

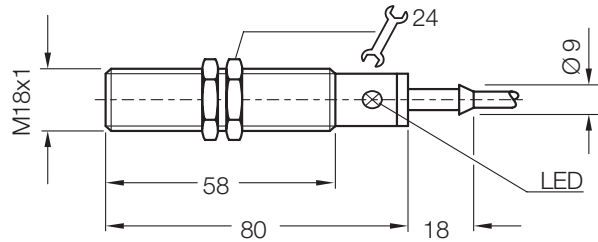
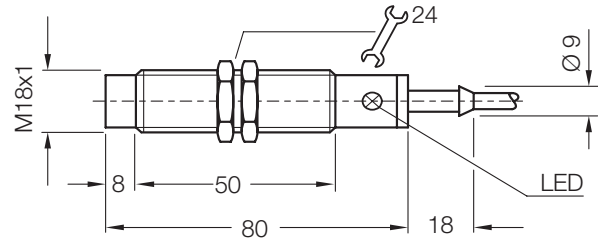


Inductive proximity sensors

IM 18 series, sensing range 5 / 8 mm

AC / DC 2-wire, metal housing

Dimensions in mm



Features

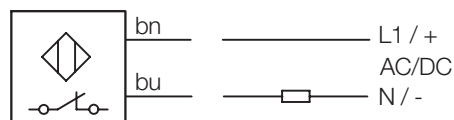
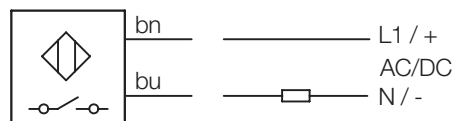


- Can be installed flush or non-flush in metal
- Broad operating voltage range in AC and DC
- Normally open/ normally closed function
- High switching frequency
- Robust brass housing, nickel-plated, with fine thread M18 x 1 mm
- Enclosure rating IP 67
- LED status indicator

Accessories

Mounting bracket

Connection diagram



Wire colour		Assignment
bn	brown	L1 / +
bu	blue	N / -

Electrical and mechanical data

Operating voltage U_b	20 ... 250 V AC / DC	Wire-break protection	-
Voltage drop U_d (at I_a max.)	≤ 6.5 V AC / 6 V DC	Short-circuit protection (pulsed)	-
Continuous current I_a	≤ 350 mA AC (... + 50 °C) ≤ 250 mA AC (... + 80 °C) ≤ 100 mA DC	Reverse polarity protection	-
Peak current I_K	2.2 A (20 ms/0.5 Hz)	Power-up pulse suppression	yes
Min. load current	5 mA	Enclosure rating to EN 60529	IP 67
Residual current	≤ 2.5 mA (250 V AC) ≤ 1.3 mA (110 V AC) ≤ 0.8 mA (24 V DC)	Protection class	□
Time delay before availability t_v	approx. 8 ms	Shock and vibration stress	30 g, 11 ms 10 to 55 Hz, 1 mm
Hysteresis H	1% - 15% of s_r	Ambient temperature T_a	- 25 ... + 80 °C
Repeatability R (U_b and T_a constant)	$\leq 10\%$ of s_r	Housing material	Brass, nickel-plated, plastic
Temperature drift	$\pm 10\%$ of s_r	Tightening torque	35 Nm
EMC	to EN 60 947-5-2	Connection cable	PUR-PVC, 2 x 0.5 mm ²

Selection table

Sensing range s_n mm	Installation in metal	Output function	Switching frequency f in Hz	Connection	Type	Order number
5			25 (AC) / 100 (DC)	Cable 2 m	IM18-05BUS-ZU0	7902122
5			25 (AC) / 100 (DC)	Cable 2 m	IM18-05BUO-ZU0	7902123
8			25 (AC) / 100 (DC)	Cable 2 m	IM18-08NUS-ZU0	7902124
8			25 (AC) / 100 (DC)	Cable 2 m	IM18-08NUO-ZU0	7902125