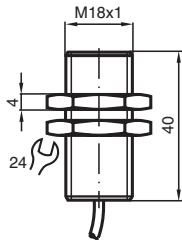
NJ5-18GM-N



- 5 mm flush
- Usable up to SIL 2 acc. to IEC 61508
- NAMUR output
- Stainless steel housing



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 Ω)
Operating voltage	U_B	5 ... 25 V
Switching frequency	f	0 ... 500 Hz
Hysteresis	H	3 %
Current consumption		
Measuring plate not detected		≥ 3 mA at nominal voltage

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Technical Data

Measuring plate detected	≤ 1 mA at nominal voltage	
Functional safety related parameters		
Safety Integrity Level (SIL)	SIL 2	
MTTF _d	4566 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 IEC 60947-5-2	
Approvals and certificates		
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	
CML approval	on request	
ANZEx	18.3018X	
KCC approval		
Hazardous Location	09-AV4BO-0227	
Marine approval	DNVGL TAA00001A5	
Ambient conditions		
Ambient temperature	-25 ... 100 °C (-13 ... 212 °F)	
Mechanical specifications		
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 ²	
Length	L	2 m
Dimensions		
Length	40 mm	
Diameter	18 mm	
General information		
Scope of delivery	2 self locking nuts in scope of delivery	
Use in the hazardous area	see instruction manuals	

Connection Assignment



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