

Inductive sensor

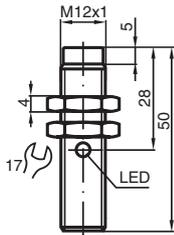
NJ4-12GM40-E2-V1



■ 4 mm non-flush



Dimensions



Technical Data

| General specifications | | |
|-----------------------------|-------|----------------------------|
| Switching function | | Normally open (NO) |
| Output type | | PNP |
| Rated operating distance | s_n | 4 mm |
| Installation | | non-flush |
| Output polarity | | DC |
| Assured operating distance | s_a | 0 ... 3.24 mm |
| Actual operating distance | s_r | 3.6 ... 4.4 mm typ. |
| Reduction factor r_{Al} | | 0.37 |
| Reduction factor r_{Cu} | | 0.36 |
| Reduction factor r_{304} | | 0.74 |
| Output type | | 3-wire |
| Nominal ratings | | |
| Operating voltage | U_B | 10 ... 60 V |
| Switching frequency | f | 0 ... 2000 Hz |
| Hysteresis | H | 1 ... 10 % typ. 3 % |
| Reverse polarity protection | | reverse polarity protected |

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

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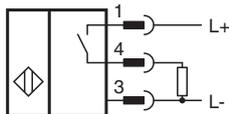
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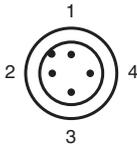
Technical Data

| | | |
|--|-------|---|
| Short-circuit protection | | pulsing |
| Voltage drop | U_d | $\leq 3 \text{ V}$ |
| Voltage drop at I_L | | |
| Voltage drop $I_L = 100 \text{ mA}$, switching element on | U_d | 1.2 ... 2.5 V |
| Operating current | I_L | 0 ... 200 mA |
| Off-state current | I_r | $\leq 0.5 \text{ mA}$ |
| No-load supply current | I_0 | $\leq 9 \text{ mA}$ |
| Time delay before availability | t_v | $\leq 20 \text{ ms}$ |
| Switching state indicator | | LED, yellow |
| Functional safety related parameters | | |
| MTTF _d | | 750 a |
| Mission Time (T_M) | | 20 a |
| Diagnostic Coverage (DC) | | 0 % |
| Compliance with standards and directives | | |
| Standard conformity | | |
| Standards | | EN IEC 60947-5-2 |
| Approvals and certificates | | |
| UL approval | | cULus Listed Load Type: General Purpose Circuitry: Class 2 Power Source Enclosure Type Rating: Type 1 Supply/Switching Voltage: 60 V DC Output Switching Current: 200 mA |
| CCC approval | | Certified by China Compulsory Certification (CCC) |
| Ambient conditions | | |
| Ambient temperature | | -25 ... 70 °C (-13 ... 158 °F) |
| Storage temperature | | -40 ... 85 °C (-40 ... 185 °F) |
| Mechanical specifications | | |
| Connection type | | Connector plug |
| Housing material | | Stainless steel 1.4305 / AISI 303 |
| Sensing face | | PBT |
| Degree of protection | | IP67 |
| Connector | | |
| Threading | | M12 x 1 |
| Number of pins | | 4 |
| Dimensions | | |
| Length | | 50 mm |
| Diameter | | 12 mm |
| General information | | |
| Scope of delivery | | 2 self locking nuts in scope of delivery |

Connection Assignment



Connection Assignment



Wire colors in accordance with EN 60947-5-2

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