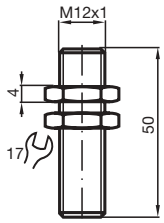
Inductive proximity switches

NJ2-12GM-N-V1

Comfort series

2 mm embeddable

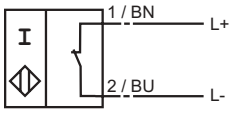


CE 0102

Switching element function	NAMUR NC
Rated operating distance s_n	2 mm
Installation	embeddable
Assured operating distance s_a	0 ... 1,62 mm
Reduction factor r_{Al}	0,4
Reduction factor r_{Cu}	0,3
Reduction factor r_{V2A}	0,85
Nominal voltage U_o	8 V
Operating voltage U_B	5 ... 25 V
Switching frequency f	0 ... 2000 Hz
Hysteresis H	3 %
Current consumption	
Measuring plate not detected	∅3 mA
Measuring plate detected	Ω1 mA
EMC in accordance with	EN 60947-5-2
Standards	DIN EN 60947-5-6 (NAMUR)
Ambient temperature	-25 ... 100 °C (248 ... 373 K)
Connection type	V1-connector
Housing material	high grade steel
Sensing face	PBT
Protection degree	IP67
Use in the hazardous area	see instruction manuals
Category	1G; 2G

Connection_type:

N / N0



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2003-07-22

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Instruction	**Manual electrical apparatus for hazardous areas**
Device category 1G	BR for use in hazardous areas with gas, vapour and mist
Directive conformity	94/9/EG
Standard conformity	EN 50014:1997; EN 50020:1994; EN 50284:1999 Ignition protection "Intrinsic safety" Use is restricted to the following stated conditions
CE symbol	CE 0102
Ex-identification	Ex II 1G EEx ia IIC T6
EC-Type Examination Certificate	PTB 00 ATEX 2048 X
Assigned type	NJ 2-12GM-N...
Effective internal capacitance C_i	Ω30 nF ; a cable length of 10 m is considered.
Effective internal inductance L_i	Ω50 σH ; a cable length of 10 m is considered.
General	The apparatus has to be operated according to the appropriate data in the data sheet and in this instruction manual. The EU prototype test certificate must be observed. The special conditions must be adhered to!
Highest permissible ambient temperature	The temperature ranges, according to temperature class, are given in the EU prototype test certificate. Note: Use the temperature table for category 1 !!! The 20 % reduction in accordance with EN 1127-1:1997 has already been accounted for in the temperature table for category 1.
Installation, Comissioning	Laws and/or regulations and standards governing the use or intended usage goal must be observed. The intrinsic safety is only assured in connection with an appropriate related apparatus and according to the proof of intrinsic safety. The associated apparatus must satisfy the requirements of category "ia" and have galvanic isolation between the power supply and signal circuits. The sensor must be protected from strong electromagnetic fields.
Maintenance	No changes can be made to apparatus, which are operated in hazardous areas. Repairs to these apparatus are not possible.
Special conditions	
Protection from mechanical danger	The sensor must be protected from mechanical damage.
Electrostatic charging	Electrostatic charges must be avoided on the mechanical housing components. Dangerous electrostatic charges on the mechanical housing components can be avoided by incorporating these in the equipotential bonding.

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Instruction	**Manual electrical apparatus for hazardous areas**
Device category 2G	for use in hazardous areas with gas, vapour and mist
Directive conformity	94/9/EG
Standard conformity	EN 50014:1997, EN 50020:1994 Ignition protection "Intrinsic safety" Use is restricted to the following stated conditions
CE symbol	CE 0102
Ex-identification	Ex II 1G EEx ia IIC T6
EC-Type Examination Certificate	PTB 00 ATEX 2048 X
Assigned type	NJ 2-12GM-N...
Effective internal capacitance C_i	Ω30 nF ; a cable length of 10 m is considered.
Effective internal inductance L_i	Ω50 σH ; a cable length of 10 m is considered.
General	The apparatus has to be operated according to the appropriate data in the data sheet and in this instruction manual. The EU prototype test certificate must be observed. The special conditions must be adhered to!
Highest permissible ambient temperature	The temperature ranges, according to temperature class, are given in the EU prototype test certificate.
Installation, Comissioning	Laws and/or regulations and standards governing the use or intended usage goal must be observed. The intrinsic safety is only assured in connection with an appropriate related apparatus and according to the proof of intrinsic safety. The sensor must be protected from strong electromagnetic fields.
Maintenance	No changes can be made to apparatus, which are operated in hazardous areas. Repairs to these apparatus are not possible.
Special conditions	
Protection from mechanical danger	The sensor must be protected from mechanical damage.
Electrostatic charging	Electrostatic charges must be avoided on the mechanical housing components. Dangerous electrostatic charges on the mechanical housing components can be avoided by incorporating these in the equipotential bonding.

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