# Inductive proximity switches

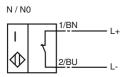
Comfort series 5 mm not embeddable



## **(** € 0102

| General specifications                  |                          |
|---|--------------------------|
| Switching element function              | NAMUR NC                 |
| Rated operating distance s <sub>n</sub> | 5 mm                     |
| Installation                            | not embeddable           |
| Assured operating distance sa           | 0 4.05 mm                |
| Reduction factor r <sub>Al</sub>        | 0.4                      |
| Reduction factor r <sub>Cu</sub>        | 0.3                      |
| Reduction factor r <sub>V2A</sub>       | 0.85                     |
| Nominal ratings                         |                          |
| Nominal voltage U <sub>o</sub>          | 8 V                      |
| Switching frequency f                   | 0 3000 Hz                |
| Hysteresis H                            | typ. %                   |
| 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  |
| Standards                               | DIN EN 60947-5-6 (NAMUR) |
| Ambient conditions                      |                          |
| Ambient temperature                     | -25 100 °C (248 373 K)   |
| Mechanical specifications               |                          |
| Connection type                         | 2.5 m, PVC cable         |
| Core cross-section                      | 0.34 mm <sup>2</sup>     |
| Housing material                        | Crastin (PBTB) / brass   |
| Sensing face                            | Crastin (PBTB)           |
| Protection degree                       | IP68                     |
| General information                     |                          |
| Use in the hazardous area               | see instruction manuals  |
| Category                                | 2G                       |
|   |                          |

### Connection type:



## Inductive proximity switches

#### ATEX 2G

Instruction

### Device category 2G

Directive conformity Standard conformity

CE symbol

Ex-identification

EC-Type Examination Certificate Appropriate type Effective internal capacitance  $C_i$  Effective internal inductance  $L_i$ 

General

Highest permissible ambient temperature

Installation, Comissioning

Maintenance

[Fett]Special conditions

Protection from mechanical danger

Electrostatic charging

### Manual electrical apparatus for hazardous areas

for use in hazardous areas with gas, vapour and mist

EN 50014:1997, EN 50020:1994 Ignition protection "Intrinsic safety" Use is restricted to the following stated conditions

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⟨Ex⟩ II 2G EEx ia IIC T6

PTB 00 ATEX 2048 X

NJ 5-11-N...

 $\leq$  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 EU prototype test certificate must be observed. The special conditions must be adhered to!

Directive 94/9E $\dot{G}$  and hence also EU prototype test 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 EU prototype test 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.