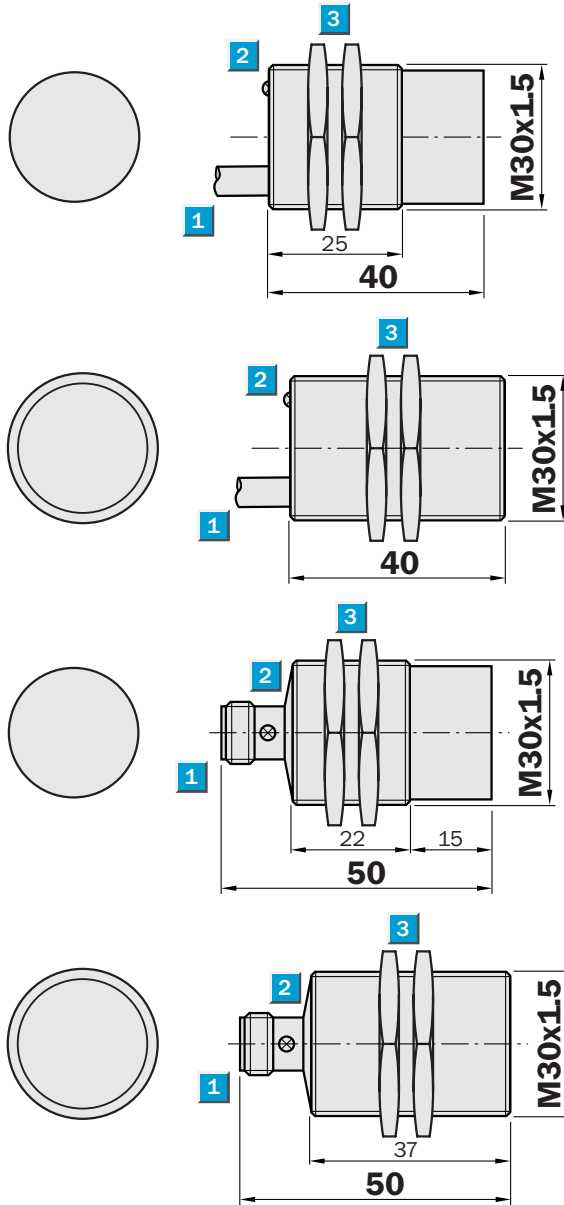


**Sensing range**  
10 / 15 mm

Inductive sensor

- Short-circuit protection (pulsed)
- Robust brass housing, nickel-plating with fine thread M30 x 1.5 mm
- Enclosure rating IP 67
- High switching frequency

### Dimensional drawing

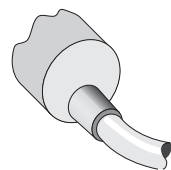


- 1 Connection
- 2 Display LED
- 3 Fastening nuts (2 x); width across 36, metal

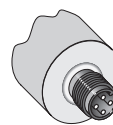
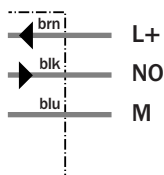
### Connection type

IM30-10BNS-ZUK  
IM30-10BPS-ZUK  
IM30-15NPS-ZUK  
IM30-15NNS-ZUK

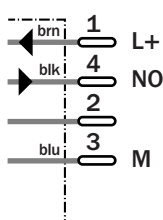
IM30-10BNS-ZCK  
IM30-10BPS-ZCK  
IM30-15NNS-ZCK  
IM30-15NPS-ZCK



