

Inductive sensor

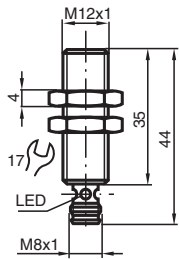
NBB4-12GM30-E2-V3



- Increased operating distance
- 4 mm flush



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} | | 0.45 |
| Reduction factor r_{Cu} | | 0.35 |
| Reduction factor r_{304} | | 0.7 |
| Output type | | 3-wire |
| Nominal ratings | | |
| Operating voltage | U_B | 10 ... 30 V |
| Switching frequency | f | 0 ... 500 Hz |
| Hysteresis | H | typ. 5 % |
| Reverse polarity protection | | reverse polarity protected |
| Short-circuit protection | | pulsing |

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

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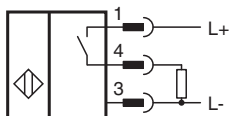
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 PEPPERL+FUCHS

Technical Data

| | | |
|---|-------|--|
| Voltage drop | U_d | $\leq 3 \text{ V}$ |
| Operating current | I_L | 0 ... 150 mA |
| Off-state current | I_r | 0 ... 0.5 mA typ. 0.1 μA at 25 °C |
| Off-state current $T_U = 40 \text{ °C}$, switching element off | | \leq |
| No-load supply current | I_0 | $\leq 15 \text{ mA}$ |
| Time delay before availability | t_v | $\leq 20 \text{ ms}$ |
| Switching state indicator | | Multihole-LED, yellow |
| Functional safety related parameters | | |
| MTTF _d | | 1770 a |
| Mission Time (T_M) | | 20 a |
| Diagnostic Coverage (DC) | | 0 % |
| Compliance with standards and directives | | |
| Standard conformity | | |
| Standards | | EN 60947-5-2:2007 IEC 60947-5-2:2007 |
| Approvals and certificates | | |
| UL approval | | cULus Listed, General Purpose |
| CCC approval | | CCC approval / marking not required for products rated $\leq 36 \text{ V}$ |
| Ambient conditions | | |
| Ambient temperature | | -25 ... 70 °C (-13 ... 158 °F) |
| Mechanical specifications | | |
| Connection type | | Connector plug M8 x 1 , 3-pin |
| Cable version | | PBT |
| Housing material | | brass, nickel-plated |
| Sensing face | | PBT |
| Degree of protection | | IP67 |
| Mass | | 30 g |

Connection



Connection Assignment



Connection Assignment

Wire colors in accordance with EN 60947-5-2

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