

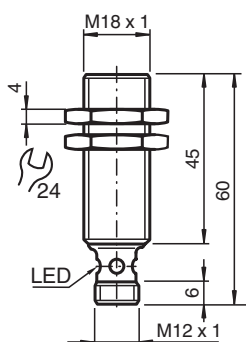


## Inductive sensor NCB8-18GM50-Z7-V1

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



### Dimensions



### Technical Data

#### General specifications

|                              |       |                      |
|------------------------------|-------|----------------------|
| Switching function           |       | Normally closed (NC) |
| Output type                  |       | Two-wire             |
| Rated operating distance     | $s_n$ | 8 mm                 |
| Installation                 |       | flush                |
| Output polarity              |       | DC                   |
| Assured operating distance   | $s_a$ | 0 ... 6.1 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               |
| Reverse polarity protection |       | reverse polarity-conductive |

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

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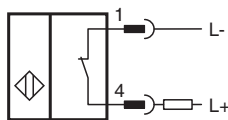
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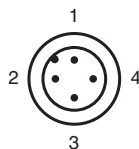
# Technical Data

|                                                 |       |                                                                                             |
|-------------------------------------------------|-------|---------------------------------------------------------------------------------------------|
| Short-circuit protection                        |       | pulsing                                                                                     |
| Voltage drop                                    | $U_d$ | $\leq 3.5 \text{ V}$                                                                        |
| Temperature drift                               |       | $\pm 15\%$                                                                                  |
| Operating current                               | $I_L$ | 2 ... 100 mA                                                                                |
| Off-state current                               | $I_r$ | typ. 0.8 mA                                                                                 |
| Switching state indicator                       |       | LED, yellow                                                                                 |
| <b>Functional safety related parameters</b>     |       |                                                                                             |
| MTTF <sub>d</sub>                               |       | 1449 a                                                                                      |
| Mission Time (T <sub>M</sub> )                  |       | 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                                    |       | CCC approval / marking not required for products rated $\leq 36 \text{ V}$                  |
| <b>Ambient conditions</b>                       |       |                                                                                             |
| Ambient temperature                             |       | -25 ... 70 °C (-13 ... 158 °F)                                                              |
| Storage temperature                             |       | -25 ... 85 °C (-13 ... 185 °F)                                                              |
| <b>Mechanical specifications</b>                |       |                                                                                             |
| Connection type                                 |       | Connector plug M12 x 1 , 4-pin                                                              |
| Housing material                                |       | brass, nickel-plated                                                                        |
| Sensing face                                    |       | PBT                                                                                         |
| Degree of protection                            |       | IP67                                                                                        |

# Connection



# Connection Assignment



Wire colors in accordance with EN 60947-5-2

|   |    |         |
|---|----|---------|
| 1 | BN | (brown) |
| 2 | WH | (white) |
| 3 | BU | (blue)  |
| 4 | BK | (black) |

Accessories

|                                                                                   |                    |                                       |
|-----------------------------------------------------------------------------------|--------------------|---------------------------------------|
|  | <b>BF 18</b>       | Mounting flange, 18 mm                |
|  | <b>EXG-18</b>      | Quick mounting bracket with dead stop |
|  | <b>V1-G-2M-PUR</b> | Female cordset, M12, 4-pin, PUR cable |
|  | <b>V1-W-2M-PUR</b> | Female cordset, M12, 4-pin, PUR cable |

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