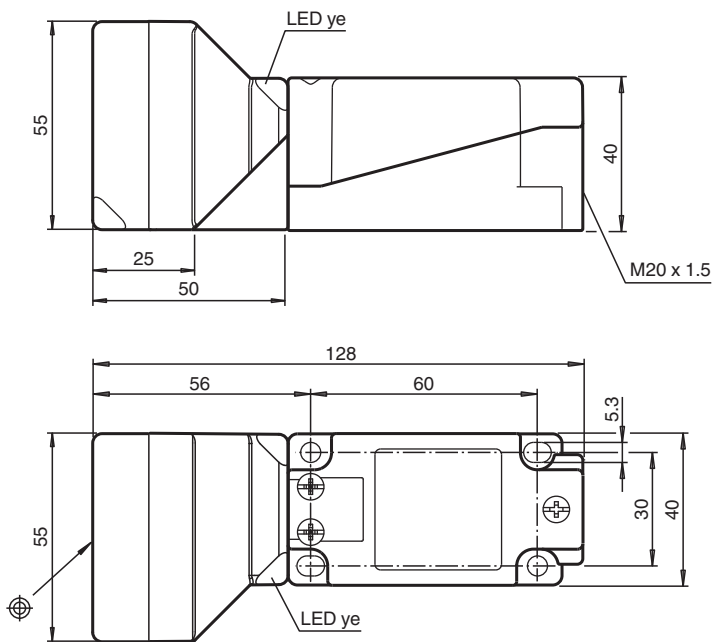


Inductive sensor NBN40-U1L-Z2

- Sensor head bidirectional and rotatable
- Basic series
- 40 mm non-flush
- 2-wire DC
- 2 LEDs indicator for 360° visibility



Dimensions



Technical Data

General specifications

| | | |
|----------------------------|-------|------------------------------|
| Switching function | | Normally open/closed (NO/NC) |
| Output type | | Two-wire |
| Rated operating distance | s_n | 40 mm |
| Installation | | non-flush |
| Output polarity | | DC |
| Assured operating distance | s_a | 0 ... 32.4 mm |
| Actual operating distance | s_r | 36 ... 44 mm typ. 40 mm |
| Reduction factor r_{AI} | | 0.39 |

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

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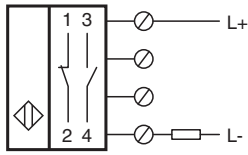
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PF PEPPERL+FUCHS


Technical Data

| | | |
|---|-----------|--|
| Reduction factor r_{Cu} | | 0.37 |
| Reduction factor r_{304} | | 0.76 |
| Output type | | 2-wire |
| Nominal ratings | | |
| Operating voltage | U_B | 5 ... 60 V DC |
| Switching frequency | f | 0 ... 100 Hz |
| Hysteresis | H | 1 ... 10 typ. 5 % |
| Reverse polarity protection | | reverse polarity tolerant |
| Short-circuit protection | | pulsing |
| Voltage drop | U_d | ≤ 5 V |
| Voltage drop at I_L | | |
| Voltage drop $I_L = 100$ mA, switching element on | U_d | ... 5 V |
| Rated insulation voltage | U_{BIS} | 60 V |
| Operating current | I_L | 2 ... 200 mA |
| Off-state current | I_r | 0 ... 1 mA typ. 0.7 mA |
| Switching state indicator | | 2 LED, yellow |
| Functional safety related parameters | | |
| MTTF _d | | 1170 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 | | |
| Protection class | | II |
| Rated insulation voltage | U_i | 60 V |
| Rated impulse withstand voltage | U_{imp} | 800 V |
| UL approval | | cULus Listed, General Purpose |
| CSA approval | | cCSAus Listed, General Purpose |
| Ambient conditions | | |
| Ambient temperature | | -25 ... 85 °C (-13 ... 185 °F) |
| Storage temperature | | -25 ... 85 °C (-13 ... 185 °F) |
| Mechanical specifications | | |
| Connection type | | screw terminals |
| Information for connection | | A maximum of two conductors with the same core cross section may be mounted on one terminal connection! tightening torque 1.2 Nm + 10 % |
| Core cross-section | | up to 2.5 mm ² |
| Minimum core cross-section | | without wire end ferrule 0.5 mm ² , with connector sleeves 0.34 mm ² |
| Maximum core cross-section | | without wire end ferrule 2.5 mm ² , with connector sleeves 1.5 mm ² |
| Housing material | | PA |
| Sensing face | | PA |
| Housing base | | plastic |
| Degree of protection | | IP68 / IP69K |
| Mass | | 225 g |
| Note | | Tightening torque: 1.8 Nm (housing) |

Connection



Accessories

| | | |
|---|---------------|--------------------------|
|  | MHW 01 | Modular mounting bracket |
|---|---------------|--------------------------|

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