



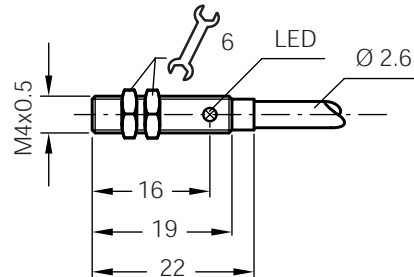
Miniature series

Inductive proximity sensors

IM 04 series, sensing range 0.6 mm

DC 3-wire, miniature metal housing

Dimensions in mm

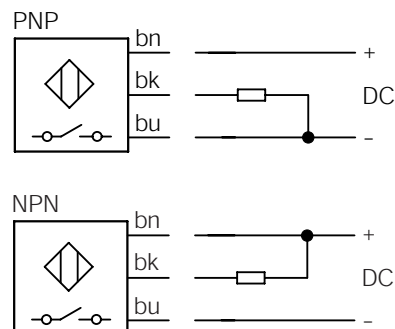


Features



- ▶ Can be installed flush
- ▶ PNP or NPN output
- ▶ Normally open function
- ▶ High switching frequency
- ▶ Short-circuit protection (pulsed)
- ▶ Robust brass housing, nickel-plated with fine thread M4 x 0.5 mm
- ▶ Cable
- ▶ Enclosure rating IP 67
- ▶ LED status indicator

Connection diagram



Wire colour		Assignment
bn	brown	+ V DC
bk	black	NO
bu	blue	- V DC

Electrical and mechanical data

Operating voltage U_b	10 ... 30 V DC	Short-circuit protection (pulsed)	yes
Ripple U_{pp}	$\leq 20\%$ of U_b	Reverse polarity protection	yes
Voltage drop U_d (at $I_a = 50$ mA)	≤ 0.6 V max.	Power-up pulse suppression	yes
Power consumption (without load)	10 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	≤ 10 ms	Ambient temperature T_a	- 25 ... + 70 °C
Hysteresis H typ.	10% of s_r	Housing material	Brass, nickel-plated, plastic
Repeatability R (U_b and T_a constant)	$\leq 2\%$	Tightening torque	0.8 Nm
Temperature drift	$\pm 10\%$ of s_r	Connection cable	PUR, 3 x 0.055 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
0,6		PNP		2000	Cable 2 m	IM04-0B6PS-ZU1	6020145
0,6		NPN		2000	Cable 2 m	IM04-0B6NS-ZU1	6020146

Normally closed function available on request