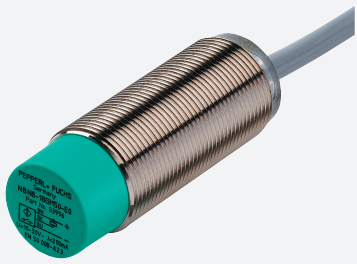


## Inductive sensor

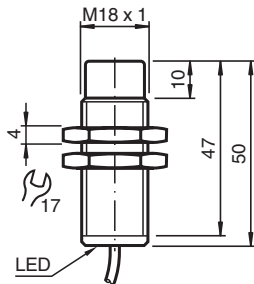
### NCN8-18GM50-E2-3G-3D



- 8 mm non-flush
- ATEX-/IECEX-approvals for zone 2/22 (Ex ec/tc)
- Stainless steel housing



## Dimensions



## Technical Data

### General specifications

|                            |       |                          |
|----------------------------|-------|--------------------------|
| Switching function         |       | Normally open (NO)       |
| Output type                |       | PNP                      |
| Rated operating distance   | $s_n$ | 8 mm                     |
| Installation               |       | non-flush                |
| Output polarity            |       | DC                       |
| Assured operating distance | $s_a$ | 0 ... 6.48 mm            |
| Actual operating distance  | $s_r$ | 7.2 ... 8.8 mm typ. 8 mm |
| Reduction factor $r_{AI}$  |       | 0.45                     |
| Reduction factor $r_{Cu}$  |       | 0.4                      |
| Reduction factor $r_{304}$ |       | 0.7                      |
| Output type                |       | 3-wire                   |

### Nominal ratings

|                             |       |                            |
|-----------------------------|-------|----------------------------|
| Operating voltage           | $U_B$ | 10 ... 60 V                |
| Switching frequency         | $f$   | 0 ... 400 Hz               |
| Hysteresis                  | $H$   | 1 ... 10 % typ. 5 %        |
| Reverse polarity protection |       | reverse polarity protected |

Release date: 2025-06-12 Date of issue: 2025-06-15 Filename: 70126047\_eng.pdf

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

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 **PEPPERL+FUCHS**

## Technical Data

|                                                                     |       |                                                     |
|---------------------------------------------------------------------|-------|-----------------------------------------------------|
| Short-circuit protection                                            |       | pulsing                                             |
| Voltage drop                                                        | $U_d$ | $\leq 3 \text{ V}$                                  |
| Voltage drop at $I_L$                                               |       |                                                     |
| Voltage drop $I_L = 200 \text{ mA}$ , switching element on          | $U_d$ | 1.5 ... 2.5 V typ. 1.9 V                            |
| Operating current                                                   | $I_L$ | 0 ... 200 mA                                        |
| Lowest operating current                                            | $I_m$ | 0 mA                                                |
| Off-state current                                                   | $I_r$ | 0 ... 0.5 mA typ. 0.01 mA                           |
| Off-state current $T_U = 40^\circ \text{C}$ , switching element off |       | $\leq 100 \mu\text{A}$                              |
| No-load supply current                                              | $I_0$ | $\leq 10 \text{ mA}$                                |
| Time delay before availability                                      | $t_v$ | &es                                                 |
| Switching state indicator                                           |       | LED, yellow                                         |
| <b>Functional safety related parameters</b>                         |       |                                                     |
| MTTF <sub>d</sub>                                                   |       | 1497 a                                              |
| Mission Time ( $T_M$ )                                              |       | 20 a                                                |
| Diagnostic Coverage (DC)                                            |       | 0 %                                                 |
| <b>Compliance with standards and directives</b>                     |       |                                                     |
| Standard conformity                                                 |       |                                                     |
| Standards                                                           |       | EN IEC 60947-5-2                                    |
| <b>Approvals and certificates</b>                                   |       |                                                     |
| IECEX approval                                                      |       |                                                     |
| Equipment protection level Gc (ec)                                  |       | IECEX TUR 21.0017X                                  |
| Equipment protection level Dc (tc)                                  |       | IECEX TUR 21.0018X                                  |
| ATEX approval                                                       |       |                                                     |
| Equipment protection level Gc (ec)                                  |       | TÜV 20 ATEX 8523 X                                  |
| Equipment protection level Dc (tc)                                  |       | TÜV 20 ATEX 8524 X                                  |
| UL approval                                                         |       | cULus Listed, General Purpose, Class 2 Power Source |
| CCC approval                                                        |       |                                                     |
| Hazardous Location                                                  |       | 2024322315005947<br>2024322315005860                |
| <b>Ambient conditions</b>                                           |       |                                                     |
| Ambient temperature                                                 |       | -25 ... 70 °C (-13 ... 158 °F)                      |
| Storage temperature                                                 |       | -40 ... 85 °C (-40 ... 185 °F)                      |
| <b>Mechanical specifications</b>                                    |       |                                                     |
| Connection type                                                     |       | cable                                               |
| Housing material                                                    |       | Stainless steel 1.4305 / AISI 303                   |
| Sensing face                                                        |       | PBT                                                 |
| Degree of protection                                                |       | IP67                                                |
| Cable                                                               |       |                                                     |
| Wire end ferrules                                                   |       | yes                                                 |
| Cable diameter                                                      |       | 6.4 mm $\pm$ 0.2 mm                                 |
| Bending radius                                                      |       | > 10 x cable diameter                               |
| Material                                                            |       | PVC                                                 |
| Color                                                               |       | grey                                                |
| Number of cores                                                     |       | 3                                                   |
| Core cross section                                                  |       | 0.5 mm <sup>2</sup>                                 |
| Length                                                              | L     | 2 m                                                 |
| Mass                                                                |       | 163 g                                               |
| Dimensions                                                          |       |                                                     |
| Length                                                              |       | 50 mm                                               |
| Diameter                                                            |       | 18 mm                                               |
| <b>General information</b>                                          |       |                                                     |

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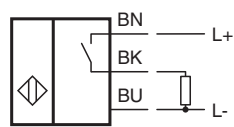
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Technical Data

|                           |                                          |                         |
|---------------------------|------------------------------------------|-------------------------|
| Scope of delivery         | 2 self locking nuts in scope of delivery |                         |
| Use in the hazardous area |                                          | see instruction manuals |

Connection Assignment



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