

# Inductive sensor

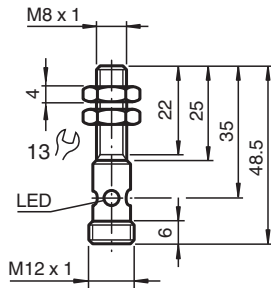
## NCB1,5-8GM25-N0-V1



- 1.5 mm flush
- NAMUR output
- Stainless steel housing
- Polarity reversal protected



### Dimensions



### Technical Data

#### General specifications

|                            |       |                       |
|----------------------------|-------|-----------------------|
| Switching function         |       | Normally closed (NC)  |
| Output type                |       | NAMUR                 |
| Rated operating distance   | $s_n$ | 1.5 mm                |
| Installation               |       | flush                 |
| Assured operating distance | $s_a$ | 0 ... 1.215 mm        |
| Actual operating distance  | $s_r$ | 1.35 ... 1.65 mm typ. |
| Reduction factor $r_{Al}$  |       | 0.22                  |
| Reduction factor $r_{Cu}$  |       | 0.19                  |
| Reduction factor $r_{304}$ |       | 0.65                  |
| Output type                |       | 2-wire                |

#### Nominal ratings

|                              |       |                                                      |
|------------------------------|-------|------------------------------------------------------|
| Nominal voltage              | $U_o$ | 8.2 V ( $R_i$ approx. 1 k $\Omega$ )                 |
| Switching frequency          | $f$   | 0 ... 2000 Hz                                        |
| Hysteresis                   | $H$   | 1 ... 10 typ. 3 %                                    |
| Reverse polarity protection  |       | reverse polarity protected                           |
| Short-circuit protection     |       | yes                                                  |
| Suitable for 2:1 technology  |       | yes , Reverse polarity protection diode not required |
| Current consumption          |       |                                                      |
| Measuring plate not detected |       | min. 3 mA                                            |
| Measuring plate detected     |       | $\leq 1$ mA                                          |
| Switching state indicator    |       | Multihole-LED, yellow                                |

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

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## Technical Data

### Functional safety related parameters

|                                |        |
|--------------------------------|--------|
| MTTF <sub>d</sub>              | 3430 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 11.0037X |
| Equipment protection level Gb | IECEX PTB 11.0037X |
| Equipment protection level Da | IECEX PTB 11.0037X |
| Equipment protection level Mb | IECEX PTB 11.0037X |
| ATEX approval                 |                    |
| Equipment protection level Ga | PTB 00 ATEX 2048 X |
| Equipment protection level Gb | PTB 00 ATEX 2048 X |
| Equipment protection level Da | PTB 00 ATEX 2048 X |
| UL approval                   |                    |
| Ordinary Location             | E87056             |
| Hazardous Location            | E501628            |
| Control drawing               | 116-0452           |
| CCC approval                  |                    |
| Hazardous Location            | 2020322315002256   |
| CML approval                  | on request         |
| ANZEx                         | 18.3018X           |
| Marine approval               | DNVGL TAA00001A5   |

### Ambient conditions

|                     |                                 |
|---------------------|---------------------------------|
| Ambient temperature | -25 ... 100 °C (-13 ... 212 °F) |
| Storage temperature | -40 ... 100 °C (-40 ... 212 °F) |

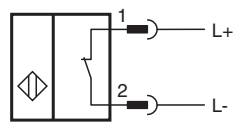
### Mechanical specifications

|                      |                                   |
|----------------------|-----------------------------------|
| Connection type      | Connector plug                    |
| Housing material     | Stainless steel 1.4305 / AISI 303 |
| Sensing face         | LCP                               |
| Degree of protection | IP67                              |
| Connector            |                                   |
| Threading            | M12 x 1                           |
| Number of pins       | 4                                 |
| Dimensions           |                                   |
| Length               | 48.5 mm                           |
| Diameter             | 8 mm                              |

### General information

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

Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-6

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

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