



## Inductive proximity sensors Cylindrical threaded housing, IM30

IM30-15NUS-ZUD



**Model Name** > IM30-15NUS-ZUD  
**Part No.** > 6022058

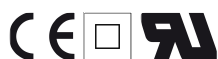


#### At a glance

- Size M30
- IP 67 enclosure rating
- Operating temperature from -25° C to +70° C

#### Your benefits

- Reduced machine downtime
- Reduced mechanical damage
- Fewer maintenance costs due to longer service life
- High resistance to shock and vibrations



#### Features

|                           |                               |
|---------------------------|-------------------------------|
| Housing:                  | Cylindrical                   |
| Thread size:              | M30 x 1.5                     |
| Sensing range Sn:         | 15 mm                         |
| Assured sensing range Sa: | 12.15 mm                      |
| Installation type:        | Non-flush                     |
| Switching frequency::     | 25 Hz, 30 Hz <sup>1) 2)</sup> |
| Output function:          | NO                            |
| Electrical wiring:        | AC/DC 2-wire                  |
| Enclosure rating:         | IP 67 <sup>3)</sup>           |
| Connection type:          | Cable, 2-wire, 6 m            |
| Housing:                  | Standard                      |

<sup>1)</sup> AC <sup>2)</sup> DC <sup>3)</sup> According to EN 60529

#### Mechanics/electronics

|                                 |                                                               |
|---------------------------------|---------------------------------------------------------------|
| Supply voltage:                 | 20 V AC/DC ... 250 V AC/DC                                    |
| Voltage drop:                   | ≤ 6.5 V AC<br>≤ 6 V DC                                        |
| Time delay before availability: | ≤ 8 ms                                                        |
| Hysteresis:                     | 1 % ... 15 %                                                  |
| Repeatability:                  | ≤ 10 % <sup>1) 2)</sup>                                       |
| Temperature drift (% of Sr):    | ± 10 %                                                        |
| EMC:                            | According to EN 60947-5-2                                     |
| Output current Ia:              | ≤ 100 mA (DC), ≤ 250 mA (AC (+80 °C)), ≤ 350 mA (AC (+50 °C)) |
| Off-state current:              | ≤ 0.8 mA (DC 24 V), ≤ 1.3 mA (AC 110 V), ≤ 2.5 mA (AC 250 V)  |

|                                          |                                |
|------------------------------------------|--------------------------------|
| Load resistance, min.:                   | 5 mA                           |
| Short-time withstand current:            | 2.2 A <sup>3)</sup>            |
| Cable material:                          | PUR/PVC                        |
| Conductor cross-section:                 | 0.5 mm <sup>2</sup>            |
| Wire-break protection:                   | 0                              |
| Short-circuit protection <sup>4)</sup> : | -                              |
| Reverse polarity protection:             | -                              |
| Power-up pulse protection:               | ✓                              |
| Shock/vibration:                         | 30 g, 11 ms/10 ... 55 Hz, 1 mm |
| Ambient operating temperature:           | -25 °C ... 70 °C               |
| Housing material:                        | Metal, Nickel-plated brass     |
| Housing cap material:                    | Plastic                        |
| Housing length:                          | 81 mm                          |
| Thread length:                           | 44 mm                          |
| Tightening torque, max.:                 | ≤ 50 Nm                        |
| Protection class:                        | II                             |

1)  $U_b$  and  $T_a$  constant    2) Of Sr    3) 20 ms/0.5 Hz    4) Miniature fuse as per IEC 60217-2 Sheet 1, ≤ 2 A (quick-blow)

### Reduction factors

|                             |                                                |
|-----------------------------|------------------------------------------------|
| Note:                       | The values are reference values which may vary |
| Stainless steel (V2A, 304): | Ca. 0.8                                        |
| Copper (Cu):                | Ca. 0.4                                        |
| Aluminum (Al):              | Ca. 0.45                                       |

