



Model Number

SJ3,5-G-N

Features

- 3.5 mm slot width

Technical Data

General specifications

| | |
|------------------------------|-----------------------|
| Switching function | Normally closed (NC) |
| Output type | NAMUR |
| Slot width | 3.5 mm |
| Depth of immersion (lateral) | 5 ... 7 mm, typ. 6 mm |
| Output type | 2-wire |

Nominal ratings

| | | |
|------------------------------|-------|---|
| Nominal voltage | U_o | 8.2 V (R_i approx. 1 k Ω) |
| Operating voltage | U_B | 5 ... 25 V |
| Switching frequency | f | 0 ... 3000 Hz |
| Hysteresis | H | 0 ... 0.6 |
| Suitable for 2:1 technology | | yes, Reverse polarity protection diode not required |
| Current consumption | | |
| Measuring plate not detected | | ≥ 3 mA at nominal voltage |
| Measuring plate detected | | ≤ 1 mA at nominal voltage |

Functional safety related parameters

| | |
|--------------------------|---------|
| MTTF _d | 11150 a |
| Mission Time (T_M) | 20 a |
| Diagnostic Coverage (DC) | 0 % |

Ambient conditions

| | |
|---------------------|---------------------------------|
| Ambient temperature | -25 ... 100 °C (-13 ... 212 °F) |
|---------------------|---------------------------------|

Mechanical specifications

| | |
|----------------------|----------------------------|
| Connection type | flexible leads LiY, 500 mm |
| Core cross-section | 0.14 mm ² |
| Housing material | PBT |
| Degree of protection | IP67 |

General information

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

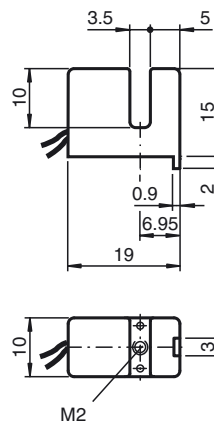
Compliance with standards and directives

| | |
|---------------------|---|
| 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 |

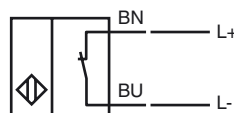
Approvals and certificates

| | |
|--------------|--|
| 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 | SJ3,5-...-N... |
| Effective internal capacitance C_i | $\leq 50 \text{ nF}$; a cable length of 10 m is considered. |
| Effective internal inductance L_i | $\leq 250 \mu\text{H}$; 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. |

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 | SJ3,5-...-N... |
| Effective internal capacitance C_i | $\leq 50 \text{ nF}$; a cable length of 10 m is considered. |
| Effective internal inductance L_i | $\leq 250 \mu\text{H}$; 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. |

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 | SJ3,5-...-N... |
| Effective internal capacitance C_i | $\leq 50 \text{ nF}$; a cable length of 10 m is considered. |
| Effective internal inductance L_i | $\leq 250 \mu\text{H}$; a cable length of 10 m is considered. |