

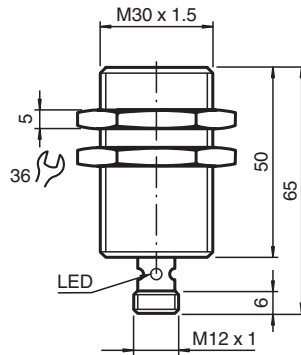
# Inductive sensor NJ10-30GM50-A2-V1



- Stainless steel housing
- 10 mm flush



## Dimensions



## Technical Data

| General specifications      |       |                            |
|-----------------------------|-------|----------------------------|
| Switching function          |       | complementary              |
| Output type                 |       | PNP                        |
| Rated operating distance    | $s_n$ | 10 mm                      |
| Installation                |       | flush                      |
| Output polarity             |       | DC                         |
| Assured operating distance  | $s_a$ | 0 ... 8.1 mm               |
| Actual operating distance   | $s_r$ | 9 ... 11 mm typ. 10 mm     |
| Reduction factor $r_{AI}$   |       | 0.2                        |
| Reduction factor $r_{Cu}$   |       | 0.15                       |
| Reduction factor $r_{304}$  |       | 0.6                        |
| Output type                 |       | 4-wire                     |
| Nominal ratings             |       |                            |
| Operating voltage           | $U_B$ | 10 ... 60 V                |
| Switching frequency         | $f$   | 0 ... 300 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".

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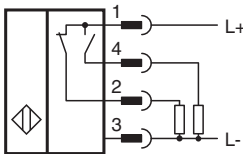
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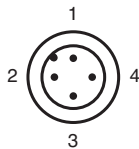
Technical Data

|                                                 |       |                                                   |
|-------------------------------------------------|-------|---------------------------------------------------|
| Short-circuit protection                        |       | pulsing                                           |
| Voltage drop                                    | $U_d$ | $\leq 3\text{ V}$                                 |
| Operating current                               | $I_L$ | 0 ... 400 mA                                      |
| No-load supply current                          | $I_0$ | $\leq 15\text{ mA}$                               |
| Switching state indicator                       |       | Multihole-LED, rear                               |
| <b>Functional safety related parameters</b>     |       |                                                   |
| MTTF <sub>d</sub>                               |       | 1190 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>               |       |                                                   |
| UL approval                                     |       | cULus Listed, General Purpose                     |
| CCC approval                                    |       | Certified by China Compulsory Certification (CCC) |
| <b>Ambient conditions</b>                       |       |                                                   |
| Ambient temperature                             |       | -25 ... 70 °C (-13 ... 158 °F)                    |
| <b>Mechanical specifications</b>                |       |                                                   |
| Connection type                                 |       | Connector plug M12 x 1 , 4-pin                    |
| Housing material                                |       | Stainless steel 1.4305 / AISI 303                 |
| Sensing face                                    |       | PBT                                               |
| Degree of protection                            |       | IP67                                              |
| Dimensions                                      |       |                                                   |
| Length                                          |       | 50 mm                                             |
| Diameter                                        |       | 30 mm                                             |

Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-2

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