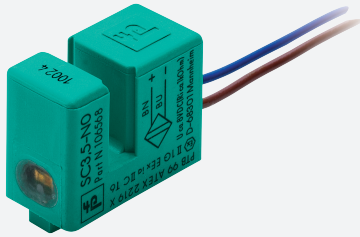


# Inductive slot sensor

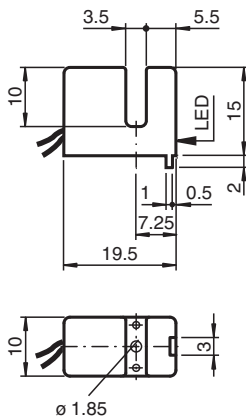
## SC3,5-N0-BU



- 3.5 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                   | 3.5 mm               |
| Depth of immersion (lateral) | 5 ... 7 typ. 6 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 ... 3000 Hz                                        |
| Hysteresis                   | H     | 0.21 ... 0.4 mm                                      |
| Suitable for 2:1 technology  |       | yes , Reverse polarity protection diode not required |
| Current consumption          |       |                                                      |
| Measuring plate not detected |       | $\geq 3$ mA at nominal voltage                       |
| Measuring plate detected     |       | $\leq 1$ mA at nominal voltage                       |
| Switching state indicator    |       | LED, yellow                                          |

#### Functional safety related parameters

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

**PEPPERL+FUCHS**

## Technical Data

|                                                 |   |                                         |
|-------------------------------------------------|---|-----------------------------------------|
| Safety Integrity Level (SIL)                    |   | SIL 2                                   |
| MTTF <sub>d</sub>                               |   | 4968 a                                  |
| Mission Time (T <sub>M</sub> )                  |   | 20 a                                    |
| Diagnostic Coverage (DC)                        |   | 0 %                                     |
| <b>Compliance with standards and directives</b> |   |                                         |
| Standard conformity                             |   |                                         |
| NAMUR                                           |   | EN 60947-5-6:2000<br>IEC 60947-5-6:1999 |
| Electromagnetic compatibility                   |   | NE 21:2007                              |
| Standards                                       |   | EN IEC 60947-5-2                        |
| <b>Approvals and certificates</b>               |   |                                         |
| 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, General Purpose           |
| 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                        |
| <b>Ambient conditions</b>                       |   |                                         |
| Ambient temperature                             |   | -25 ... 100 °C (-13 ... 212 °F)         |
| <b>Mechanical specifications</b>                |   |                                         |
| Connection type                                 |   | flexible leads LiY                      |
| Housing material                                |   | PBT                                     |
| Degree of protection                            |   | IP67                                    |
| <b>Cable</b>                                    |   |                                         |
| Cable diameter                                  |   | 1.1 mm ± 0.1 mm                         |
| Bending radius                                  |   | > 10 x cable diameter                   |
| Material                                        |   | PVC                                     |
| Core cross section                              |   | 0.14 mm <sup>2</sup>                    |
| Length                                          | L | 500 mm                                  |
| <b>Dimensions</b>                               |   |                                         |
| Height                                          |   | 15 mm                                   |
| Width                                           |   | 10 mm                                   |
| Length                                          |   | 19.5 mm                                 |
| <b>General information</b>                      |   |                                         |
| Use in the hazardous area                       |   | see instruction manuals                 |

## Connection Assignment

