

# Inductive sensor

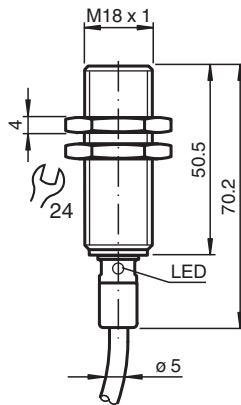
## NMB10-18GH50-E2



- 10 mm flush
- Active surface metal
- One-piece housing with stainless steel (V4A; 1.4435)



### Dimensions



### Technical Data

| General specifications      |       |                                      |
|-----------------------------|-------|--------------------------------------|
| Switching function          |       | Normally open (NO)                   |
| Output type                 |       | PNP                                  |
| Rated operating distance    | $s_n$ | 10 mm                                |
| Installation                |       | flush in mild steel                  |
| Output polarity             |       | DC                                   |
| Assured operating distance  | $s_a$ | 0 ... 8.1 mm                         |
| Reduction factor $r_{Al}$   |       | 0.4                                  |
| Reduction factor $r_{Cu}$   |       | 0.25                                 |
| Reduction factor $r_{304}$  |       | 0.5 (0.9 of material thickness 2 mm) |
| Reduction factor $r_{St37}$ |       | 1                                    |
| Output type                 |       | 3-wire                               |
| Nominal ratings             |       |                                      |
| Installation conditions     |       |                                      |
| A                           |       | 0 mm                                 |
| B                           |       | 16 mm                                |
| C                           |       | 30 mm                                |

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

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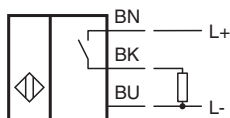
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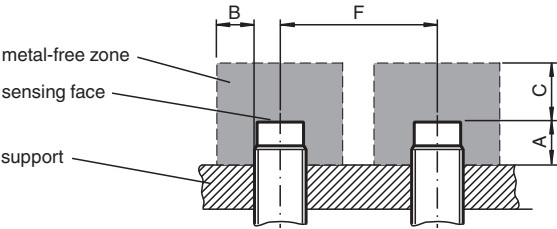
## Technical Data

|                                                 |       |                                                                    |
|-------------------------------------------------|-------|--------------------------------------------------------------------|
| F                                               |       | 60 mm                                                              |
| Operating voltage                               | $U_B$ | 10 ... 30 V                                                        |
| Switching frequency                             | $f$   | 0 ... 300 Hz                                                       |
| Hysteresis                                      | H     | 3 ... 15 typ. 5 %                                                  |
| Reverse polarity protection                     |       | yes                                                                |
| Short-circuit protection                        |       | yes                                                                |
| Voltage drop                                    | $U_d$ | $\leq 2$ V                                                         |
| Operating current                               | $I_L$ | 0 ... 200 mA                                                       |
| Off-state current                               | $I_r$ | $\leq 0.1$ mA                                                      |
| No-load supply current                          | $I_0$ | $\leq 10$ mA                                                       |
| Time delay before availability                  | $t_v$ | $\leq 40$ ms                                                       |
| Switching state indicator                       |       | LED, yellow                                                        |
| <b>Limit data</b>                               |       |                                                                    |
| Operating pressure statically                   |       | 60 bar (870.2 psi) max.                                            |
| <b>Functional safety related parameters</b>     |       |                                                                    |
| MTTF <sub>d</sub>                               |       | 655 a                                                              |
| Mission Time (T <sub>M</sub> )                  |       | 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>               |       |                                                                    |
| UL approval                                     |       | cULus Listed, General Purpose                                      |
| CCC approval                                    |       | CCC approval / marking not required for products rated $\leq 36$ V |
| <b>Ambient conditions</b>                       |       |                                                                    |
| Ambient temperature                             |       | -25 ... 85 °C (-13 ... 185 °F)                                     |
| <b>Mechanical specifications</b>                |       |                                                                    |
| Connection type                                 |       | cable TPE-S , 2 m 3 x 0.34 mm <sup>2</sup>                         |
| Housing material                                |       | Stainless steel 1.4435 / AISI 316L                                 |
| Sensing face                                    |       | Stainless steel 1.4435 / AISI 316L                                 |
| Degree of protection                            |       | IP68 / IP69K                                                       |
| Mass                                            |       | 112 g                                                              |
| Dimensions                                      |       |                                                                    |
| Length                                          |       | 70 mm                                                              |
| Diameter                                        |       | 18 mm                                                              |
| <b>General information</b>                      |       |                                                                    |
| Assembly dimensions                             |       | x: 18 mm<br>y: $\geq 4$ mm                                         |

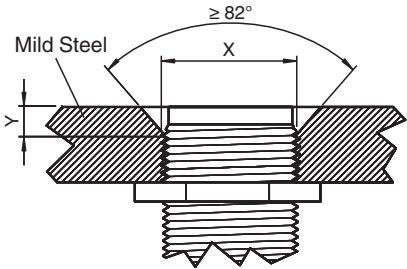
## Connection



Installation



Mounting



Sensor face is flush with mounting surface.