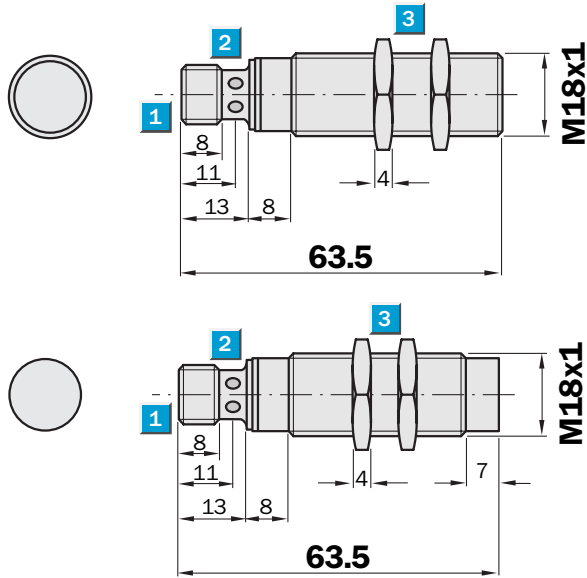


Sensing range
10 / 20 mm

Inductive sensor

- Triple sensing range
- Robust stainless steel V4A, 316L one piece housing, with fine thread M18 x 1 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 (2x); width across 24, stainless steel V4A, 316L



Connection type

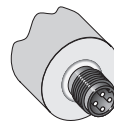
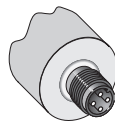
IM18-10BPO-NC1

IM18-10BNS-NC1

IM18-10BPS-NC1

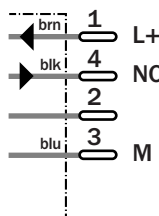
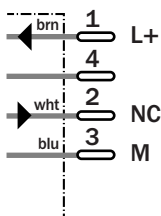
IM18-20NNS-NC1

IM18-20NPS-NC1



M12, 4-pin

M12, 4-pin



See chapter Accessories

Connector, M12, 4-pin

Technical specifications		IM18-	10BNS-NC1	10BPO-NC1	10BPS-NC1	20NNS-NC1	20NPS-NC1						
Sensing range S_n	10 mm												
	20 mm												
Electrical configuration	DC 3-wire												
Supply voltage V_s	DC 10 ... 30 V												
Ripple U _{pp}	≤ 20 % ¹⁾												
Voltage drop U _d	≤ 2 V ²⁾												
Power consumption	≤ 12 mA ³⁾												
Continuous current I_a	≤ 200 mA												
Time delay before availability t _v	≤ 300 ms												
Hysteresis H, of s _r	1 ... 15 %												
Repeatability R	≤ 5 % (U _b and T _a constant) ⁴⁾												
Temperature drift, of s _r	≤ 10 %												
EMC	According to EN 60947-5-2												
Switching output	NPN												
	PNP												
Output function	Normally open ⁵⁾												
	Normally closed ⁵⁾												
Installation	Flush												
	Non-flush ⁶⁾												
Connection type	Connector, M12, 4-pin												
Enclosure rating	IP68, IP 69K ⁷⁾												
Max. switching frequency	200 Hz												
Dimensions	M18 x 1 ⁸⁾												
Short-circuit protection	✓ ⁹⁾												
Reverse polarity protection	✓												
Power-up pulse suppression	✓												
Shock/vibration stress	30 g, 11 ms/10 ... 55 Hz, 1 mm ¹⁰⁾												
Ambient temperature T _a	-25 °C ... +85 °C												
Housing material	Stainless steel V4A 1.4404, 316L												
Tightening torque	50 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⁾ according to EN 60529
⁸⁾ Thread diameter x pitch (mm)

⁹⁾ (pulsed)
¹⁰⁾ according to IEC 60 947-5-2/7.4

Correction factors:

	Flush installation:	Non-flush installation:
Steel (ST37)	1.0	1.0
Copper	0.85	0.85
Aluminium	1.0	1.0
Brass	1.3	1.3
Stainless steel	0.4 / 0.8	0.4 / 0.8

1 mm / 2 mm thick

Order information

Type	Order no.
IM18-10BNS-NC1	6 027 578
IM18-10BPO-NC1	6 027 579
IM18-10BPS-NC1	6 027 577
IM18-20NNS-NC1	6 027 581
IM18-20NPS-NC1	6 027 580