



Model Number

NJ10-22-N-G-5M

Features

- Comfort series
- Usable up to SIL 2 acc. to IEC 61508

Technical Data

General specifications

Switching function	Normally closed (NC)
Output type	NAMUR
Rated operating distance	s_n 10 mm
Installation	non-flush
Assured operating distance	s_a 0 ... 8.1 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 V
Switching frequency	f 0 ... 2000 Hz
Hysteresis	H typ. 3 %
Current consumption	
Measuring plate not detected	≥ 3 mA
Measuring plate detected	≤ 1 mA

Functional safety related parameters

MTTF _d	4560 a
Mission Time (T_M)	20 a
Diagnostic Coverage (DC)	0 %

Ambient conditions

Ambient temperature	-25 ... 100 °C (-13 ... 212 °F)
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Mechanical specifications

Connection type	cable PVC , 5 m
Core cross-section	0.75 mm ²
Housing material	Stainless steel 1.4305 / AISI 303
Sensing face	PBT
Degree of protection	IP68
Cable	
Bending radius	> 10 x cable diameter

General information

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

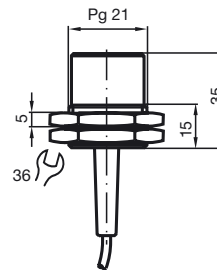
Compliance with standards and directives

Standard conformity	
NAMUR	EN 60947-5-6:2000 IEC 60947-5-6:1999
Standards	EN 60947-5-2:2007 IEC 60947-5-2:2007

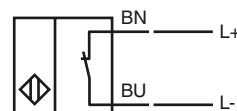
Approvals and certificates

UL approval	cULus Listed, General Purpose
CSA approval	cCSAus Listed, General Purpose
CCC approval	CCC approval / marking not required for products rated ≤ 36 V

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	NJ 10-22-N...	
Effective internal capacitance	C_i	$\leq 130 \text{ nF}$; a cable length of 10 m is considered.
Effective internal inductance	L_i	$\leq 100 \text{ }\mu\text{H}$; 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	NJ 10-22-N...	
Effective internal capacitance	C_i	$\leq 130 \text{ nF}$; a cable length of 10 m is considered.
Effective internal inductance	L_i	$\leq 100 \text{ }\mu\text{H}$; 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.	