

Inductive sensor

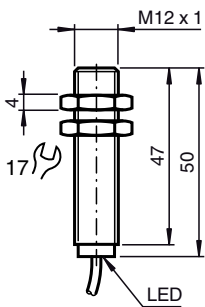
NBB4-12GM50-E2



- 4 mm flush
- Increased operating distance



Dimensions



Technical Data

General specifications

| | | |
|------------------------------|-------|--------------------|
| Switching function | | Normally open (NO) |
| Output type | | PNP |
| Rated operating distance | s_n | 4 mm |
| Installation | | flush |
| Output polarity | | DC |
| Assured operating distance | s_a | 0 ... 3.24 mm |
| Reduction factor r_{Al} | | 0.39 |
| Reduction factor r_{Cu} | | 0.35 |
| Reduction factor r_{304} | | 0.75 |
| Reduction factor r_{Brass} | | 0.49 |
| Output type | | 3-wire |

Nominal ratings

| | | |
|-----------------------------|-------|--|
| Operating voltage | U_B | 10 ... 30 V |
| Switching frequency | f | 0 ... 800 Hz |
| Hysteresis | H | typ. 5% |
| Reverse polarity protection | | reverse polarity protected |
| Short-circuit protection | | pulsing |
| Voltage drop | U_d | ≤ 3 V |
| Operating current | I_L | 0 ... 200 mA |
| Off-state current | I_r | 0 ... 0.5 mA typ. 0.1 μ A at 25 °C |
| No-load supply current | I_0 | ≤ 15 mA |

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

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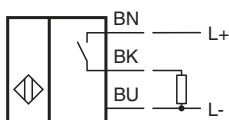
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Technical Data

| | | |
|---|-------|---|
| Time delay before availability | t_v | ≤ 5 ms |
| Switching state indicator | | LED, yellow |
| Functional safety related parameters | | |
| MTTF _d | | 1820 a |
| Mission Time (T _M) | | 20 a |
| Diagnostic Coverage (DC) | | 0 % |
| Compliance with standards and directives | | |
| Standard conformity | | |
| Standards | | EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012 |
| Approvals and certificates | | |
| UL approval | | cULus Listed, General Purpose |
| CSA approval | | cCSAus 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) |
| Mechanical specifications | | |
| Connection type | | cablc PVC , 2 m |
| Cable version | | 3 x 0.14 mm ² |
| Core cross-section | | 0.14 mm ² |
| Housing material | | brass, nickel-plated |
| Sensing face | | PBT |
| Degree of protection | | IP67 |
| Cable | | |
| Cable diameter | | 3 mm + 0.3 mm |
| Bending radius | | > 10 x cable diameter |
| General information | | |
| Scope of delivery | | 2 self locking nuts in scope of delivery |

Connection



Accessories

| | | |
|---|---------------|---------------------------------------|
|  | BF 12 | Mounting flange, 12 mm |
|  | EXG-12 | Quick mounting bracket with dead stop |