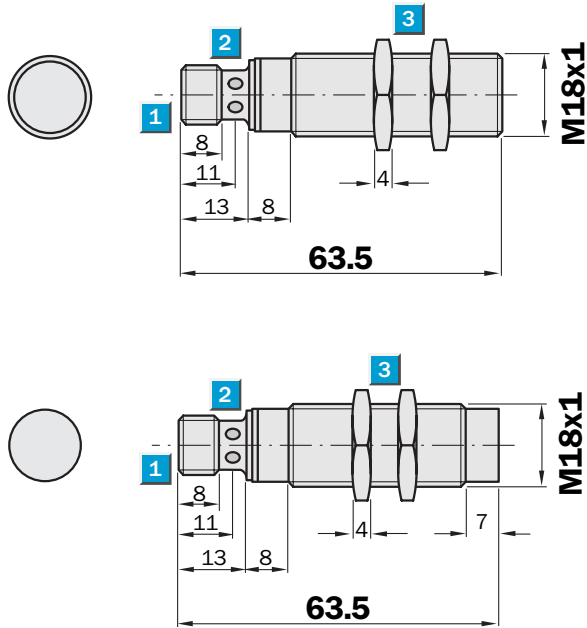


Sensing range
10 / 20 mm

Inductive sensor

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



Connection type

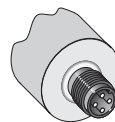
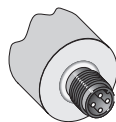
IM18-10BPO-NC1

IM18-10BNS-NC1

IM18-10BPS-NC1

IM18-20NNS-NC1

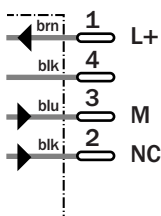
IM18-20NPS-NC1



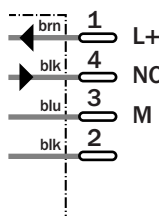
See chapter Accessories

Connector, M12, 4-pin

M12, 4-pin



M12, 4-pin



Technical data		IM18-	10BNS-NC1	10BPO-NC1	10BPS-NC1	20NNS-NC1	20NPS-NC1						
Sensing range S_n	20 mm												
	10 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⁾												
	Normally closed ⁵⁾												
Installation	Non-flush ⁶⁾												
	Flush												
Connection types	Plug, M12, 4-pin												
Enclosure rating	IP 69K												
Max. switching frequency	200 Hz												
Dimensions	M18 x 1 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 ... +75 °C												
Housing material	Stainless steel V4A, 316L												
Tightening material	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⁾ thread diameter x pitch (mm)
⁸⁾ (pulsed)

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