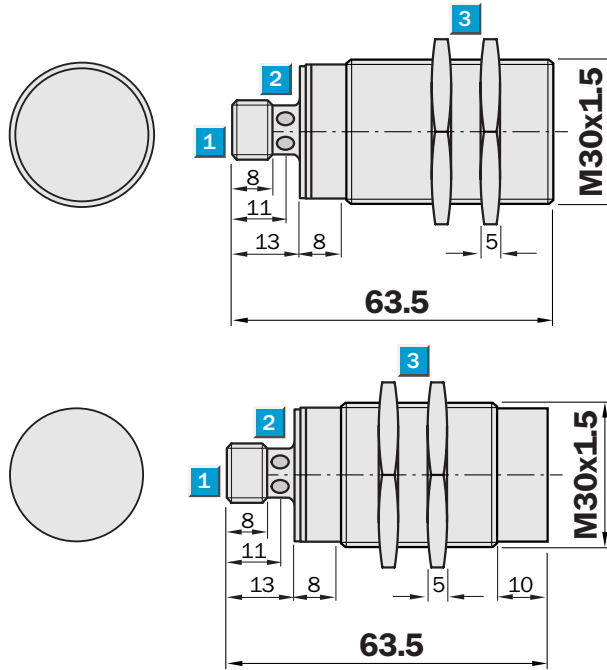


**Sensing range**  
20 / 40 mm

Inductive sensor

- Triple sensing range
- Robust stainless steel V4A, 316L one piece housing, with fine thread M30 x 1.5 mm
- Enclosure rating IP 69K + IP 68
- Especially suitable for use in the food and beverage sector
- Visual installation support

Dimensional drawing

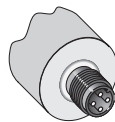


- 1 Connection
- 2 Display LED
- 3 Fastening nuts (2 x); width across 36, stainless steel V4A, 316L

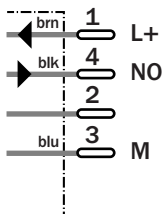


Connection type

- IM30-20BNS-NC1
- IM30-20BPS-NC1
- IM30-40NNS-NC1
- IM30-40NPS-NC1



M12, 4-pin



See chapter Accessories

Connector, M12, 4-pin

Technical specifications		IM30-	20BNS-NC1	20BPS-NC1	40NNS-NC1	40NPS-NC1						
<b>Sensing range S<sub>n</sub></b>	20 mm											
	40 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>	≤ 20 % <sup>1)</sup>											
Voltage drop U <sub>d</sub>	≤ 2 V <sup>2)</sup>											
Power consumption	≤ 12 mA <sup>3)</sup>											
<b>Continuous current I<sub>a</sub></b>	≤ 200 mA											
Time delay before availability t <sub>v</sub>	≤ 300 ms											
Hysteresis H, of s <sub>r</sub>	1 ... 15 %											
Repeatability R	≤ 5 % (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 <sup>5)</sup>											
<b>Installation</b>	Flush											
	Non-flush <sup>6)</sup>											
<b>Connection type</b>	Connector, M12, 4-pin											
<b>Enclosure rating</b>	IP68, IP 69K <sup>7)</sup>											
Max. switching frequency	100 Hz											
Dimensions	M30 x 1.5 <sup>8)</sup>											
<b>Short-circuit protection</b>	✓ <sup>9)</sup>											
<b>Reverse polarity protection</b>	✓											
<b>Power-up pulse suppression</b>	✓											
Shock/vibration stress	30 g, 11 ms/10 ... 55 Hz, 1 mm <sup>10)</sup>											
Ambient temperature T <sub>a</sub>	-25 °C ... +85 °C											
<b>Housing material</b>	Stainless steel V4A 1.4404, 316L											
Tightening torque	150 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> other output functions available on request  
<sup>6)</sup> see installation notes  
<sup>7)</sup> according to EN 60529  
<sup>8)</sup> Thread diameter x pitch (mm)  
<sup>9)</sup> (pulsed)  
<sup>10)</sup> according to IEC 60 947-5-2/7.4

**Correction factors:**

	Flush installation:	Non-flush installation:
Steel (ST37)	1.0	1.0
Copper	0.9	0.9
Aluminium	1.0	1.0
Brass	1.2	1.2
Stainless steel	0.5 / 0.9	- / 0.5

1 mm / 2 mm thick

**Order information**

Type	Order no.
IM30-20BNS-NC1	6 027 583
IM30-20BPS-NC1	6 027 582
IM30-40NNS-NC1	6 027 585
IM30-40NPS-NC1	6 027 584