



## Inductive proximity sensors Cylindrical threaded housing, IME12

IME12-04BNOZW2K



**Model Name** > [IME12-04BNOZW2K](#)  
**Part No.** > [1040777](#)



#### At a glance

- Size M12
- IP 67 enclosure rating
- Operating temperature from -25° C to +75° 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:              | M12 x 1             |
| Sensing range Sn:         | 4 mm                |
| Assured sensing range Sa: | 3.24 mm             |
| Installation type:        | Flush               |
| Switching frequency:      | 2,000 Hz            |
| Output type:              | NPN                 |
| Output function:          | NC                  |
| Electrical wiring:        | DC 3-wire           |
| Enclosure rating:         | IP 67 <sup>1)</sup> |
| Connection type:          | Cable, 3-wire, 2 m  |
| Housing:                  | Short-body          |

<sup>1)</sup> According to EN 60529

#### Mechanics/electronics

|                                 |                           |
|---------------------------------|---------------------------|
| Supply voltage:                 | 10 V DC ... 30 V DC       |
| Ripple:                         | ≤ 10 %                    |
| Voltage drop:                   | ≤ 2 V                     |
| Power consumption:              | ≤ 10 mA <sup>1)</sup>     |
| Time delay before availability: | ≤ 100 ms                  |
| Hysteresis:                     | 5 % ... 15 %              |
| Repeatability:                  | ≤ 2 % <sup>2) 3)</sup>    |
| Temperature drift (% of Sr):    | ± 10 %                    |
| EMC:                            | According to EN 60947-5-2 |

|                                |                                   |
|--------------------------------|-----------------------------------|
| Output current Ia:             | ≤ 200 mA                          |
| Cable material:                | PVC                               |
| Short-circuit protection:      | ✓                                 |
| Reverse polarity protection:   | ✓                                 |
| Power-up pulse protection:     | ✓                                 |
| Shock/vibration:               | 30 g, 11 ms/10 Hz ... 55 Hz, 1 mm |
| Ambient operating temperature: | -25 °C ... 75 °C                  |
| Housing material:              | Metal, Nickel-plated brass        |
| Housing cap material:          | Plastic, PA6                      |
| Housing length:                | 44 mm                             |
| Thread length:                 | 29 mm                             |
| Tightening torque, max.:       | 12 Nm                             |

1) Without load 2) Ub and Ta constant 3) Of Sr

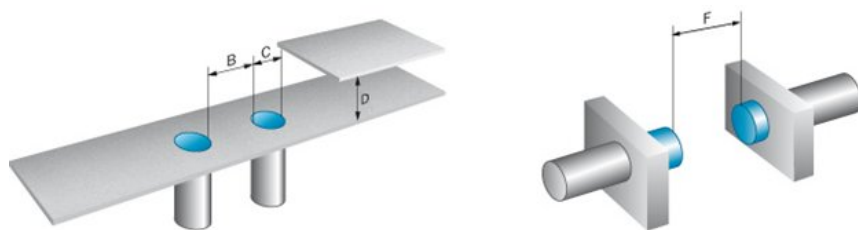
### Reduction factors

|                             |                                                |
|-----------------------------|------------------------------------------------|
| Note:                       | The values are reference values which may vary |
| Carbon steel St37 (Fe):     | 1                                              |
| Stainless steel (V2A, 304): | Ca. 0.8                                        |
| Copper (Cu):                | Ca. 0.4                                        |
| Aluminum (Al):              | Ca. 0.45                                       |
| Brass (Br):                 | Ca. 0.4                                        |

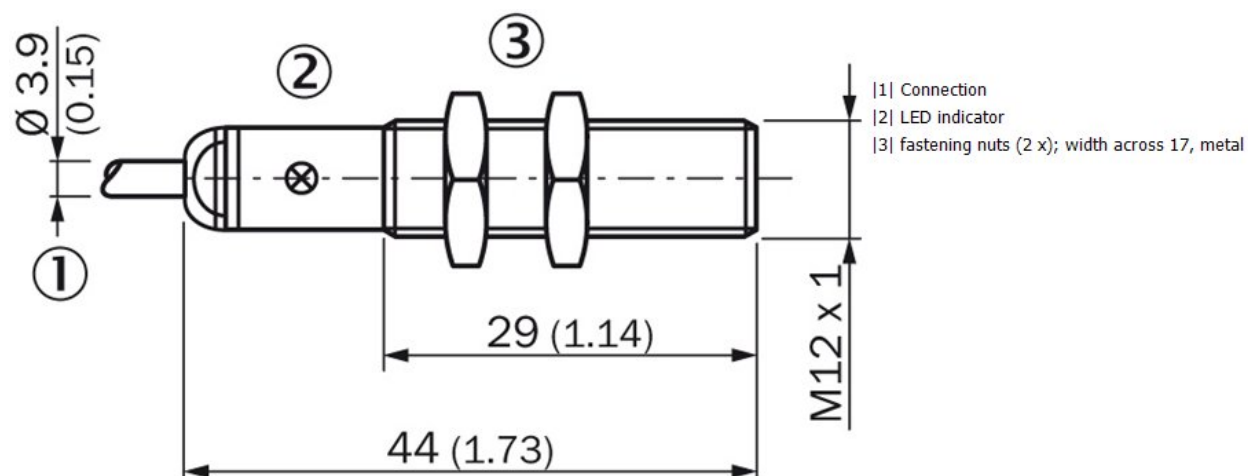
### Installation note

|         |                                       |
|---------|---------------------------------------|
| B:      | 24 mm                                 |
| C:      | 12 mm                                 |
| D:      | 12 mm                                 |
| F:      | 32 mm                                 |
| Remark: | Associated graphic see "Installation" |

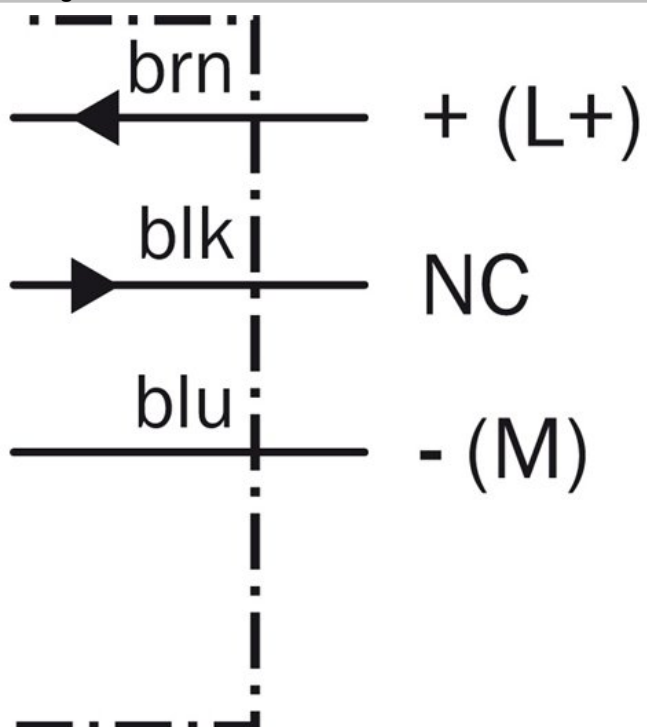
## Installation note



## Dimensional drawing



## Connection diagram



## Connection type



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