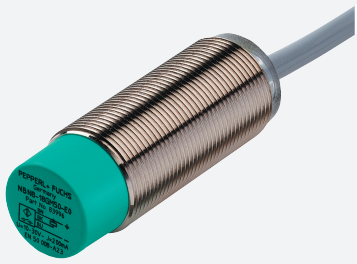


## Inductive sensor

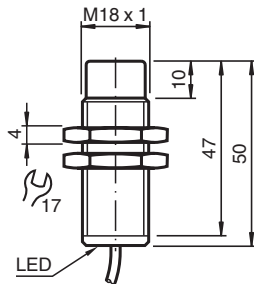
## NCN8-18GM50-E2-3G-3D



- Comfort series
- ATEX-/IECEX-approvals for zone 2/22 (Ex ec/tc)



## 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 $r_{Al}$   |       | 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 |

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

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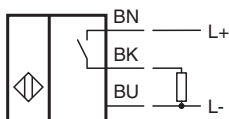
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## Technical Data

|   |       |   |
|---|-------|---|
| 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 $T_U = 40 \text{ }^\circ\text{C}$ , switching element off |       | $\leq 100 \text{ } \mu\text{A}$   |
| 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 60947-5-2:2007<br>EN 60947-5-2/A1:2012<br>IEC 60947-5-2:2007<br>IEC 60947-5-2 AMD 1:2012 |
| <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  |
| <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 PVC , 2 m   |
| Core cross section  |       | 0.5 mm <sup>2</sup>   |
| Housing material  |       | Stainless steel 1.4305 / AISI 303   |
| Sensing face  |       | PBT   |
| Degree of protection  |       | IP67  |
| Cable   |       |   |
| Bending radius  |       | > 10 x cable diameter   |
| <b>General information</b>  |       |   |
| Use in the hazardous area   |       | see instruction manuals   |

## Connection



**Accessories**

|   |              |                        |
|---|--------------|------------------------|
|  | <b>BF 18</b> | Mounting flange, 18 mm |
|---|--------------|------------------------|

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