

(E 0102

# **Model Number**

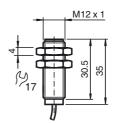
NJ4-12GK-N-Y16044

## **Features**

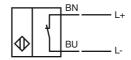
- · Comfort series
- 4 mm non-flush

Technical Data		
General specifications		
Switching element function		NAMUR, NC
Rated operating distance	Sn	4 mm
Installation		non-flush
Output polarity		NAMUR
Assured operating distance	sa	0 3.24 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	$U_o$	8 V
Switching frequency	f	0 1500 Hz
Current consumption		
Measuring plate not detected		≥ 3 mA
Measuring plate detected		≤ 1 mA
Standard conformity		
EMC in accordance with		IEC / EN 60947-5-2:2004
Ambient conditions		
Ambient temperature		-25 100 °C (-13 212 °F)
Mechanical specifications		
Connection type		cable PVC , 2 m
Core cross-section		0.34 mm <sup>2</sup>
Housing material		PBT
Sensing face		PBT
Degree of protection		IP68
General information		
Use in the hazardous area		see instruction manuals
Category		2G
Compliance with standards and	directive	es
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 Ci Effective internal inductance Li

General

Ambient temperature

Installation, Comissioning

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 €0102

⟨ II 2G EEx ia IIC T6

EN 50014:1997, EN 50020:1994 Ignition protection "Intrinsic safety" Use is restricted to the following stated conditions NJ 4-12GK-N.

≤ 45 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.