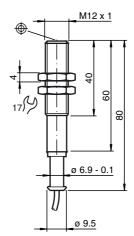
## Dimensions



# **(**E 0102





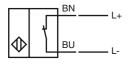
## **Model Number**

NJ2-12GM-N-Y08766

## **Features**

- Comfort series
- · 2 mm flush

### Connection



## **Technical Data**

General specifications		
Switching element function		NAMUR, NC
Rated operating distance	s <sub>n</sub>	2 mm
Installation		flush
Output polarity		NAMUR
Assured operating distance	sa	0 1.62 mm
Reduction factor r <sub>Al</sub>		0.4
Reduction factor r <sub>Cu</sub>		0.3
Reduction factor r <sub>304</sub>		0.85
Nominal ratings		
Nominal voltage	Uo	8 V

Switching frequency f 0 ... 2000 Hz
Current consumption
Measuring plate not detected ≥ 3 mA
Measuring plate detected ≤ 1 mA

Measuring plate not detected ≥ 3 mA

Measuring plate detected ≤ 1 mA

Functional safety related parameters

 MTTF<sub>d</sub>
 11770 a

 Mission Time (T<sub>M</sub>)
 20 a

 Diagnostic Coverage (DC)
 0 %

 Ambient conditions

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

Connection type cable PVC , 5 m
Core cross-section 0.34 mm²
Housing material Stainless steel 1.4305 / AISI 303
Sensing face PBT
Protection degree IP67

General information
Use in the hazardous area see instruction manuals
Category 2G

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

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#### ATEX 2G

Instruction

#### Device category 2G

Directive conformity Standard conformity

CE marking

General

Ex-identification

EC-Type Examination Certificate Appropriate type Effective internal capacitance Ci Effective internal inductance L

Highest permissible ambient temperature

Installation, Comissioning

Maintenance

#### Specific conditions

Protection from mechanical danger

Electrostatic charging

#### Manual electrical apparatus for hazardous areas

for use in hazardous areas with gas, vapour and mist 94/9/EG

EN 60079-0:2009, EN 60079-11:2007 Ignition protection "Intrinsic safety"
Use is restricted to the following stated conditions **C**€0102

⟨ II 2G Ex ia IIC T6 Gb

PTB 00 ATEX 2048 X

NJ 2-12GM-N...

≤ 30 nF; a cable length of 10 m is considered.  $\leq 50~\mu H$  ; 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.

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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