3 x 0.5 mm<sup>2</sup>



M12, 4-pin



### See chapter Accessories

Connector, M12, 4-pin

Mounting systems

| Technical specifications                      |  | IM30- | 10BNS-ZUK | 10BPS-ZUK | 10BNS-ZCK | 10BPS-ZCK | 15NPS-ZUK | 15NNS-ZUK | 15NNS-ZCK | 15NPS-ZCK |  |  |
|---|--|-------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|--|
| <b>Sensing range S<sub>n</sub></b>            | 10 mm  |       |           |           |           |           |           |           |           |           |  |  |
|   | 15 mm  |       |           |           |           |           |           |           |           |           |  |  |
| <b>Electrical configuration</b>               | DC 3-wire  |       |           |           |           |           |           |           |           |           |  |  |
| <b>Supply voltage V<sub>s</sub></b>           | DC 10 ... 30 V   |       |           |           |           |           |           |           |           |           |  |  |
| Ripple U <sub>pp</sub>                        | ≤ 10 % <sup>1)</sup>   |       |           |           |           |           |           |           |           |           |  |  |
| Voltage drop U <sub>d</sub>                   | ≤ 1.5 V <sup>2)</sup>  |       |           |           |           |           |           |           |           |           |  |  |
| Power consumption                             | ≤ 10 mA <sup>3)</sup>  |       |           |           |           |           |           |           |           |           |  |  |
| <b>Continuous current I<sub>a</sub></b>       | ≤ 300 mA   |       |           |           |           |           |           |           |           |           |  |  |
| Time delay before availability t <sub>v</sub> | ≤ 15 ms  |       |           |           |           |           |           |           |           |           |  |  |
| Hysteresis H, of s <sub>r</sub>               | 1 ... 10 %   |       |           |           |           |           |           |           |           |           |  |  |
| Repeatability R                               | ≤ 3 % (U <sub>b</sub> and T <sub>a</sub> constant) <sup>4)</sup> |       |           |           |           |           |           |           |           |           |  |  |
| Temperature drift, of s <sub>r</sub>          | ± 10 %   |       |           |           |           |           |           |           |           |           |  |  |
| EMC   | According to EN 60947-5-2  |       |           |           |           |           |           |           |           |           |  |  |
| <b>Switching output</b>                       | NPN  |       |           |           |           |           |           |           |           |           |  |  |
|   | PNP  |       |           |           |           |           |           |           |           |           |  |  |
| <b>Output function</b>                        | Normally open  |       |           |           |           |           |           |           |           |           |  |  |
| <b>Installation</b>                           | Flush  |       |           |           |           |           |           |           |           |           |  |  |
|   | Non-flush  |       |           |           |           |           |           |           |           |           |  |  |
| <b>Connection type</b>                        | Cable, PUR-PVC, 2 m  |       |           |           |           |           |           |           |           |           |  |  |
|   | Connector, M12, 4-pin  |       |           |           |           |           |           |           |           |           |  |  |
| Max. switching frequency                      | 500 Hz   |       |           |           |           |           |           |           |           |           |  |  |
| Dimensions                                    | M30 x 1.5 <sup>5)</sup>  |       |           |           |           |           |           |           |           |           |  |  |
| <b>Wire-break protection</b>                  | ✓  |       |           |           |           |           |           |           |           |           |  |  |
| <b>Short-circuit protection</b>               | ✓ <sup>6)</sup>  |       |           |           |           |           |           |           |           |           |  |  |
| <b>Reverse polarity protection</b>            | ✓  |       |           |           |           |           |           |           |           |           |  |  |
| <b>Power-up pulse suppression</b>             | ✓  |       |           |           |           |           |           |           |           |           |  |  |
| Shock/vibration stress                        | 30 g, 11 ms/10 ... 55 Hz, 1 mm                                   |       |           |           |           |           |           |           |           |           |  |  |
| Ambient temperature T <sub>a</sub>            | -25 °C ... +70 °C  |       |           |           |           |           |           |           |           |           |  |  |
| <b>Housing material</b>                       | Brass nickel-plated, plastic                                     |       |           |           |           |           |           |           |           |           |  |  |
| Tightening torque                             | 50 Nm  |       |           |           |           |           |           |           |           |           |  |  |

<sup>1)</sup> of U<sub>b</sub>  
<sup>2)</sup> at I<sub>a</sub> max

<sup>3)</sup> without load  
<sup>4)</sup> of s<sub>r</sub>

<sup>5)</sup> Thread diameter x pitch (mm)  
<sup>6)</sup> (pulsed)

| Order information |           |
|-------------------|-----------|
| Type              | Order no. |
| IM30-10BNS-ZUK    | 1 017 446 |
| IM30-10BPS-ZUK    | 1 017 434 |
| IM30-10BNS-ZCK    | 1 017 448 |
| IM30-10BPS-ZCK    | 1 017 436 |
| IM30-15NPS-ZUK    | 1 017 435 |
| IM30-15NNS-ZUK    | 1 017 447 |
| IM30-15NNS-ZCK    | 1 017 449 |
| IM30-15NPS-ZCK    | 1 017 437 |