

# Inductive sensor

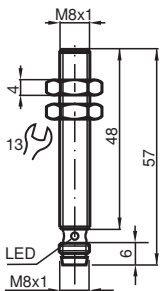
## NCB1,5-8GM50-Z0-V3



- 1.5 mm flush
- 2-wire DC



### Dimensions



### Technical Data

| General specifications     |       |                       |
|----------------------------|-------|-----------------------|
| Switching function         |       | Normally open (NO)    |
| Output type                |       | Two-wire              |
| Rated operating distance   | $s_n$ | 1.5 mm                |
| Installation               |       | flush                 |
| Output polarity            |       | DC                    |
| Assured operating distance | $s_a$ | 0 ... 1.21 mm         |
| Actual operating distance  | $s_r$ | 1.35 ... 1.65 mm typ. |
| Reduction factor $r_{Al}$  |       | 0.22                  |
| Reduction factor $r_{Cu}$  |       | 0.16                  |
| Reduction factor $r_{304}$ |       | 0.64                  |
| Output type                |       | 2-wire                |
| Nominal ratings            |       |                       |

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

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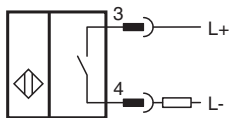
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**PEPPERL+FUCHS**

## Technical Data

|                                                 |       |                                                                                             |
|-------------------------------------------------|-------|---------------------------------------------------------------------------------------------|
| Operating voltage                               | $U_B$ | 5 ... 60 V                                                                                  |
| Switching frequency                             | $f$   | 0 ... 1200 Hz                                                                               |
| Hysteresis                                      | $H$   | 1 ... 10 typ. 5 %                                                                           |
| Reverse polarity protection                     |       | reverse polarity tolerant                                                                   |
| Short-circuit protection                        |       | pulsing                                                                                     |
| Voltage drop                                    | $U_d$ | $\leq 5$ V                                                                                  |
| Operating current                               | $I_L$ | 2 ... 100 mA                                                                                |
| Lowest operating current                        | $I_m$ | 2 mA                                                                                        |
| Off-state current                               | $I_r$ | 0 ... 0.5 mA typ.                                                                           |
| Switching state indicator                       |       | LED, yellow                                                                                 |
| <b>Functional safety related parameters</b>     |       |                                                                                             |
| MTTF <sub>d</sub>                               |       | 1476 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>               |       |                                                                                             |
| UL approval                                     |       | cULus Listed, General Purpose                                                               |
| CSA approval                                    |       | cCSAus Listed, General Purpose                                                              |
| CCC approval                                    |       | Certified by China Compulsory Certification (CCC)                                           |
| <b>Ambient conditions</b>                       |       |                                                                                             |
| Ambient temperature                             |       | -25 ... 70 °C (-13 ... 158 °F)                                                              |
| <b>Mechanical specifications</b>                |       |                                                                                             |
| Connection type                                 |       | Connector plug M8 x 1 , 3-pin                                                               |
| Housing material                                |       | Stainless steel 1.4305 / AISI 303                                                           |
| Sensing face                                    |       | LCP                                                                                         |
| Degree of protection                            |       | IP67                                                                                        |

## Connection



## Connection Assignment



Wire colors in accordance with EN 60947-5-2

|   |    |         |
|---|----|---------|
| 1 | BN | (brown) |
| 3 | BU | (blue)  |
| 4 | BK | (black) |

Accessories

|                                                                                   |                     |                                                   |
|-----------------------------------------------------------------------------------|---------------------|---------------------------------------------------|
|  | <b>BF 8</b>         | Mounting flange, 8 mm                             |
|  | <b>EXG-08</b>       | Quick mounting bracket with dead stop             |
|  | <b>V3-WM-2M-PUR</b> | Female cordset single-ended, M8, 3-pin, PUR cable |

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