

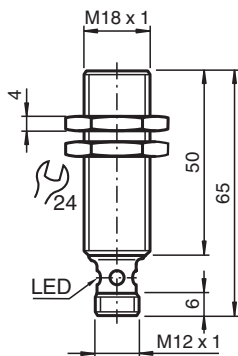


Inductive sensor NRB8-18GM50-E2-C-V1

- Reduction factor = 1
- Magnetic field resistant
- Weld Immune



Dimensions



Technical Data

| General specifications | | |
|-----------------------------|-------|----------------------------|
| Switching function | | Normally open (NO) |
| Output type | | PNP |
| Rated operating distance | s_n | 8 mm |
| Installation | | flush |
| Output polarity | | DC |
| Assured operating distance | s_a | 0 ... 6.48 mm |
| Reduction factor r_{Al} | | 1 |
| Reduction factor r_{Cu} | | 1 |
| Reduction factor r_{304} | | 1 |
| Reduction factor r_{St37} | | 1 |
| Output type | | 3-wire |
| Nominal ratings | | |
| Operating voltage | U_B | 10 ... 30 V DC |
| Switching frequency | f | 0 ... 600 Hz |
| Hysteresis | H | typ. 5 % |
| Reverse polarity protection | | reverse polarity protected |

Release date: 2026-04-13 Date of issue: 2026-04-13 Filename: 264611_eng.pdf

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

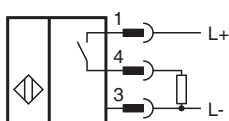
Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

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Technical Data

| | | |
|-------------------------------------------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Short-circuit protection | | pulsing |
| Voltage drop | U_d | ≤ 2 V |
| Rated insulation voltage | U_{BIS} | 60 V |
| Operating current | I_L | 0 ... 200 mA |
| Off-state current | I_r | 0 ... 0.5 mA typ. 0.1 μ A at 25 °C |
| No-load supply current | I_0 | ≤ 14 mA |
| Time delay before availability | t_v | max. 15 ms |
| Constant magnetic field | B | 200 mT |
| Alternating magnetic field | B | 200 mT |
| Switching state indicator | | Multihole-LED, yellow |
| Safety-relevant product characteristics | | |
| MTTF _d | | 1393 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 Circuitry: Class 2 Power Source Enclosure Type Rating: Type 1 Supply/Switching Voltage: 30 V DC Output Switching Current: 200 mA |
| CCC approval | | CCC approval / marking not required for products rated ≤ 36 V |
| 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 | | Brass, PTFE coated |
| Sensing face | | PPS |
| Degree of protection | | IP67 |
| Connector | | |
| Threading | | M12 x 1 |
| Number of pins | | 3 |
| Mass | | 44 g |
| Dimensions | | |
| Length | | 65 mm |
| Diameter | | 18 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) |