

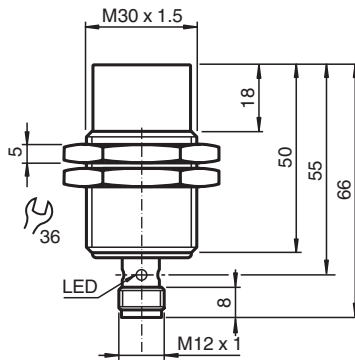
## Inductive sensor

### NBN15-30GS50-Z4L-V1-3G-3D

- 15 mm non-flush
- 2-wire DC sensor with minimum off-state current
- Switching status indicator, yellow LED
- ATEX-approval for zone 2 and zone 22
- Stainless steel housing



## Dimensions



## Technical Data

### General specifications

|                            |       |   |
|----------------------------|-------|---|
| Switching function         |       | Normally open (NO)                      |
| Output type                |       | Two-wire with minimum off-state current |
| Rated operating distance   | $s_n$ | 15 mm                                   |
| Installation               |       | non-flush                               |
| Output polarity            |       | DC                                      |
| Assured operating distance | $s_a$ | 0 ... 12.2 mm                           |
| Actual operating distance  | $s_r$ | 13.5 ... 16.5 mm typ.                   |
| Reduction factor $r_{Al}$  |       | 0.4                                     |
| Reduction factor $r_{Cu}$  |       | 0.35                                    |
| Reduction factor $r_{304}$ |       | 0.7                                     |
| Output type                |       | 2-wire                                  |

### Nominal ratings

|                             |       |                   |
|-----------------------------|-------|-------------------|
| Operating voltage           | $U_B$ | 4 ... 30 V        |
| Switching frequency         | $f$   | 0 ... 700 Hz      |
| Hysteresis                  | $H$   | 1 ... 10 typ. 5 % |
| Reverse polarity protection |       | yes               |
| Short-circuit protection    |       | pulsing           |
| Voltage drop                | $U_d$ | $\leq 4$ V        |
| Operating current           | $I_L$ | 2 ... 30 mA       |

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

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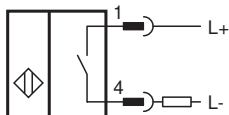
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PEPPERL+FUCHS

## Technical Data

|   |       |   |
|---|-------|---|
| Lowest operating current                        | $I_m$ | 2 mA  |
| Off-state current                               | $I_r$ | $\leq 200 \mu\text{A}$                              |
| Switching state indicator                       |       | Multihole-LED, yellow                               |
| <b>Functional safety related parameters</b>     |       |   |
| MTTF <sub>d</sub>                               |       | 1536 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>               |       |   |
| IECEX approval                                  |       |   |
| Equipment protection level Gc (ec)              |       | IECEX TUR 21.0017X                                  |
| Equipment protection level Dc (tc)              |       | IECEX TUR 21.0018X                                  |
| ATEX approval                                   |       |   |
| Equipment protection level Gc (ec)              |       | TÜV 20 ATEX 8523 X                                  |
| Equipment protection level Dc (tc)              |       | TÜV 20 ATEX 8524 X                                  |
| UL approval                                     |       | cULus Listed, General Purpose, Class 2 Power Source |
| KCC approval                                    |       |   |
| Hazardous Location                              |       | 23-AV4BO-0237X                                      |
| <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                                 |       | Connector plug M12 x 1 , 4-pin                      |
| Housing material                                |       | Stainless steel 1.4305 / AISI 303                   |
| Sensing face                                    |       | PBT   |
| Degree of protection                            |       | IP67  |
| Mass  |       | 165 g   |
| <b>Dimensions</b>                               |       |   |
| Length  |       | 66 mm   |
| Diameter  |       | 30 mm   |
| <b>General information</b>                      |       |   |
| Scope of delivery                               |       | 2 self locking nuts in scope of delivery            |

## Connection



## Connection Assignment

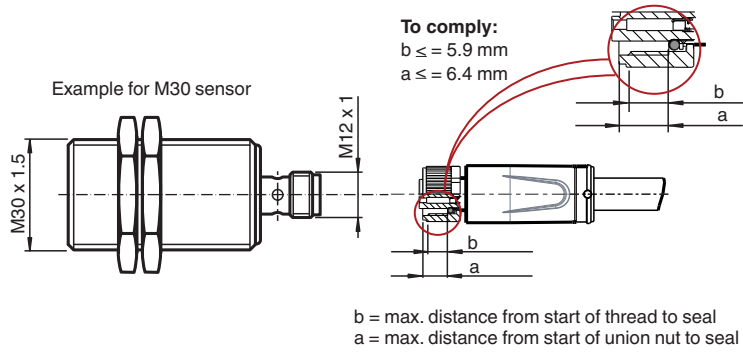


Wire colors in accordance with EN 60947-5-2

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

## Installation

### Requirement for male cordset to achieve IP degree of protection



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