


ONLINE DATA SHEET
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# Inductive proximity sensors
# Cylindrical threaded housing, IME12

IME12-04BDSZC0S



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# Cylindrical threaded housing, IME12

**Model Name** > IME12-04BDSZC0S
**Part No.** > 1067178





**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 function: | NO |
| Electrical wiring: | DC 2-wire |
| Enclosure rating: | IP 67 [1] |
| Electrical connection: | Connector M12, 4-pin |
| Housing: | Standard |

[1] According to EN 60529

## Mechanics/electronics

| | |
|---|---|
| Supply voltage: | 10 V DC ... 30 V DC |
| Residual ripple: | ≤ 10 % |
| Voltage drop:: | ≤ 4 V, ≤ 4.5 V [1] [2] |
| Power consumption: | ≤ 10 mA [3] |
| Time delay before availability: | ≤ 100 ms |
| Hysteresis: | 5 % ... 15 % |
| Repeatability:: | ≤ 2 % [4] [5] |
| Temperature drift (of Sr): | ± 10 % |
| EMC: | According to EN 60947-5-2 |
| Output current Ia: | ≤ 100 mA |


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| | |
|---|---|
| Off-state current: | ≤ 0.8 mA |
| Load resistance, min.: | 3 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.: | Typ. 12 Nm |
| Power-up pulse: | ≤ 5 ms |

[1] At $I_a$ = 30 mA [2] At $I_a$ max [3] Without load [4] Ub and Ta constant [5] Of Sr

**Reduction factors**

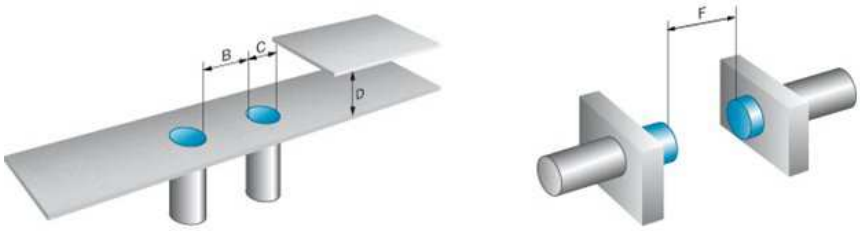
| | |
|---|---|
| Note: | The values are reference values which may vary |
| Carbon steel St37 (Fe): | 1 |
| Stainless steel (V2A, 304): | Ca. 0.8 |
| Copper (Cu): | Ca. 0.4 |
| Aluminum (Al): | Ca. 0.45 |
| Brass (Br): | Ca. 0.4 |

**Installation note**

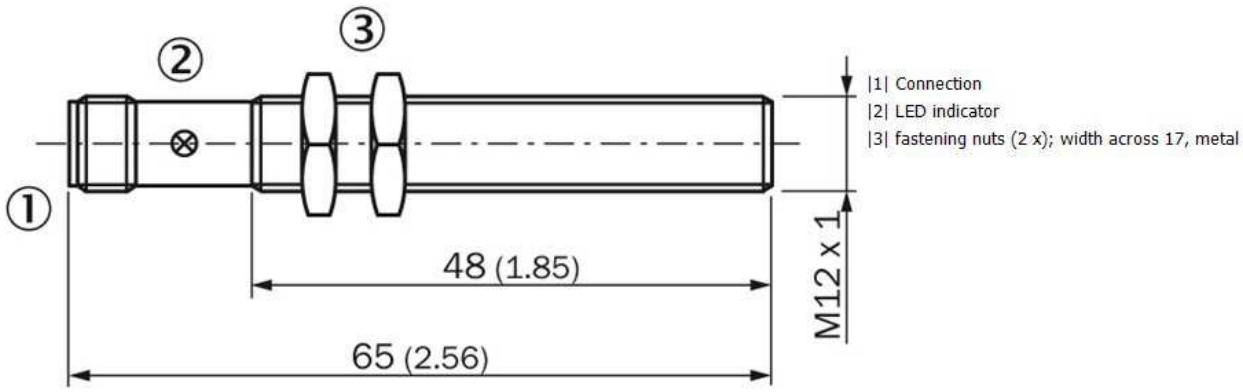
| | |
|---|---|
| B: | 24 mm |
| C: | 12 mm |
| D: | 12 mm |
| F: | 32 mm |
| Remark: | Associated graphic see "Installation" |


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## Installation note



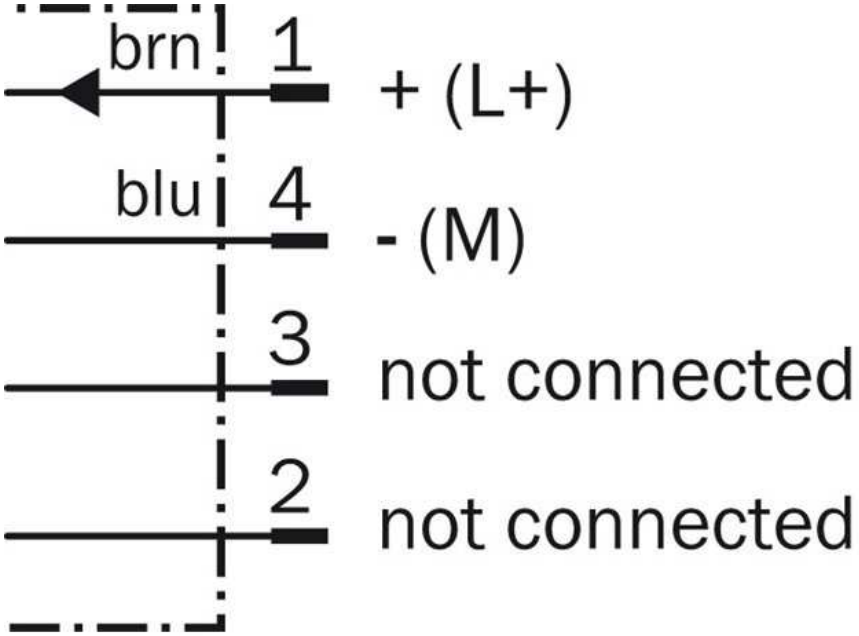

## Dimensional drawing



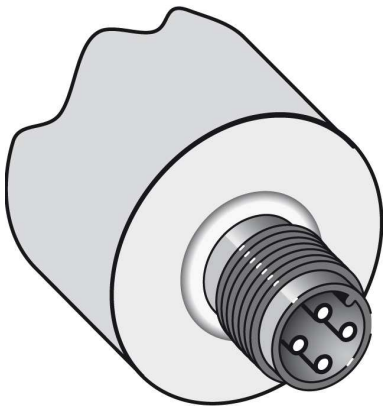


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## Connection diagram




## Connection type




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A4 4c int43

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