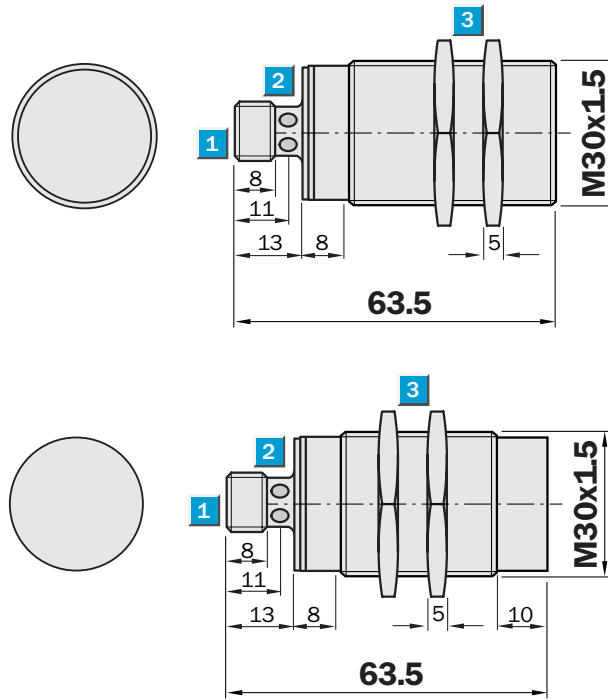


Sensing range
20 / 40 mm

Inductive sensor

- Triple sensing range
- Installation flush or non-flush in metal
- Robust stainless steel V4A, 316L one piece housing, with fine thread M30 x 1.5 mm
- Enclosure rating IP 69K
- Especially suitable for use in the food and beverage sector

Dimensional drawing

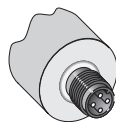


- 1 Connection
- 2 Display LED
- 3 Fastening nuts (2 x); width across 36, stainless steel V4A, 316L



Connection type

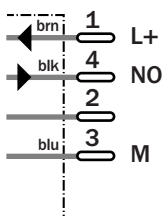
- IM30-20BNS-NC1
- IM30-20BPS-NC1
- IM30-40NNS-NC1
- IM30-40NPS-NC1



See chapter Accessories

Connector, M12, 4-pin

M12, 4-pin



Technical data		IM30-	20BNS-NC1	20BPS-NC1	40NNS-NC1	40NPS-NC1						
Sensing range S_n	40 mm											
	20 mm											
Electrical configuration	DC 3-wire											
Supply voltage V_s	DC 10 ... 30 V											
Ripple V_{pp}	$\leq 20\%$ ¹⁾											
Voltage drop V_d	$\leq 2\text{ V}$ ²⁾											
Current consumption	$\leq 15\text{ mA}$ ³⁾											
Continuous current I_a	$\leq 200\text{ mA}$											
Time delay before availability t_v	$\leq 80\text{ ms}$											
Hysteresis H (of s_r)	1 ... 15 %											
Repeatability R	$\leq 5\%$ (U_b and T_a constant) ⁴⁾											
Temperature drift, of s_r	$\pm 10\%$											
EMC	According to EN 60 947-5-2											
Switching output	PNP											
	NPN											
Output function	Normally open ⁵⁾											
Installation	Non-flush ⁶⁾											
	Flush											
Connection types	Plug, M12, 4-pin											
Enclosure rating	IP 69K											
Max. switching frequency	100 Hz											
Dimensions	M30 x 1.5 ⁷⁾											
Short-circuit protection	✓ ⁸⁾											
Reverse polarity protection	✓											
Power-up pulse suppression	✓											
Shock / vibration stress	30 g, 11 ms / 10 ... 55 Hz, 1 mm											
Ambient temperature T_a	-25 °C ... +70 °C											
Housing material	Stainless steel V4A, 316L											
Tightening material	150 Nm											

¹⁾ of U_b
²⁾ at I_a max

³⁾ without load
⁴⁾ of s_r

⁵⁾ other output functions available on request

⁶⁾ see installation notes
⁷⁾ thread diameter x pitch (mm)
⁸⁾ (pulsed)

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