

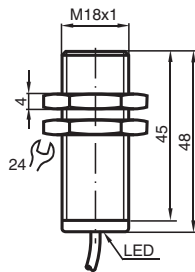
# Inductive sensor

## NCB8-18GM50-Z4

- 8 mm flush
- 2-wire DC
- Increased operating distance



### Dimensions



### Technical Data

#### General specifications

|                              |       |                    |
|------------------------------|-------|--------------------|
| Switching function           |       | Normally open (NO) |
| Output type                  |       | Two-wire           |
| Rated operating distance     | $s_n$ | 8 mm               |
| Installation                 |       | flush              |
| Output polarity              |       | DC                 |
| Assured operating distance   | $s_a$ | 0 ... 6.48 mm      |
| Reduction factor $r_{Al}$    |       | 0.4                |
| Reduction factor $r_{Cu}$    |       | 0.4                |
| Reduction factor $r_{304}$   |       | 0.7                |
| Reduction factor $r_{Brass}$ |       | 0.5                |
| Output type                  |       | 2-wire             |

#### Nominal ratings

|                             |       |                             |
|-----------------------------|-------|-----------------------------|
| Operating voltage           | $U_B$ | 3.5 ... 30 V                |
| Switching frequency         | $f$   | 0 ... 1000 Hz               |
| Hysteresis                  | $H$   | typ. 5%                     |
| Reverse polarity protection |       | reverse polarity-conductive |
| Short-circuit protection    |       | pulsing                     |
| Voltage drop                | $U_d$ | $\leq 3.5$ V                |
| Temperature drift           |       | $\pm 15\%$                  |
| Operating current           | $I_L$ | 2 ... 100 mA                |
| Off-state current           | $I_r$ | typ. 0.8 mA                 |

Release date: 2024-05-28 Date of issue: 2024-06-02 Filename: 105930\_eng.pdf

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

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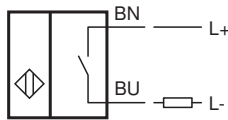
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 **PEPPERL+FUCHS**

Technical Data

|                                          |                                                              |
|------------------------------------------|--------------------------------------------------------------|
| Switching state indicator                | LED, yellow                                                  |
| Stability alarm indicator                | LED, red                                                     |
| Stability control-switch point           | 0,8 s <sub>r</sub> ... 0,9 s <sub>r</sub>                    |
| Functional safety related parameters     |                                                              |
| MTTF <sub>d</sub>                        | 1370 a                                                       |
| Mission Time (T <sub>M</sub> )           | 20 a                                                         |
| Diagnostic Coverage (DC)                 | 0 %                                                          |
| Compliance with standards and directives |                                                              |
| Standard conformity                      |                                                              |
| Standards                                | EN IEC 60947-5-2                                             |
| Approvals and certificates               |                                                              |
| UL approval                              | cULus Listed, General Purpose                                |
| CCC approval                             | CCC approval / marking not required for products rated ≤36 V |
| Ambient conditions                       |                                                              |
| Ambient temperature                      | -25 ... 70 °C (-13 ... 158 °F)                               |
| Storage temperature                      | -25 ... 85 °C (-13 ... 185 °F)                               |
| Mechanical specifications                |                                                              |
| Connection type                          | cable PVC , 2 m                                              |
| Core cross section                       | 0.34 mm <sup>2</sup>                                         |
| Housing material                         | brass, nickel-plated                                         |
| Sensing face                             | PBT                                                          |
| Degree of protection                     | IP67                                                         |
| Dimensions                               |                                                              |
| Length                                   | 48 mm                                                        |
| Diameter                                 | 18 mm                                                        |

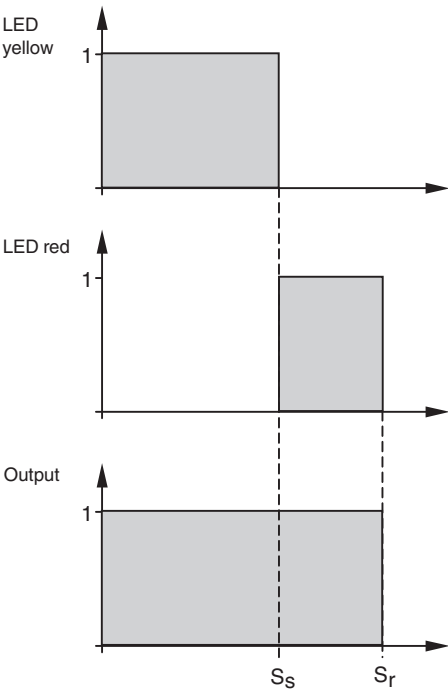
Connection



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Operation

Correlation between output signal/LED-function and stable operating distance  $s_s$ /effective operating distance  $s_r$ : ( $s_s$  typ. 80 % of  $s_r$ )



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