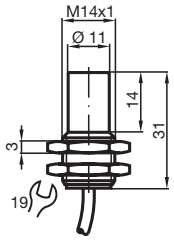
# Inductive proximity switches

**NJ5-11-N-G**

Comfort series

5 mm not embeddable




CE 0102

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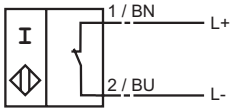
|---|---|
| Switching element function | NAMUR NC |
| Rated operating distance $s_n$ | 5 mm |
| Installation | not embeddable |
| Assured operating distance $s_a$ | 0 ... 4,05 mm |
| Reduction factor $r_{Al}$ | 0,4 |
| Reduction factor $r_{Cu}$ | 0,3 |
| Reduction factor $r_{V2A}$ | 0,85 |
| Nominal voltage $U_o$ | 8 V |
| Switching frequency f | 0 ... 3000 Hz |
| Hysteresis H | typ. % |
| Current consumption | |
| Measuring plate not detected | ≥ 3 mA |
| Measuring plate detected | ≤ 1 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 | 2 m, PVC cable |
| Core cross-section | 0.34 mm² |
| Housing material | high grade steel |
| Sensing face | PVDF |
| Protection degree | IP68 |
| Use in the hazardous area | see instruction manuals |
| Category | 2G |

**Connection_type:**

N / N0

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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<br>Ignition protection "Intrinsic safety"<br>Use is restricted to the following stated conditions |
| CE symbol | CE 0102 |
| Ex-identification | Ex II 2G EEx ia IIC T6 |
| EC-Type Examination Certificate | PTB 00 ATEX 2048 X |
| Assigned type | NJ 5-11-N... |
| Effective internal capacitance Ci | ≤ 45 nF A cable length of 10 m is considered. |
| Effective internal inductance Li | ≤ 50 µH 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. |
| Maintenance | No changes can be made to apparatus, which are operated in hazardous areas.<br>Repairs to these apparatus are not possible. |
| Special conditions | |
| Protection from mechanical danger | The sensor must not be mechanically damaged. |
| 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. |