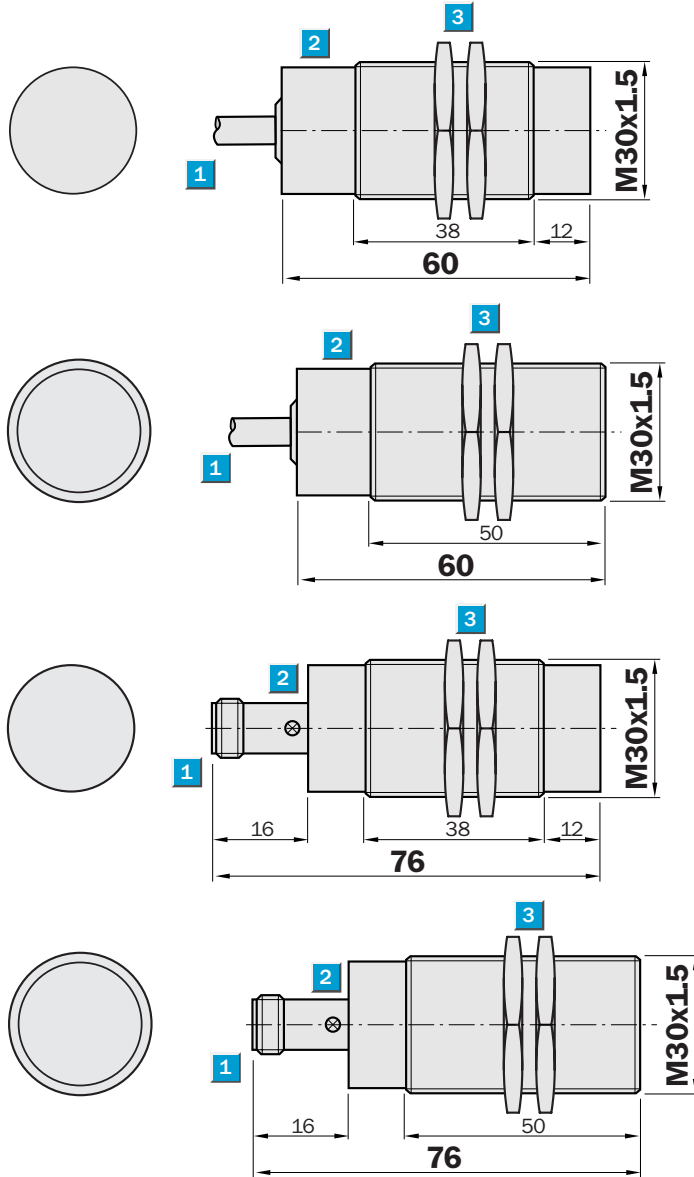


**Sensing range**  
10 / 15 mm

Inductive sensor

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

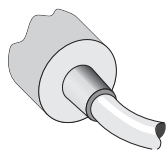
Dimensional drawing



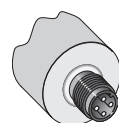
- 1 Connection
- 2 Display LED
- 3 Fastening nuts (2 x); width across 36, metal

Connection type

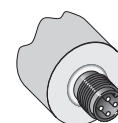
IM30-10BNS-ZW1	IM30-10BNS-ZC1	IM30-10BPO-ZC1
IM30-10BPS-ZW1	IM30-10BPS-ZC1	
IM30-15NNS-ZW1	IM30-15NNS-ZC1	
IM30-15NPS-ZW1	IM30-15NPS-ZC1	
IM30-15NPO-ZW1		



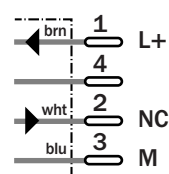
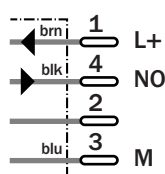
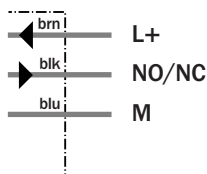
3 x 0.5 mm<sup>2</sup>



M12, 4-pin



M12, 4-pin



See chapter Accessories  
Connector, M12, 4-pin  
Mounting systems

Technical specifications		IM30-	10BNS-ZW1	10BPS-ZW1	10BNS-ZC1	10BPO-ZC1	10BPS-ZC1	15NNS-ZW1	15NPS-ZW1	15NPO-ZW1	15NNS-ZC1	15NPS-ZC1
<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 V <sup>2)</sup>											
Power consumption	≤ 20 mA <sup>3)</sup>											
<b>Continuous current I<sub>a</sub></b>	≤ 400 mA											
Time delay before availability t <sub>v</sub>	≤ 100 ms											
Hysteresis H, of s <sub>r</sub>	2 ... 10 %											
Repeatability R	≤ 2 % (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											
	Normally closed											
<b>Installation</b>	Flush											
	Non-flush											
<b>Connection type</b>	Cable, PVC, 2 m											
	Connector, M12, 4-pin											
<b>Enclosure rating</b>	IP 67 <sup>5)</sup>											
Max. switching frequency	200 Hz											
Dimensions	M30 x 1.5 <sup>6)</sup>											
<b>Short-circuit protection</b>	✓ <sup>7)</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	60 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> according to EN 60529  
<sup>6)</sup> Thread diameter x pitch (mm)

<sup>7)</sup> (pulsed)

Order information	
Type	Order no.
IM30-10BNS-ZW1	6 020 275
IM30-10BPS-ZW1	6 020 274
IM30-10BNS-ZC1	6 020 279
IM30-10BPO-ZC1	6 020 280
IM30-10BPS-ZC1	6 020 278
IM30-15NNS-ZW1	6 020 283
IM30-15NPS-ZW1	6 020 282
IM30-15NPO-ZW1	6 020 284
IM30-15NNS-ZC1	6 020 287
IM30-15NPS-ZC1	6 020 286