

Inductive proximity sensors

IM 30 series, sensing range 10 / 15 mm

DC 3-wire, metal housing

Dimensions in mm



Standard series

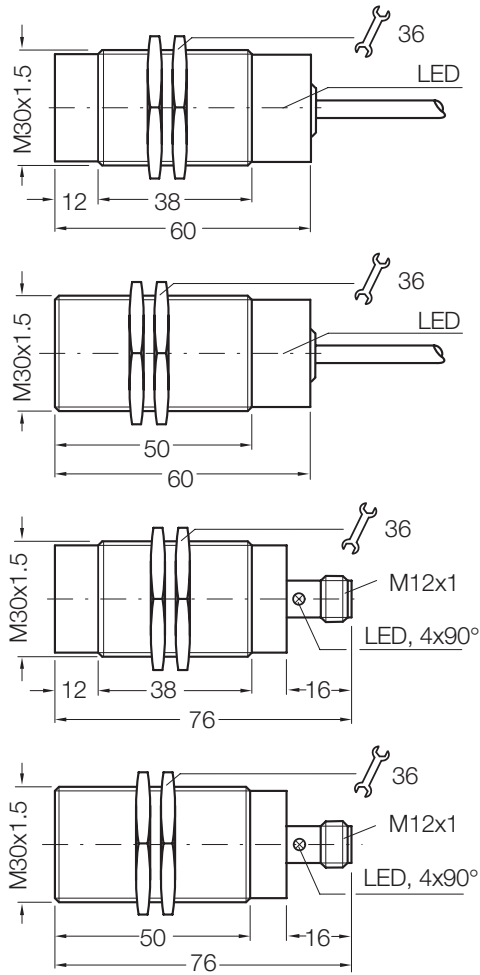
Features



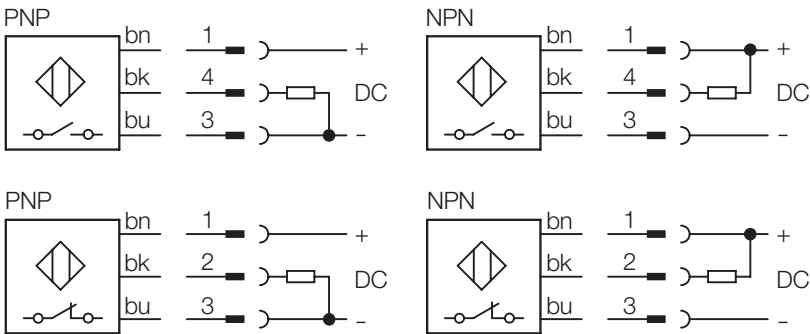
- Can be installed flush or non-flush in metal
- PNP or NPN output
- Normally open/ normally closed function
- High switching frequency
- Short-circuit protection (pulsed)
- Robust brass housing, nickel-plating with fine thread M30 x 1.5 mm
- Cable or connector
- Enclosure rating IP 67
- LED status indicator
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Accessories

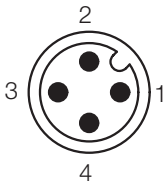
Round connectors
Mounting bracket



Connection diagram



Wire colour	Contact	Assignment
bn brown	1	+ V DC
bk black	2/4	NC/NO
bu blue	3	- V DC



Electrical and mechanical data

Operating voltage U_b	10 ... 30 V DC	Short-circuit protection (pulsed)	yes
Ripple U_{pp}	$\leq 10\%$	Reverse polarity protection	yes
Voltage drop U_d (at I_a max.)	≤ 1 V	Power-up pulse suppression	yes
Power consumption (without load)	≤ 20 mA	Enclosure rating to EN 60529	IP 67
Continuous current I_a	≤ 400 mA	Shock and vibration stress	30 g, 11 ms 10 to 55 Hz, 1 mm
Time delay before availability t_v	≤ 100 ms	Ambient temperature T_a	- 25 ... + 70 °C
Hysteresis H	2% - 10% of s_r	Housing material	Brass, nickel-plated, plastic
Repeatability R (U_b and T_a constant)	$\leq 2\%$ of s_r	Tightening torque	60 Nm
Temperature drift	$\pm 10\%$ of s_r	Connection cable	PVC, 3 x 0.5 mm ²
EMC	to EN 60 947-5-2		

Selection table

Sensing range s_n mm	Installation in metal	Switching output	Output function	Switching frequency f in Hz	Connection	Type	Order number
10		PNP		200	Cable 2 m	IM30-10BPS-ZW1	6020274
10		NPN		200	Cable 2 m	IM30-10BNS-ZW1	6020275
10		PNP		200	Connector M12 x 1 mm	IM30-10BPS-ZC1	6020278
10		NPN		200	Connector M12 x 1 mm	IM30-10BNS-ZC1	6020279
10		PNP		200	Connector M12 x 1 mm	IM30-10BPO-ZC1	6020280
15		PNP		200	Cable 2 m	IM30-15NPS-ZW1	6020282
15		NPN		200	Cable 2 m	IM30-15NNS-ZW1	6020283
15		PNP		200	Cable 2 m	IM30-15NPO-ZW1	6020284
15		PNP		200	Connector M12 x 1 mm	IM30-15NPS-ZC1	6020286
15		NPN		200	Connector M12 x 1 mm	IM30-15NNS-ZC1	6020287