

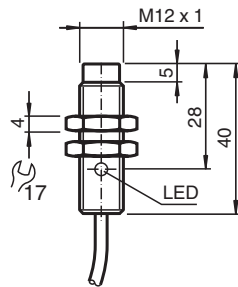
# Inductive sensor NJ4-12GM40-E1



■ 4 mm non-flush



## Dimensions



## Technical Data

### General specifications

|                            |       |                      |
|----------------------------|-------|----------------------|
| Switching function         |       | Normally closed (NC) |
| Output type                |       | NPN                  |
| 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 $r_{AI}$  |       | 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".

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.com

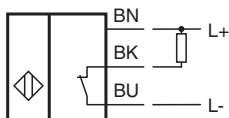
Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

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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                                      |
| No-load supply current                                     | $I_o$ | $\leq 15 \text{ mA}$                              |
| Time delay before availability                             | $t_v$ | $\leq 20 \text{ ms}$                              |
| Switching state indicator                                  |       | LED, yellow                                       |
| <b>Compliance with standards and directives</b>            |       |   |
| Standard conformity  |       |   |
| Standards  |       | EN 60947-5-2:2007<br>IEC 60947-5-2:2007           |
| <b>Approvals and certificates</b>                          |       |   |
| UL approval  |       | cULus Listed, General Purpose                     |
| CSA approval   |       | cCSAus Listed, General Purpose                    |
| CCC approval   |       | Certified by China Compulsory Certification (CCC) |
| <b>Ambient conditions</b>                                  |       |   |
| Ambient temperature  |       | -25 ... 70 °C (-13 ... 158 °F)                    |
| Storage temperature  |       | -40 ... 85 °C (-40 ... 185 °F)                    |
| <b>Mechanical specifications</b>                           |       |   |
| Connection type  |       | cable PUR , 2 m                                   |
| Core cross section   |       | 0.34 mm <sup>2</sup>                              |
| Housing material   |       | Stainless steel 1.4305 / AISI 303                 |
| Sensing face   |       | PBT   |
| Degree of protection                                       |       | IP67  |
| <b>General information</b>                                 |       |   |
| Scope of delivery  |       | 2 self locking nuts in scope of delivery          |

## Connection



## Accessories

|   |              |                        |
|---|--------------|------------------------|
|  | <b>BF 12</b> | Mounting flange, 12 mm |
|---|--------------|------------------------|