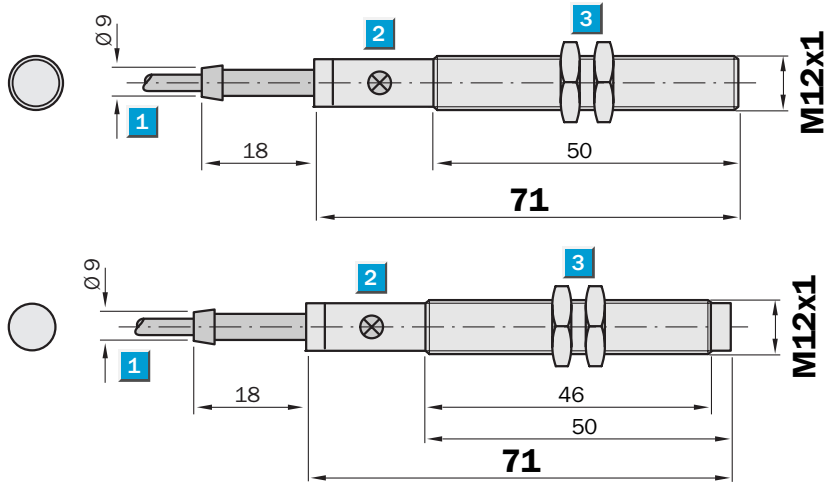


Sensing range
2 / 4 mm

Inductive sensor

- Broad supply voltage range in AC
- Robust brass housing, nickel-plated, with fine thread M12 x 1 mm
- Enclosure rating IP 67

Dimensional drawing

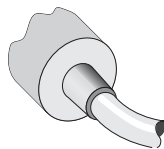


- 1 Connection
- 2 Display LED
- 3 Fastening nuts (2 x); width across 17, metal

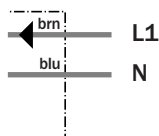


Connection type

- IM12-02BAO-ZUO
- IM12-02BAS-ZUO
- IM12-04NAO-ZUO
- IM12-04NAS-ZUO



2 x 0.5 mm²



See chapter Accessories
Mounting systems

| Technical specifications | | IM12- | 02BAO-ZUO | 02BAS-ZUO | 04NAO-ZUO | 04NAS-ZUO | | | | | | |
|---|---|-------|-----------|-----------|-----------|-----------|--|--|--|--|--|--|
| Sensing range S_n | 2 mm | | | | | | | | | | | |
| | 4 mm | | | | | | | | | | | |
| Electrical configuration | AC 2-wire | | | | | | | | | | | |
| Supply voltage V_s | AC 20 ... 250 V | | | | | | | | | | | |
| Voltage drop U _d | ≤ 8.5 V ¹⁾ | | | | | | | | | | | |
| Continuous current I_a | ≤ 250 mA (... +50 °C) | | | | | | | | | | | |
| Continuous current I_a | ≤ 200 mA (... +80 °C) | | | | | | | | | | | |
| Intermittent current I _k | 0.9 A (20 ms/0.5Hz) | | | | | | | | | | | |
| Min. load current | 8 mA | | | | | | | | | | | |
| Residual current | ≤ 3 mA (250 V AC) | | | | | | | | | | | |
| Residual current | ≤ 1.5 mA (120 V AC) | | | | | | | | | | | |
| Time delay before availability t _v | ≤ 10 ms | | | | | | | | | | | |
| Hysteresis H, of s _r | 1 ... 15 % | | | | | | | | | | | |
| Repeatability R | ≤ 10 % (U _b and T _a constant) ²⁾ | | | | | | | | | | | |
| Temperature drift, of s _r | ± 10 % | | | | | | | | | | | |
| EMC | According to EN 60947-5-2 | | | | | | | | | | | |
| Output function | Normally closed | | | | | | | | | | | |
| | Normally open | | | | | | | | | | | |
| Installation | Flush | | | | | | | | | | | |
| | Non-flush | | | | | | | | | | | |
| Connection type | Cable, PUR-PVC, 2 m | | | | | | | | | | | |
| Enclosure rating | IP 67 ³⁾ | | | | | | | | | | | |
| VDE protection class | □ | | | | | | | | | | | |
| Max. switching frequency | 25 Hz | | | | | | | | | | | |
| Dimensions | M12 x 1 ⁴⁾ | | | | | | | | | | | |
| Power-up pulse suppression | ✓ | | | | | | | | | | | |
| Shock/vibration stress | 30 g, 11 ms/10 ... 55 Hz, 1 mm | | | | | | | | | | | |
| Ambient temperature T _a | -25 °C ... +80 °C | | | | | | | | | | | |
| Housing material | Brass nickel-plated, plastic | | | | | | | | | | | |
| Tightening torque | 7 Nm | | | | | | | | | | | |

¹⁾ at I_a max

²⁾ of s_r

³⁾ according to EN 60529

⁴⁾ Thread diameter x pitch (mm)

| Order information | |
|-------------------|-----------|
| Type | Order no. |
| IM12-02BAO-ZUO | 7 902 119 |
| IM12-02BAS-ZUO | 7 902 118 |
| IM12-04NAO-ZUO | 7 902 121 |
| IM12-04NAS-ZUO | 7 902 120 |