

Inductive sensor

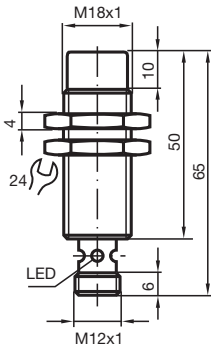
NBN12-18GM50-E0-V1



- Basic series
- 12 mm non-flush
- Increased operating distance



Dimensions



Technical Data

General specifications

| | | |
|----------------------------|-------|--------------------|
| Switching function | | Normally open (NO) |
| Output type | | NPN |
| Rated operating distance | s_n | 12 mm |
| Installation | | non-flush |
| Output polarity | | DC |
| Assured operating distance | s_a | 0 ... 9.72 mm |
| Reduction factor r_{Al} | | 0.5 |
| Reduction factor r_{Cu} | | 0.4 |
| Reduction factor r_{304} | | 0.7 |

Nominal ratings

| | | |
|---------------------|-------|--------------|
| Operating voltage | U_B | 10 ... 30 V |
| Switching frequency | f | 0 ... 200 Hz |

Release date: 2020-03-20 Date of issue: 2020-03-30 Filename: 087778_eng.pdf

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

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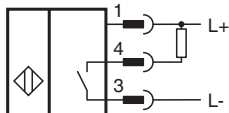
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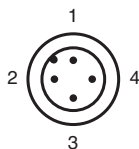
Technical Data

| | | |
|---|-------|--|
| Hysteresis | H | typ. 5% |
| Reverse polarity protection | | reverse polarity protected |
| Short-circuit protection | | pulsing |
| Voltage drop | U_d | ≤ 3 V |
| Operating current | I_L | 0 ... 200 mA |
| No-load supply current | I_0 | ≤ 10 mA |
| Switching state indicator | | Multihole-LED, yellow |
| Functional safety related parameters | | |
| MTTF _d | | 1500 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 |
| CSA approval | | cCSAus 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 M12 x 1 , 4-pin |
| Housing material | | brass, nickel-plated |
| Sensing face | | PBT |
| Degree of protection | | IP67 |

Connection






Connection Assignment



Wire colors in accordance with EN 60947-5-2

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

Accessories

| | | |
|---|--------------------|---------------------------------------|
|  | BF 18 | Mounting flange, 18 mm |
|  | V1-G-2M-PUR | Female cordset, M12, 4-pin, PUR cable |
|  | V1-W-2M-PUR | Female cordset, M12, 4-pin, PUR cable |

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