



Advanced short series

Features



- Enhanced sensing range
- 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-plated with fine thread M12 x 1 mm
- Cable or connector
- Enclosure rating IP 67
- LED status indicator (for 4 x 90° connectors)
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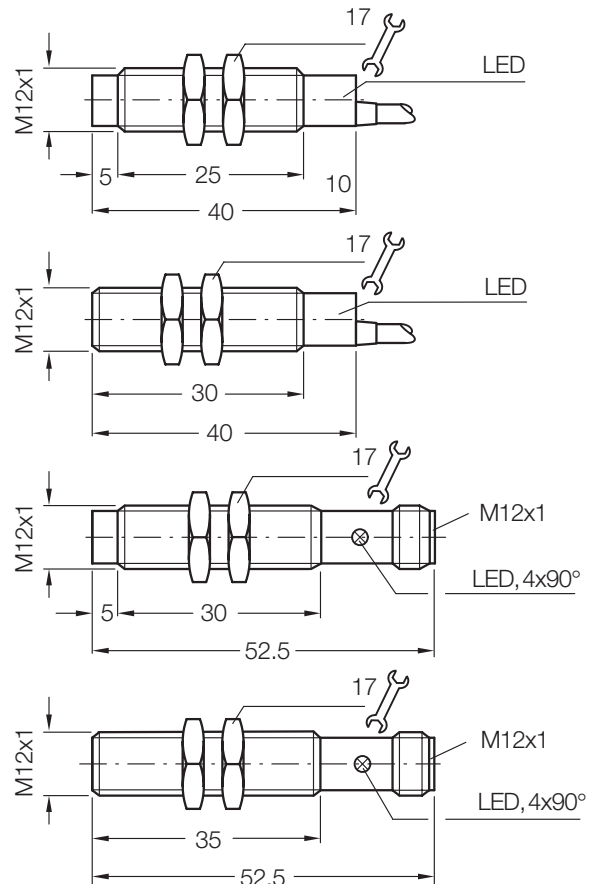
Accessories

Round connectors
Mounting bracket

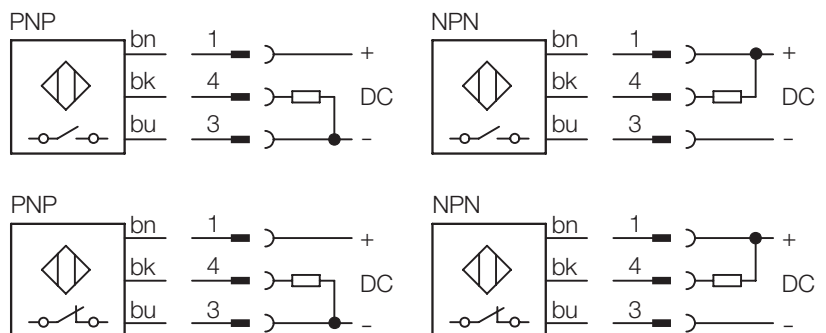
Inductive proximity sensors

IM 12 series, sensing range 4 / 8 mm

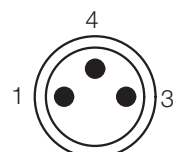
DC 3-wire, metal housing



Connection diagram



Wire colour	Contakt	Assignment
bn brown	1	+ V DC
bk black	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}	$\leq 10\%$ of U_b	Reverse polarity protection	yes
Voltage drop U_d (at I_a max.)	≤ 1.5 V	Power-up pulse suppression	yes
Power consumption (without load)	≤ 10 mA	Enclosure rating to EN 60529	IP 67
Continuous current I_a	≤ 300 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 ... + 75 °C
Hysteresis H	1% - 15% of s_r	Housing material	Brass nickel-plated, plastic
Repeatability R (U_b and T_a constant)	$\leq 5\%$ of s_r	Tightening torque	7.0 Nm
Temperature drift EMC	$\pm 10\%$ of s_r to EN 60 947-5-2	Connection cable	PVC, 3 x 0.22 mm ²

Selection table

Sensing range s_n mm	Installation in metal	Switching output	Output function	Switching frequency f in Hz	Connetion	Type	Order number
4		PNP		2000	Cable 2 m	IM12-04BPS-ZWK	6 025 682
4		NPN		2000	Cable 2 m	IM12-04BNS-ZWK	6 025 683
4		PNP		2000	Connector M12 x 1 mm	IM12-04BPS-ZCK	6 025 679
4		NPN		2000	Connector M12 x 1 mm	IM12-04BNS-ZCK	6 025 681
4		PNP		2000	Connector M12 x 1 mm	IM12-04BPO-ZCK	6 025 680
4		NPN		2000	Connector M12 x 1 mm	IM12-04BNO-ZCK	6 025 859
8		PNP		2000	Cable 2 m	IM12-08NPS-ZWK	6 025 684
8		NPN		2000	Cable 2 m	IM12-08NNS-ZWK	6 025 685
8		PNP		2000	Connector M12 x 1 mm	IM12-08NPS-ZCK	6 025 686
8		NPN		2000	Connector M12 x 1 mm	IM12-08NNS-ZCK	6 025 687
8		PNP		2000	Connector M12 x 1 mm	IM12-08NPO-ZCK	6 025 688
8		NPN		2000	Connector M12 x 1 mm	IM12-08NNO-ZCK	6 025 860