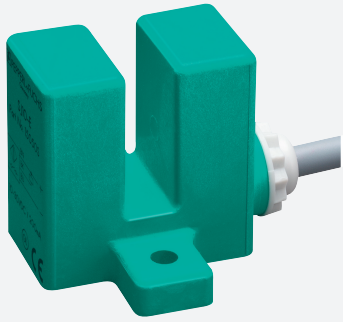


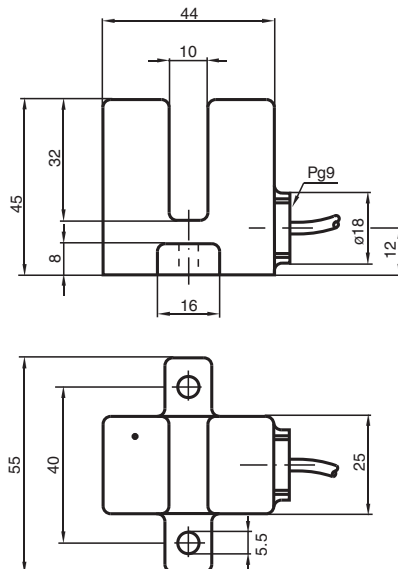


## Inductive slot sensor SJ10-N

- 10 mm slot width
- Usable up to SIL 2 acc. to IEC 61508



### Dimensions



### Technical Data

#### General specifications

|                              |                               |
|------------------------------|-------------------------------|
| Switching function           | Normally closed (NC)          |
| Output type                  | NAMUR                         |
| Slot width                   | 10 mm                         |
| Depth of immersion (lateral) | 13.5 ... 16.5 mm , typ. 15 mm |
| Output type                  | 2-wire                        |

#### Nominal ratings

|                     |       |                                      |
|---------------------|-------|--------------------------------------|
| Nominal voltage     | $U_o$ | 8.2 V ( $R_i$ approx. 1 k $\Omega$ ) |
| Operating voltage   | $U_B$ | 5 ... 25 V                           |
| Switching frequency | $f$   | 0 ... 1000 Hz                        |
| Hysteresis          | $H$   | 0.1 ... 0.5 mm                       |

#### Current consumption

|                              |                                |
|------------------------------|--------------------------------|
| Measuring plate not detected | $\geq 3$ mA at nominal voltage |
| Measuring plate detected     | $\leq 1$ mA at nominal voltage |

## Technical Data

### Functional safety related parameters

|                                |         |
|--------------------------------|---------|
| Safety Integrity Level (SIL)   | SIL 2   |
| MTTF <sub>d</sub>              | 11460 a |
| Mission Time (T <sub>M</sub> ) | 20 a    |
| Diagnostic Coverage (DC)       | 0 %     |

### Compliance with standards and directives

|                     |                                         |
|---------------------|-----------------------------------------|
| Standard conformity |                                         |
| NAMUR               | EN 60947-5-6:2000<br>IEC 60947-5-6:1999 |
| Standards           | EN IEC 60947-5-2                        |

### Approvals and certificates

|                               |                                                                                                                                                      |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| IECEx approval                |                                                                                                                                                      |
| Equipment protection level Ga | IECEx PTB 11.0091X                                                                                                                                   |
| Equipment protection level Gb | IECEx PTB 11.0091X                                                                                                                                   |
| Equipment protection level Da | IECEx PTB 11.0091X                                                                                                                                   |
| Equipment protection level Mb | IECEx PTB 11.0091X                                                                                                                                   |
| ATEX approval                 |                                                                                                                                                      |
| Equipment protection level Ga | PTB 99 ATEX 2219 X                                                                                                                                   |
| Equipment protection level Gb | PTB 99 ATEX 2219 X                                                                                                                                   |
| Equipment protection level Da | PTB 99 ATEX 2219 X                                                                                                                                   |
| UL approval                   | cULus Listed<br>Load Type: General Purpose<br>Circuitry: Class 2 Power Source<br>Enclosure Type Rating: Type 1<br>Supply/Switching Voltage: 8.2 V DC |
| Ordinary Location             | E87056                                                                                                                                               |
| Hazardous Location            | E501628                                                                                                                                              |
| Control drawing               | 116-0453                                                                                                                                             |
| CCC approval                  |                                                                                                                                                      |
| Hazardous Location            | 2020322315002306                                                                                                                                     |
| NEPSI approval                |                                                                                                                                                      |
| NEPSI certificate             | GYJ16.1391X                                                                                                                                          |
| KCC approval                  |                                                                                                                                                      |
| Hazardous Location            | 13-AV4BO-0353X                                                                                                                                       |
| Marine approval               | DNVGL TAA00001A5                                                                                                                                     |

### Ambient conditions

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

### Mechanical specifications

|                                     |                       |
|-------------------------------------|-----------------------|
| Connection type                     | cable                 |
| Housing material                    | PBT                   |
| Degree of protection                | IP67                  |
| Cable                               |                       |
| Cable diameter                      | 6 mm ± 0.2 mm         |
| Bending radius                      | > 10 x cable diameter |
| Material                            | PVC                   |
| Core cross section                  | 0.75 mm <sup>2</sup>  |
| Length                              | L 2 m                 |
| Tightening torque, fastening screws | 3 Nm                  |
| Dimensions                          |                       |
| Height                              | 45 mm                 |
| Width                               | 55 mm                 |
| Length                              | 44 mm                 |

### General information

|                           |                         |
|---------------------------|-------------------------|
| Use in the hazardous area | see instruction manuals |
|---------------------------|-------------------------|

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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 **PEPPERL+FUCHS**

## Connection Assignment

