

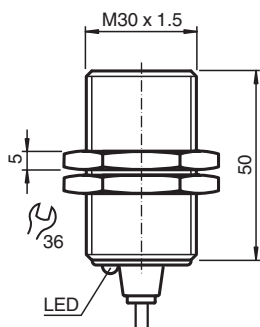


## Inductive sensor NRB15-30GM50-A2-C

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



### Dimensions



### Technical Data

#### General specifications

|                             |       |                |
|-----------------------------|-------|----------------|
| Switching function          |       | complementary  |
| Output type                 |       | PNP            |
| Rated operating distance    | $s_n$ | 15 mm          |
| Installation                |       | flush          |
| Output polarity             |       | DC             |
| Assured operating distance  | $s_a$ | 0 ... 12.15 mm |
| Reduction factor $r_{Al}$   |       | 1              |
| Reduction factor $r_{Cu}$   |       | 1              |
| Reduction factor $r_{304}$  |       | 1              |
| Reduction factor $r_{Si37}$ |       | 1              |
| Output type                 |       | 4-wire         |

#### Nominal ratings

|                             |       |                            |
|-----------------------------|-------|----------------------------|
| Operating voltage           | $U_B$ | 10 ... 30 V DC             |
| Switching frequency         | $f$   | 0 ... 750 Hz               |
| Hysteresis                  | $H$   | typ. 5 %                   |
| Reverse polarity protection |       | reverse polarity protected |

Release date: 2024-05-28 Date of issue: 2024-06-02 Filename: 292537\_eng.pdf

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

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 **PEPPERL+FUCHS**

## Technical Data

|                                                 |           |                                                                            |
|-------------------------------------------------|-----------|----------------------------------------------------------------------------|
| Short-circuit protection                        |           | pulsing                                                                    |
| Voltage drop                                    | $U_d$     | $\leq 2 \text{ V}$                                                         |
| 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 $\mu\text{A}$ at 25 °C                               |
| No-load supply current                          | $I_0$     | $\leq 14 \text{ mA}$                                                       |
| Time delay before availability                  | $t_v$     | max. 15 ms                                                                 |
| Constant magnetic field                         | B         | 200 mT                                                                     |
| Alternating magnetic field                      | B         | 200 mT                                                                     |
| Switching state indicator                       |           | all direction LED, yellow                                                  |
| <b>Functional safety related parameters</b>     |           |                                                                            |
| MTTF <sub>d</sub>                               |           | 1140.2 a                                                                   |
| Mission Time (T <sub>M</sub> )                  |           | 20 a                                                                       |
| Diagnostic Coverage (DC)                        |           | 0 %                                                                        |
| <b>Compliance with standards and directives</b> |           |                                                                            |
| Standard conformity                             |           |                                                                            |
| Standards                                       |           | EN IEC 60947-5-2                                                           |
| <b>Approvals and certificates</b>               |           |                                                                            |
| Protection class                                |           | II                                                                         |
| Rated insulation voltage                        | $U_i$     | 60 V                                                                       |
| Rated impulse withstand voltage                 | $U_{imp}$ | 800 V                                                                      |
| UL approval                                     |           | cULus Listed, Type 1 enclosure<br>Class 2 power source                     |
| CCC approval                                    |           | CCC approval / marking not required for products rated $\leq 36 \text{ V}$ |
| <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                                |           | Brass, PTFE coated                                                         |
| Sensing face                                    |           | PPS                                                                        |
| Degree of protection                            |           | IP67                                                                       |
| Mass                                            |           | 180 g                                                                      |
| Dimensions                                      |           |                                                                            |
| Length                                          |           | 50 mm                                                                      |
| Diameter                                        |           | 30 mm                                                                      |
| <b>General information</b>                      |           |                                                                            |
| Scope of delivery                               |           | 2 self locking nuts in scope of delivery                                   |

## Connection

