

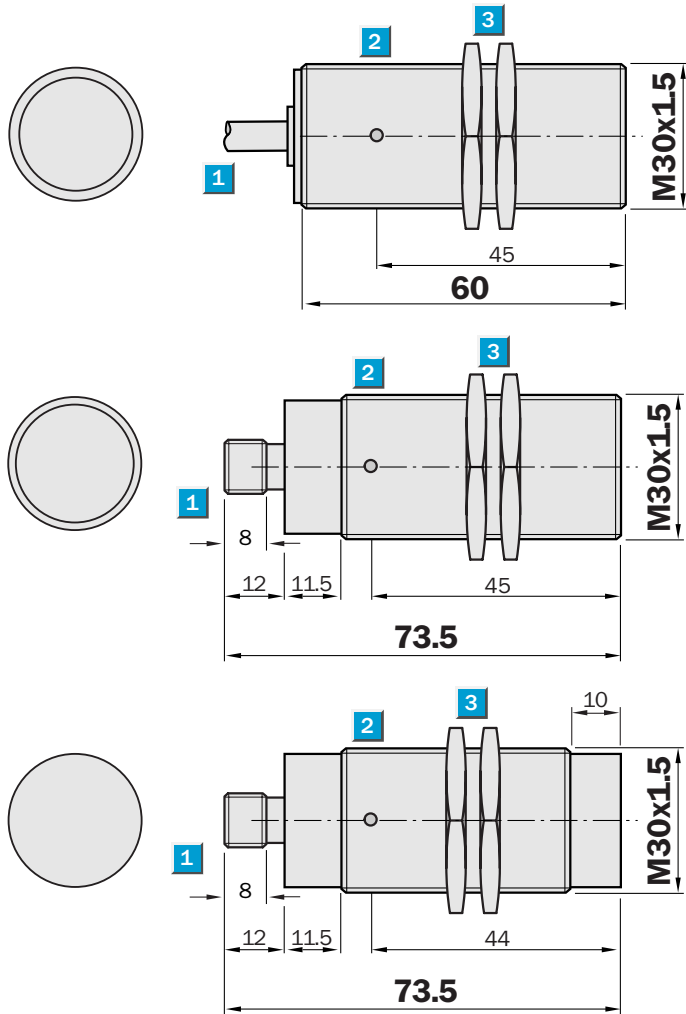
Sensing range
22 / 40 mm

Inductive sensor

- Triple sensing range
- Installation quasi flush or non-flush in metal
- Short-circuit protection (pulsed)
- Robust brass housing, chrome-plated with fine thread M30 x 1 mm
- Enclosure rating IP 67



Dimensional drawing

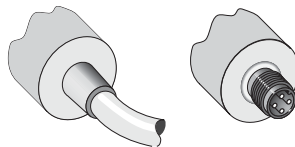


- 1 Connection
- 2 Display LED
- 3 Fastening nuts (2 x); width across 36, metal



Connection type

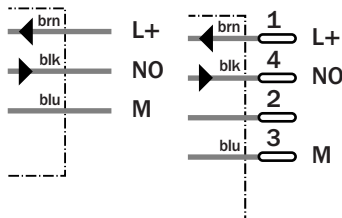
IM30-22BNS-ZW1	IM30-22BPS-ZC1
	IM30-40NPS-ZC1
	IM30-40NNS-ZC1



Accessories

Connector, M12, 4-pin
Mounting systems

3 x 0.34 mm ²	M12, 4-pin
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Technical specifications		IM30-	22BNS-ZW1	22BPS-ZC1	40NPS-ZC1	40NNS-ZC1						
Sensing range S_n	22 mm											
	40 mm											
Electrical configuration	DC 3-wire											
Supply voltage V_s	DC 10 ... 30 V											
Ripple U_{pp}	$\leq 20\%$ ¹⁾											
Voltage drop U_d	$\leq 2\text{ V}$ ²⁾											
Power consumption	$\leq 10\text{ mA}$ ³⁾											
Continuous current I_a	$\leq 200\text{ mA}$											
Time delay before availability t_v	$\leq 100\text{ ms}$											
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 60947-5-2											
Switching output	NPN											
	PNP											
Output function	Normally open ⁵⁾											
Installation	Quasi-flush ⁶⁾											
	Non-flush											
Connection type	Cable, PVC, 2 m											
	Connector, M12, 4-pin											
Max. switching frequency	200 Hz											
	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	Brass, chrome-plated, plastic											
Tightening torque	60 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⁾ When mounting in conductible materials the sensors must be installed with a distance A to the surface. A Steel,

metal = 6 mm/A Stainless steel = 2 mm
⁷⁾ Thread diameter x pitch (mm)
⁸⁾ (pulsed)

Ordering information	
Type	Part Number
IM30-22BNS-ZW1	6 027 520
IM30-22BPS-ZC1	6 027 521
IM30-40NPS-ZC1	6 027 522
IM30-40NNS-ZC1	6 033 087