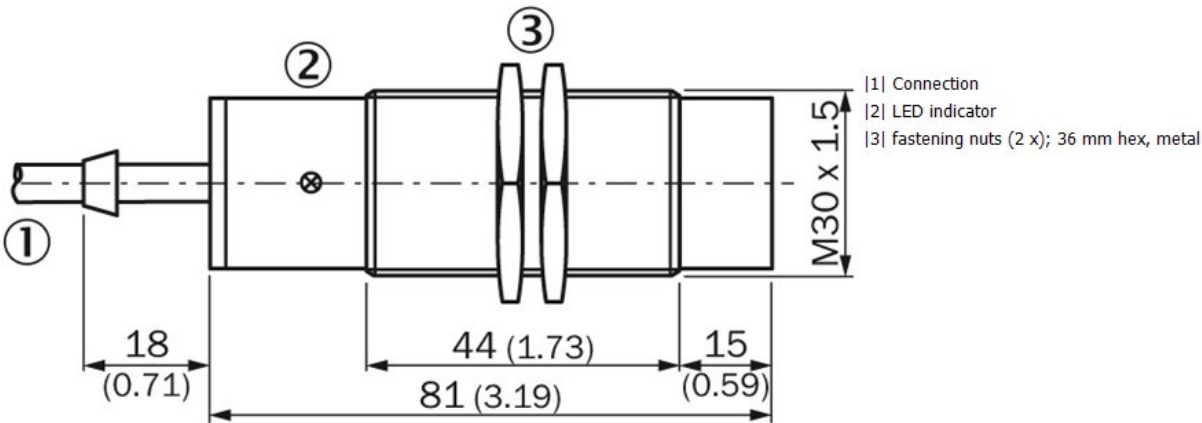
### Installation note

|         |                                       |
|---------|---------------------------------------|
| A:      | 30 mm                                 |
| B:      | 60 mm                                 |
| C:      | 30 mm                                 |
| D:      | 45 mm                                 |
| E:      | 30 mm                                 |
| F:      | 120 mm                                |
| Remark: | Associated graphic see "Installation" |

Installation note



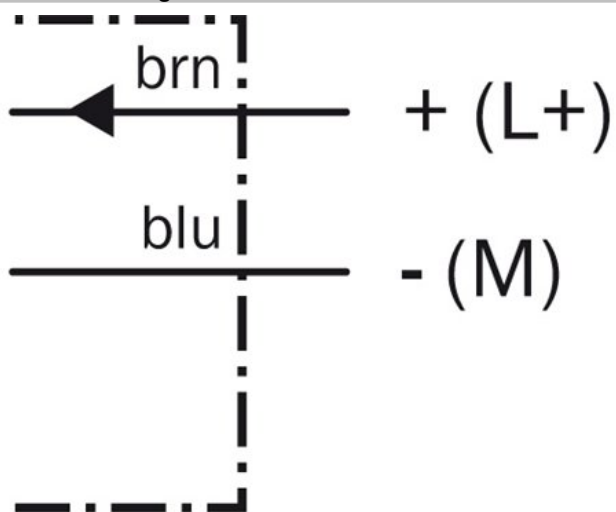
Dimensional drawing



All dimensions in mm (inch)

#### Connection diagram

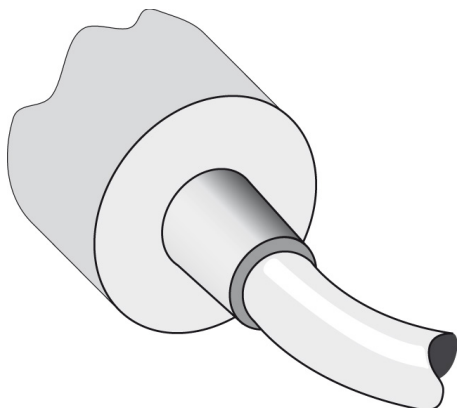
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Miniature fuse to IEC60127-2  
sheet 1,  $\leq 2$  A (fast acting)

#### Connection type

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