



Model Number

NJ1,5-8GM-N

Features

- 1.5 mm flush
- Usable up to SIL 2 acc. to IEC 61508

Accessories

BF 8

Mounting flange, 8 mm

Technical Data

General specifications

| | | |
|----------------------------|-------|-----------------------|
| Switching function | | Normally closed (NC) |
| Output type | | NAMUR |
| Rated operating distance | s_n | 1.5 mm |
| Installation | | flush |
| Assured operating distance | s_a | 0 ... 1.215 mm |
| Actual operating distance | s_r | 1.35 ... 1.65 mm typ. |
| Reduction factor r_{AI} | | 0.4 |
| Reduction factor r_{CU} | | 0.3 |
| Reduction factor r_{304} | | 0.85 |
| Output type | | 2-wire |

Nominal ratings

| | | |
|------------------------------|-------|---|
| Nominal voltage | U_o | 8.2 V (R_i approx. 1 k Ω) |
| Switching frequency | f | 0 ... 5000 Hz |
| Hysteresis | H | 1 ... 10 typ. 5 % |
| Suitable for 2:1 technology | | yes, Reverse polarity protection diode not required |
| 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 PVC, 2 m |
| Core cross-section | | 0.14 mm ² |
| Housing material | | Stainless steel 1.4305 / AISI 303 |
| Sensing face | | PBT |
| Degree of protection | | IP66 / IP67 |
| Cable | | |
| Bending radius | | > 10 x cable diameter |

General information

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

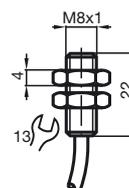
Compliance with standards and directives

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

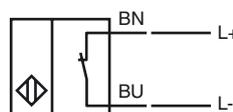
Approvals and certificates

| | | |
|-----------------|--|--|
| FM approval | | |
| Control drawing | | 116-0165 |
| UL approval | | cULus Listed, General Purpose |
| CSA approval | | cCSAus Listed, General Purpose |
| CCC approval | | CCC approval / marking not required for products rated ≤ 36 V |

Dimensions



Electrical Connection



Equipment protection level Ga

CE marking

CE 0102

Effective internal inductivity C_i ≤ 30 nF ; a cable length of 10 m is considered.Effective internal inductance L_i ≤ 50 μ H ; a cable length of 10 m is considered.Highest permissible ambient temperature Details of the correlation between the type of circuit connected, the maximum permissible ambient temperature, the temperature class, and the effective internal reactance values can be found on the EU-type examination certificate.
Note: Use the temperature table for category 1 !!! The 20 % reduction in accordance with EN 1127-1 has already been applied to the temperature table for category 1.**Equipment protection level Gb**

CE marking

CE 0102

Effective internal inductivity C_i ≤ 30 nF ; a cable length of 10 m is considered.Effective internal inductance L_i ≤ 50 μ H ; a cable length of 10 m is considered.Maximum permissible ambient temperature T_{amb} Details of the correlation between the type of circuit connected, the maximum permissible ambient temperature, the temperature class, and the effective internal reactance values can be found on the EU-type examination certificate.**Equipment protection level Da**

CE marking

CE 0102

Effective internal inductivity C_i ≤ 30 μ F
A cable length of 10 m is considered.Effective internal inductance L_i ≤ 50 μ H
A cable length of 10 m is considered.