



Model Number

NJ8-18GK-N-150-10M

Features

- 8 mm non-flush
- Temperature range
-40 ... 150 °C (-40 ... 302 °F)

Technical Data

General specifications

| | | |
|----------------------------|-------|----------------------|
| Switching function | | Normally closed (NC) |
| Output type | | NAMUR |
| Rated operating distance | s_n | 8 mm |
| Installation | | non-flush |
| Assured operating distance | s_a | 0 ... 6.48 mm |
| 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 V |
| Switching frequency | f | 0 ... 200 Hz |
| Current consumption | | |
| Measuring plate not detected | | ≥ 3 mA |
| Measuring plate detected | | ≤ 1 mA |

Ambient conditions

| | | |
|---------------------|--|---------------------------------|
| Ambient temperature | | -40 ... 150 °C (-40 ... 302 °F) |
|---------------------|--|---------------------------------|

Mechanical specifications

| | | |
|----------------------|--|-----------------------|
| Connection type | | cable SIHF, 10 m |
| Core cross-section | | 0.34 mm ² |
| Housing material | | PPS |
| Sensing face | | PPS |
| Degree of protection | | IP65 |
| Cable | | |
| Bending radius | | > 10 x cable diameter |

General information

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

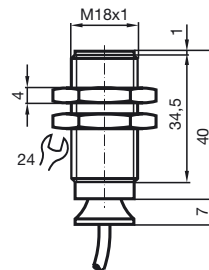
Compliance with standards and directives

| | | |
|---------------------|--|---|
| Standard conformity | | |
| NAMUR | | EN 60947-5-6:2000 IEC 60947-5-6:1999 |
| Standards | | |
| | | EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012 |

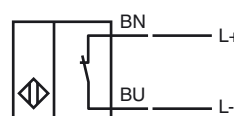
Approvals and certificates

| | | |
|----------------|--|--|
| EAC conformity | | TR CU 012/2011 |
| 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 | |
| ATEX marking |  II 1G Ex ia IIC T6...T1 Ga The Ex-related marking can also be printed on the enclosed label. | |
| Standards | EN 60079-0:2012+A11:2013, EN 60079-11:2012 Ignition protection "Intrinsic safety" Use is restricted to the following stated conditions | |
| Appropriate type | NJ8-18GK-N-150... | |
| Effective internal inductivity | C_i | $\leq 70 \text{ nF}$; a cable length of 10 m is considered. |
| Effective internal inductance | L_i | $\leq 50 \text{ }\mu\text{H}$; 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. | |

Special conditions**Equipment protection level Gb**

| | | |
|---|--|---|
| CE marking | CE 0102 | |
| ATEX marking |  II 1G Ex ia IIC T6...T1 Ga The Ex-related marking can also be printed on the enclosed label. | |
| Standards | EN 60079-0:2012+A11:2013, EN 60079-11:2012 Ignition protection "Intrinsic safety" Use is restricted to the following stated conditions | |
| Appropriate type | NJ8-18GK-N-150... | |
| Effective internal inductivity | C_i | $\leq 70 \text{ nF}$; a cable length of 10 m is considered. |
| Effective internal inductance | L_i | $\leq 50 \text{ }\mu\text{H}$; 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. | |

Special conditions**Equipment protection level Da**

| | | |
|--------------------------------|--|--|
| CE marking | CE 0102 | |
| ATEX marking |  II 1D Ex ia IIC T135°C Da The Ex-related marking can also be printed on the enclosed label. | |
| Standards | EN 60079-0:2012+A11:2013, EN 60079-11:2012 Ignition protection "Intrinsic safety" Use is restricted to the following stated conditions | |
| Appropriate type | NJ8-18GK-N-150... | |
| Effective internal inductivity | C_i | $\leq 70 \text{ }\mu\text{F}$ A cable length of 10 m is considered. |
| Effective internal inductance | L_i | $\leq 50 \text{ }\mu\text{H}$ A cable length of 10 m is considered. |

Special conditions