



**Inductive proximity sensors**  
**Cylindrical threaded housing, IME12**

IME12-04BPOZCOS



**Model Name** > [IME12-04BPOZC0S](#)  
**Part No.** > [1040768](#)



**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**

|                           |                      |
|---------------------------|----------------------|
| Design:                   | 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:              | PNP                  |
| Output function:          | NC                   |
| Electrical wiring:        | DC 3-wire            |
| Enclosure rating:         | IP 67 <sup>1)</sup>  |
| Connection type:          | Connector M12, 4-pin |
| Housing:                  | Standard             |

<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 I <sub>a</sub> : | ≤ 200 mA                          |
| Short-circuit protection:       | ✓                                 |
| Reverse polarity protection:    | ✓                                 |
| Power-up pulse protection:      | ✓                                 |
| Shock and vibration resistance: | 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:                 | 65 mm                             |
| Thread length:                  | 48 mm                             |
| Tightening torque, max.:        | 12 Nm                             |

1) Without load 2) U<sub>b</sub> and T<sub>a</sub> constant 3) Of Sr

### Reduction factors

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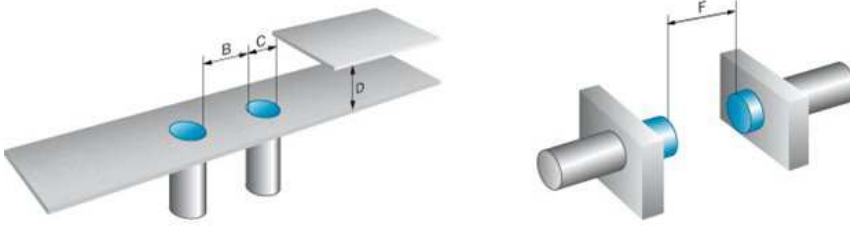
|                             |  |
|-----------------------------|--|
| Note:                       | The values are reference values which may vary |
| Carbon steel St37 (Fe):     | 1  |
| Stainless steel (V2A, 304): | Ca. 0.8  |
| Copper (Cu):                | Ca. 0.4  |
| Aluminum (Al):          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

### Installation note

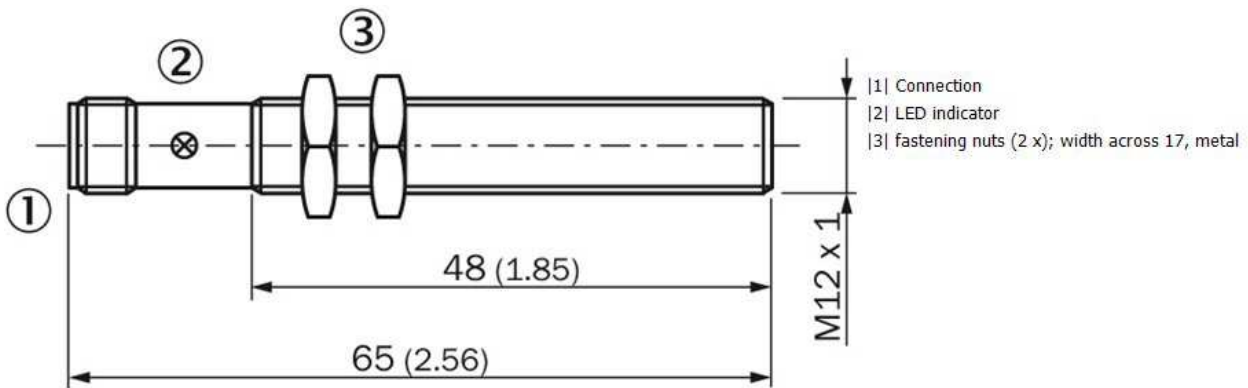
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|         |                                       |
|---------|---------------------------------------|
| B:      | 24 mm                                 |
| C:      | 12 mm                                 |
| D:      | 12 mm                      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

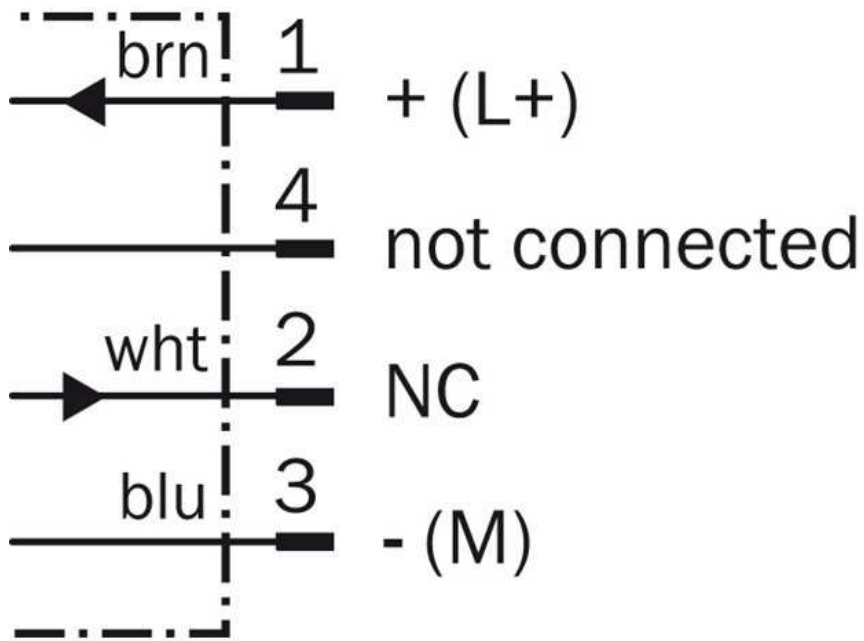
## Installation note



## Dimensional drawing



Connection diagram



Connection type



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