

Inductive proximity sensors

IM 18 series, sensing range 5 / 8 mm

DC 4-wire, metal housing

Dimensions in mm



Multitalents

Features

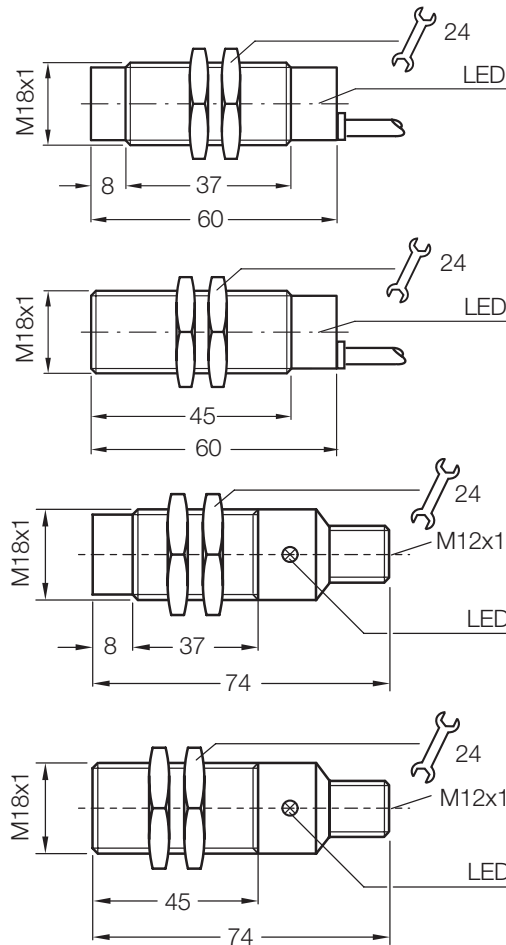


- Free configurable output functions in one sensor
PNP / NO, PNP / NC
NPN / NO, NPN / NC
- Can be installed flush or non-flush in metal
- Short-circuit protection
- Robust brass housing, nickel-plated with fine thread M18 x 1 mm
- Cable or connector
- Enclosure rating IP 67
- LED status indicator (NO function)

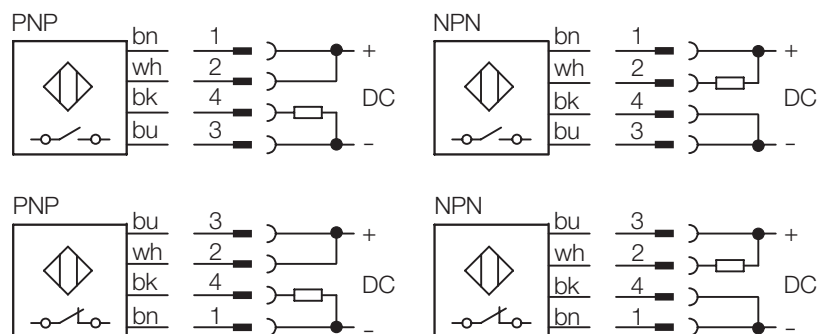


Accessories

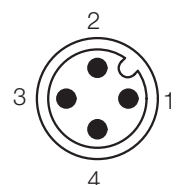
Round connectors
Mounting bracket



Connection diagram



Wire colour	Contact	configurable output function			
		PNP		NPN	
bn brown	1	+V DC	-V DC	+V DC	-V DC
wh white	2	+V DC	+V DC	NO	NC
bu blue	3	-V DC	+V DC	-V DC	+V DC
bk black	4	NO	NC	-V DC	-V DC



Electrical and mechanical data

Operating voltage U_b	10 ... 30 V DC	Short-circuit protection	yes
Ripple U_{pp}	$\leq 10\%$	Reverse polarity protection	yes
Voltage drop U_d (at I_a max.)	≤ 1.2 V	Power-up pulse suppression	yes
Power consumption (without load)	≤ 30 mA	Enclosure rating to EN 60529	IP 67
Continuous current I_a	≤ 100 mA	Shock and vibration stress	30 g, 11 ms 10 to 55 Hz, 1 mm
Time delay before availability t_v	≤ 200 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)	$\leq 5\%$ of s_r	Tightening torque	40 Nm
Temperature drift EMC	$\pm 10\%$ of s_r to prEN 60 947-5-2	Connection cable	PVC, 4 x 0.34 mm ²

Selection table

Sensing range s_n mm	Installation in metal	Switching output	Output function	Switching frequency f in Hz	Connection	Type	Order number
5		PNP/NPN config.		300	Cable 2 m	IM18-05BCP-ZW1	7902935
5		PNP/NPN config.		300	Connector M12 x 1 mm	IM18-05BCP-ZC1	7902936
8		PNP/NPN config.		300	Cable 2 m	IM18-08NCP-ZW1	7902937
8		PNP/NPN config.		300	Connector M12 x 1 mm	IM18-08NCP-ZC1	7902938