



Model Number

NJ1,5-18GM-N-D

Features

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

Application

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!

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_{AI}	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		≥ 3 mA
Measuring plate detected		≤ 1 mA

Limit data

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

MTTF _d	10880 a
Mission Time (T_M)	20 a
Diagnostic Coverage (DC)	0 %

Ambient conditions

Ambient temperature	-25 ... 85 °C (-13 ... 185 °F)
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Mechanical specifications

Connection type	cable PVC , 2 m
Core cross-section	0.34 mm ²
Housing material	Stainless steel 1.4305 / AISI 303
Sensing face	Ceramic
Degree of protection	IP66 / IP68
Cable	
Cable diameter	4.8 mm \pm 0.2 mm
Bending radius	> 10 x cable diameter

General information

Use in the hazardous area	see instruction manuals
Category	2G; 1D

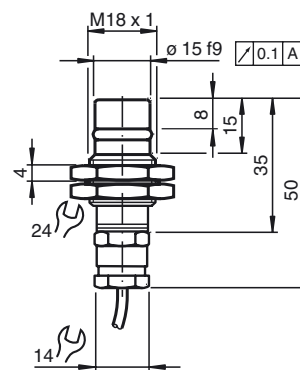
Compliance with standards and directives

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

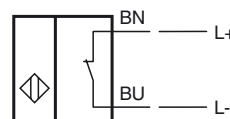
Approvals and certificates

EAC conformity	TR CU 012/2011
UL approval	cULus Listed, General Purpose
CSA approval	cCSAus Listed, General Purpose

Dimensions



Electrical Connection



Equipment protection level Gb

CE marking	CE 0102	
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	NJ1,5-18GM-N-D..	
Effective internal capacitance C_i	≤ 50 nF ; a cable length of 10 m is considered.	
Effective internal inductance L_i	≤ 60 μ H ; 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	CE 0102	
ATEX marking	II 1D Ex ia IIC 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	NJ1,5-18GM-N-D..	
Effective internal capacitance C_i	≤ 50 nF ; a cable length of 10 m is considered.	
Effective internal inductance L_i	≤ 60 μ H ; 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.	