

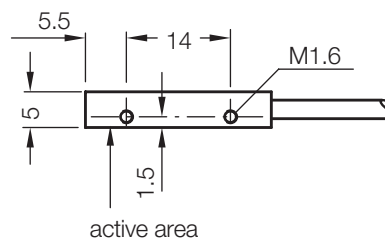
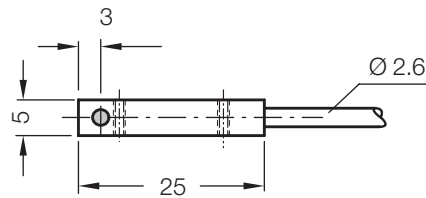


# Inductive proximity sensors

## IQ 05 series, sensing range 0.8 mm

### DC 3-wire, miniature metal housing

Dimensions in mm

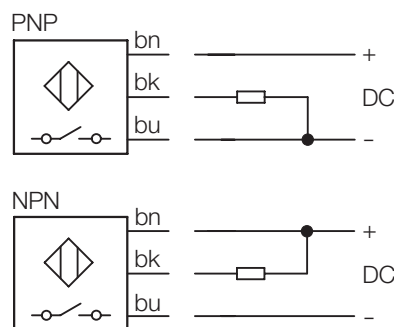


#### Features



- ▶ 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

<b>Operating voltage</b> $U_b$	10 ... 30 V DC	<b>Short-circuit protection (pulsed)</b>	yes
<b>Ripple</b> $U_{pp}$	$\leq 20\%$ of $U_b$	<b>Reverse polarity protection</b>	yes
<b>Voltage drop</b> $U_d$ (at $I_a = 200$ mA)	$\leq 2.0$ V max.	<b>Power-up pulse suppression</b>	yes
<b>Power consumption</b> (without load)	$\leq 10$ mA	<b>Enclosure rating</b> to EN 60529	IP 67
<b>Continuous current</b> $I_a$	$\leq 200$ mA	<b>Shock and vibration stress</b>	30 g, 11 ms 10 to 55 Hz, 1 mm
<b>Time delay before availability</b> $t_v$	$\leq 10$ ms	<b>Ambient temperature</b> $T_a$	- 25 ... + 70 °C
<b>Hysteresis</b> H	10% of $s_r$	<b>Housing material</b>	Brass, nickel-plated, plastic
<b>Repeatability</b> R ( $U_b$ and $T_a$ constant)	$\leq 1.5\%$ of $s_r$	<b>Connection cable</b>	PUR, 3 x 0.055 mm <sup>2</sup>
<b>Temperature drift</b>	$\pm 10\%$ of $s_r$		
<b>EMC</b>	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

Normally closed function available on request