

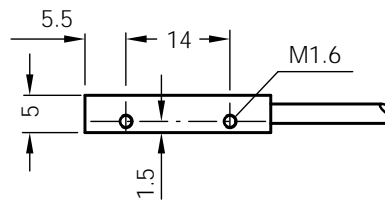
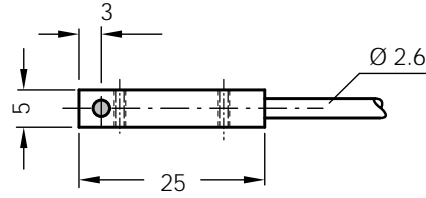


Inductive proximity sensors

IQ 05 series, sensing range 0.8 mm

DC 3-wire, miniature metal housing

Dimensions in mm

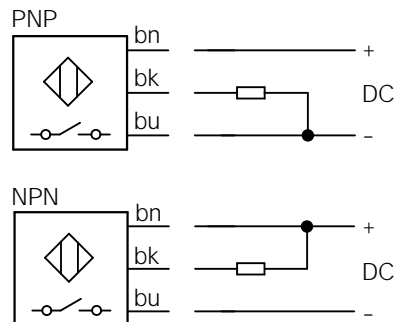


Features



- ▶ Can be installed flush
- ▶ PNP or NPN output
- ▶ Normally open function
- ▶ High switching frequency
- ▶ Short-circuit protection (pulsed)
- ▶ Robust brass housing, nickel-plated
- ▶ 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	≤ 2.0 V max. at $I_a = 200$ mA	Power-up pulse suppression	yes
Power consumption (without load)	≤ 10 mA	Enclosure rating to DIN 40050	IP 67
Continuous current I_a	≤ 200 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	10% of s_r	Housing material	Brass, nickel-plated, plastic
Repeatability R (U_b and T_a constant)	$\leq 1.5\%$ of s_r	Connection cable	PUR, 3 x 0.055 mm ²
Temperature drift EMC	$\pm 10\%$ of s_r 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
0.8		PNP		5000	Cable 2 m	IQ05-0B8PS-ZU1	6020161
0.8		NPN		5000	Cable 2 m	IQ05-0B8NS-ZU1	6020162