

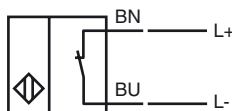
Model Number

SJ3,5-N LED

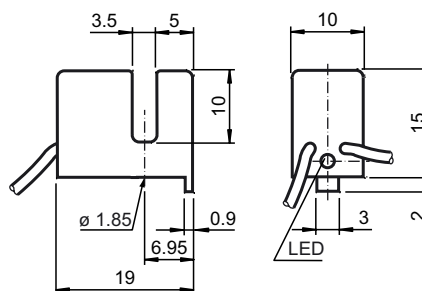
Features

- 3.5 mm slot width

Connection



Dimensions



Technical Data

General specifications

| | |
|------------------------------|------------------------|
| Switching element function | NAMUR, NC |
| Slot width | 3.5 mm |
| Depth of immersion (lateral) | 5 ... 7 mm , typ. 6 mm |
| Installation | |
| Output polarity | NAMUR |

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 | 0.1 ... 0.4 mm |
| Reverse polarity protection | | reverse polarity protected |
| Suitable for 2:1 technology | | yes , with reverse polarity protection diode |
| Current consumption | | |
| Measuring plate not detected | | ≥ 3 mA |
| Measuring plate detected | | ≤ 1 mA |
| Switching state indication | | LED, yellow |

Functional safety related parameters

| | |
|--------------------------|--------|
| MTTF _d | 2370 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 |
| Protection degree | 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 |
| CCC approval | Products with a maximum operating voltage of ≤ 36 V do not bear a CCC marking because they do not require approval. |

ATEX 2G

Instruction

Device category 2G

Directive conformity

Standard conformity

CE marking

Ex-identification

EC-Type Examination Certificate

Appropriate type

Effective internal capacitance C_i Effective internal inductance L_i

General

Highest permissible ambient temperature

Installation, Commissioning

Maintenance

Specific conditions

Protection from mechanical danger

Manual electrical apparatus for hazardous areas

for use in hazardous areas with gas, vapour and mist


94/9/EG

EN 60079-0:2009, EN 60079-11:2007

Ignition protection "Intrinsic safety"

Use is restricted to the following stated conditions

CE 0102

 II 2G Ex ia IIC T6 Gb

PTB 99 ATEX 2219 X

SJ3,5-...-N...

 ≤ 50 nF ; a cable length of 10 m is considered. ≤ 250 μ H ; a cable length of 10 m is considered.

The apparatus has to be operated according to the appropriate data in the data sheet and in this instruction manual. The EC-Type Examination Certificate has to be observed. The special conditions must be adhered to!

The temperature ranges, according to temperature class, are given in the EC-Type Examination Certificate.

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.

No changes can be made to apparatus, which are operated in hazardous areas. Repairs to these apparatus are not possible.

When used in the temperature range below -20 °C the sensor should be protected from knocks by the provision of an additional housing.