

Inductive sensor

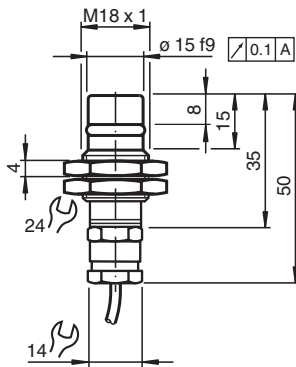
NJ1,5-18GM-N-D



- 1.5 mm flush
- Compression proof up to 350 bar, dynamic on active surface
- Usable up to SIL 2 acc. to IEC 61508
- NAMUR output



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 ... 1.22 mm
Reduction factor r_{Al}		0
Reduction factor r_{Cu}		0
Reduction factor r_{304}		0.55
Output type		2-wire

Nominal ratings

Nominal voltage	U_o	8.2 V (R_i approx. 1 k Ω)
Switching frequency	f	0 ... 400 Hz
Hysteresis	H	typ. %
Current consumption		
Measuring plate not detected		min. 3 mA
Measuring plate detected		\leq 1 mA

Limit data

Operating pressure		350 bar (5076.4 psi)
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Functional safety related parameters

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Technical Data

Safety Integrity Level (SIL)		SIL 2
MTTF _d		10880 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 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 Gb		PTB 00 ATEX 2048 X
Equipment protection level Da		PTB 00 ATEX 2048 X
FM approval		
Control drawing		116-0165
UL approval		cULus Listed Load Type: General Purpose Circuitry: Class 2 Power Source Enclosure Type Rating: Type 1 Supply/Switching Voltage: 8.2 V DC
CCC approval		
Hazardous Location		2020322315002255
CML approval		on request
ANZEx		18.3018X
KCC approval		
Hazardous Location		19-AV4BO-0227
Ambient conditions		
Ambient temperature		-25 ... 85 °C (-13 ... 185 °F)
Mechanical specifications		
Connection type		cable
Housing material		Stainless steel 1.4305 / AISI 303
Sensing face		Ceramic
Degree of protection		IP66 / IP68
Cable		
Cable diameter		4.8 mm ± 0.2 mm
Bending radius		> 10 x cable diameter
Material		PVC
Core cross section		0.34 mm ²
Length	L	2 m
Dimensions		
Length		50 mm
Diameter		18 mm
General information		
Use in the hazardous area		see instruction manuals

Connection Assignment



Installation

Note

Please refer to the technical information about this product at www.pepperl-fuchs.com. This information describes the necessary geometry of the installation space!