

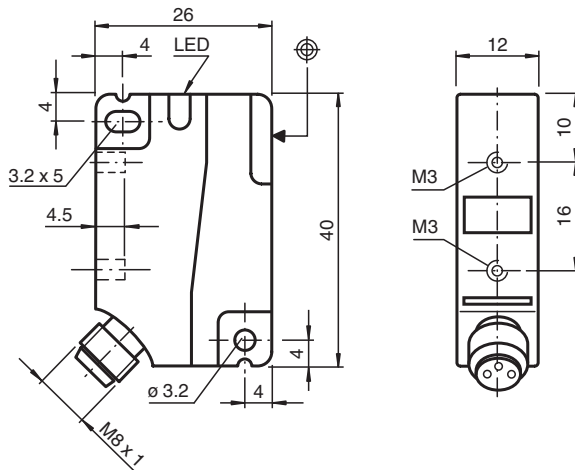


Inductive sensor NBN8-F1-E2-V3

- 8 mm non-flush
- 3-wire DC



Dimensions



Technical Data

| General specifications | | |
|------------------------------|-------|----------------------------|
| Switching function | | Normally open (NO) |
| Output type | | PNP |
| Rated operating distance | s_n | 8 mm |
| Installation | | non-flush |
| Output polarity | | DC |
| Assured operating distance | s_a | 0 ... 6.48 mm |
| Reduction factor r_{Al} | | 0.45 |
| Reduction factor r_{Cu} | | 0.45 |
| Reduction factor r_{304} | | 0.7 |
| Reduction factor r_{Brass} | | 0.55 |
| Output type | | 3-wire |
| Nominal ratings | | |
| Operating voltage | U_B | 10 ... 30 V DC |
| Switching frequency | f | 0 ... 1400 Hz |
| Hysteresis | H | typ. 5% |
| 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

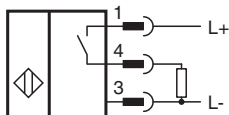
Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

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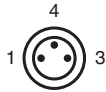
Technical Data

| | | |
|---|-----------|--|
| Short-circuit protection | | pulsing |
| Voltage drop | U_d | ≤ 2.5 V |
| Operating current | I_L | 0 ... 250 mA |
| Off-state current | I_r | 0 ... 0.01 mA typ. 0.1 μ A at 25 °C |
| No-load supply current | I_0 | ≤ 15 mA |
| Switching state indicator | | LED, yellow |
| Functional safety related parameters | | |
| MTTF _d | | 1640 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 | | |
| Protection class | | II |
| Rated insulation voltage | U_i | 60 V |
| Rated impulse withstand voltage | U_{imp} | 800 V |
| UL approval | | cULus 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 | | Connector plug |
| Housing material | | PA |
| Sensing face | | PA |
| Degree of protection | | IP67 |
| Connector | | |
| Threading | | M8 x 1 |
| Number of pins | | 3 |
| Tightening torque, fastening screws | | Threading M3 ≤ 1.1 Nm |
| Dimensions | | |
| Height | | 40 mm |
| Width | | 12 mm |
| Length | | 26 mm |

Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-2

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