



Model Number

NJ1,5-10GM-N-Y183937

Technical Data

General specifications

| | | |
|----------------------------|-------|----------------------|
| Switching function | | Normally closed (NC) |
| Output type | | NAMUR |
| Rated operating distance | s_n | 1 mm |
| Installation | | flush |
| Assured operating distance | s_a | 0 ... 0.81 mm |
| Actual operating distance | s_r | 0.9 ... 1.1 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 V |
| Switching frequency | f | 1.5 kHz |
| Hysteresis | H | 1 ... 10 typ. 5 % |
| 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 | | Connector plug M12 x 1, 4-pin |
| Housing material | | brass, nickel-plated |
| Sensing face | | PBT |
| Degree of protection | | IP67 |

General information

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

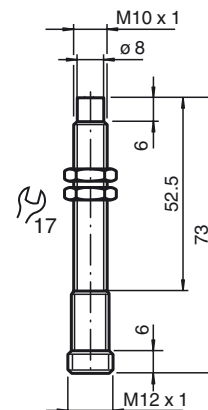
Compliance with standards and directives

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

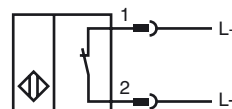
Approvals and certificates

| | | |
|--------------|--|--------------------------------|
| UL approval | | cULus Listed, General Purpose |
| CSA approval | | cCSAus Listed, General Purpose |

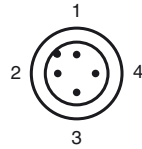
Dimensions



Electrical Connection



Pinout



Wire colors in accordance with EN 60947-5-6

| | | |
|---|----|---------|
| 1 | BN | (brown) |
| 2 | BU | (blue) |

Equipment protection level Gb

| | | |
|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| CE marking | CE 0102 | |
| ATEX marking | Ex II 2G Ex ia IIC T6...T1 Gb 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 | NJ1,5-10GM-N-Y... | |
| Effective internal capacitance | C_i | $\leq 20 \text{ nF}$; 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 | Ex II 1D Ex ia IIIC 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 | NJ1,5-10GM-N-Y... | |
| Effective internal capacitance | C_i | $\leq 20 \text{ }\mu\text{F}$ 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

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