

CE
0102

Model Number

NJ10-22-N-E93-Y122049

Features

- Comfort series
- 10 mm non-flush

Technical Data

General specifications

| | | |
|----------------------------|-------|------------|
| Switching element function | | NAMUR, NC |
| Rated operating distance | s_n | 10 mm |
| Installation | | non-flush |
| Output polarity | | NAMUR |
| Assured operating distance | s_a | 0 ... 9 mm |

Nominal ratings

| | | |
|------------------------------|-------|---------------|
| Nominal voltage | U_o | 8 V |
| Switching frequency | f | 0 ... 2000 Hz |
| Hysteresis | H | typ. % |
| Current consumption | | |
| Measuring plate not detected | | ≥ 3 mA |
| Measuring plate detected | | ≤ 1 mA |

Ambient conditions

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

Mechanical specifications

| | | |
|----------------------|--|-----------------------|
| Connection type | | cable silicone , 10 m |
| Core cross-section | | 0.75 mm ² |
| Housing material | | PBT |
| Sensing face | | PBT |
| Degree of protection | | IP68 |

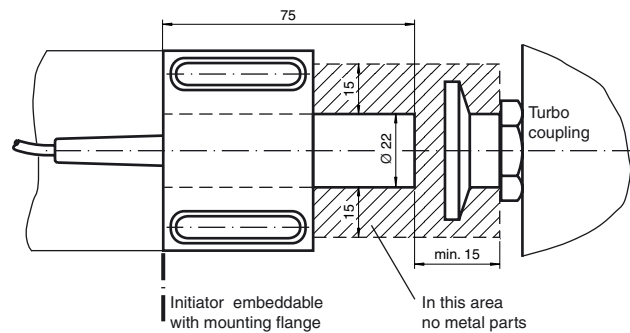
General information

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

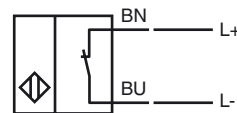
Compliance with standards and directives

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

Dimensions



Electrical Connection



ATEX 2G

Instruction

Device category 2G

EC-Type Examination Certificate

CE marking

ATEX marking

Directive conformity

Standards

Appropriate type

Effective internal capacitance C_i Effective internal inductance L_i

General

Ambient temperature

Installation, Commissioning

Maintenance

Specific conditions

Protection from mechanical danger

Manual electrical apparatus for hazardous areas

for use in hazardous areas with gas, vapour and mist

PTB 00 ATEX 2048 X

CE 0102

II 2G EEx ia IIC T6

94/9/EG

EN 50014:1997, EN 50020:1994

Ignition protection "Intrinsic safety"

Use is restricted to the following stated conditions

NJ 10-22-N...

 ≤ 130 nF ; a cable length of 10 m is considered. ≤ 100 μ H ; a cable length of 10 m is considered.

The apparatus has to be operated according to the appropriate data in the data sheet and in this instruction manual. The EC-Type Examination Certificate has to be observed. The special conditions must be adhered to!

Directive 94/9/EG and hence also EC-Type Examination Certificates apply in general only to the use of electrical apparatus under atmospheric conditions.

The use in ambient temperatures of > 60 °C was tested with regard to hot surfaces by the mentioned certification authority.

If the equipment is not used under atmospheric conditions, a reduction of the permissible minimum ignition energies may have to be taken into consideration.

The temperature ranges, according to temperature class, are given in the EC-Type Examination Certificate.

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.

No changes can be made to apparatus, which are operated in hazardous areas.

Repairs to these apparatus are not possible.

When used in the temperature range below -20 °C the sensor should be protected from knocks by the provision of an additional housing.

ATEX 1D

Instruction

Device category 1D

EC-Type Examination Certificate

CE marking

ATEX marking

Directive conformity

Standards

Appropriate type

Effective internal capacitance C_i Effective internal inductance L_i

General

Maximum housing surface temperature

Installation, Commissioning

Maintenance

Specific conditions

Electrostatic charging

Manual electrical apparatus for hazardous areas

for use in hazardous areas with combustible dust

ZELM 03 ATEX 0128 X

CE 0102

Ex II 1D Ex iaD 20 T 108 °C (226.4 °F)

94/9/EG

IEC 61241-11:2002: draft; prEN61241-0:2002

type of protection intrinsic safety "iD"

Use is restricted to the following stated conditions

NJ 10-22-N...

≤ 130 nF ; a cable length of 10 m is considered.

≤ 100 μH ; a cable length of 10 m is considered.

The apparatus has to be operated according to the appropriate data in the data sheet and in this instruction manual.

The EC-Type Examination Certificate has to be observed.

The special conditions must be adhered to!

The maximum surface temperature of the housing is given in the EC-Type Examination Certificate.

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 at least the requirements of category ia IIB or iaD. Because of the possibility of the danger of ignition, which can arise due to faults and/or transient currents in the equipotential bonding system, galvanic isolation in the power supply and signal circuits is preferable. Associated apparatus without electrical isolation must only be used if the appropriate requirements of IEC 60079-14 are met. The intrinsically safe circuit has to be protected against influences due to lightning.

When used in the isolating wall between Zone 20 and Zone 21 or Zone 21 und Zone 22 the sensor must not be exposed to any mechanical danger and must be sealed in such a way, that the protective function of the isolating wall is not impaired. The applicable directives and standards must be observed.

No changes can be made to apparatus, which are operated in hazardous areas.

Repairs to these apparatus are not possible.

The connection cables are to be laid in accordance with EN 50281-1-2 and must not normally be subjected to chaffing during use.