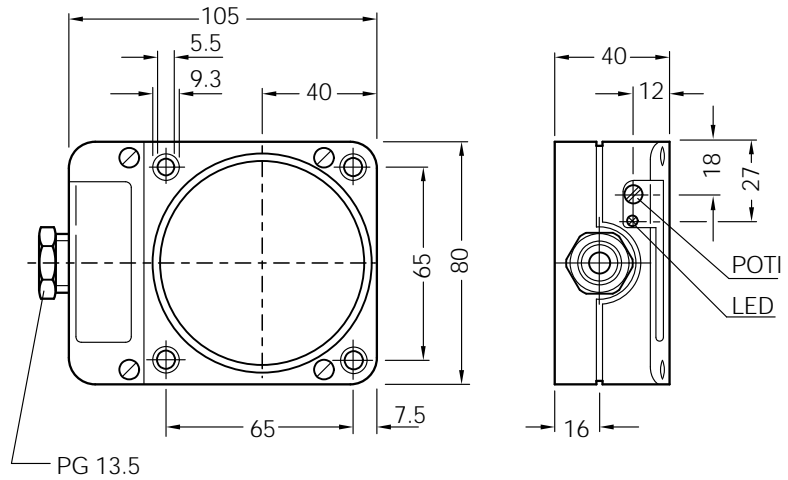


Inductive proximity sensors

IQ 80 series, sensing range 60 mm

DC 3-wire, plastic housing

Dimensions in mm

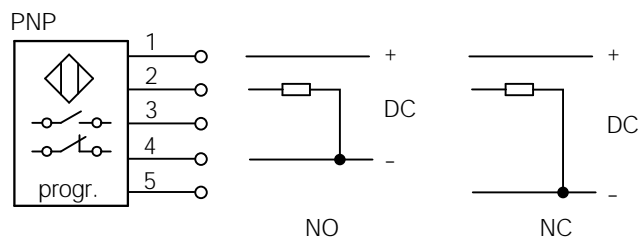


Features




- ▶ Can be installed non-flush in metal
- ▶ Adjustable switching distance between 20 to 60 mm
- ▶ PNP output
- ▶ Programmable NO/NC function
- ▶ Short-circuit protection (pulsed)
- ▶ Robust plastic housing
- ▶ Terminal connection
- ▶ Enclosure rating IP 65
- ▶ LED status indicator

Connection diagram


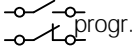


Terminal	Assignment
1	+ V DC
2	Output
3	free
4	- V DC / NO
5	- V DC / NC

Electrical and mechanical data

Operating voltage U_b	10 ... 36 V DC	Short-circuit protection (pulsed)	yes
Voltage drop U_d	≤ 2.5 V at I_a max. and U_b 24 V	Reverse polarity protection	yes
Power consumption (without load)	≤ 15 mA	Power-up pulse suppression	yes
Continuous current I_a	≤ 250 mA	Enclosure rating to DIN 40050	IP 65
Time delay before availability t_v	approx. 250 ms	Protection class	
Hysteresis H	1% - 15% of s_r	Shock and vibration stress	30 g, 11 ms 10 to 55 Hz, 1 mm
Repeatability R (U_b and T_a constant)	$\leq 10\%$ of s_r	Ambient temperature T_a	- 25 ... + 80 °C
Temperature drift	$\pm 10\%$ of s_r	Housing material	Plastic
EMC	to EN 60 947-5-2		

Selection table

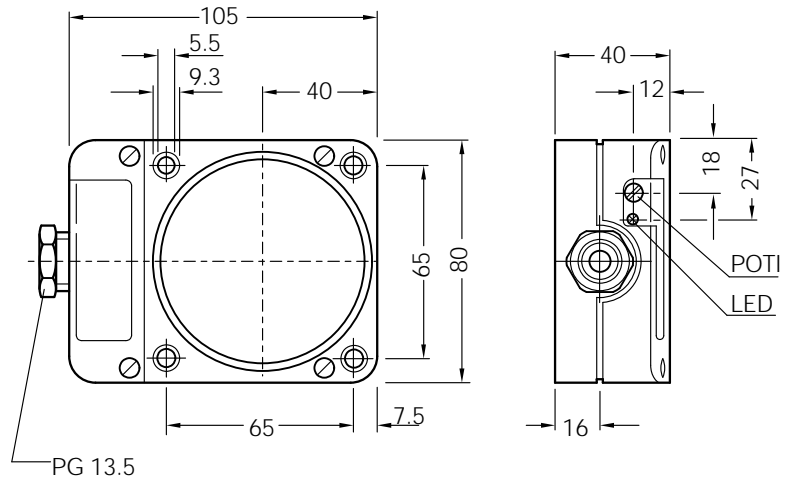
Sensing range s_n mm	Installation in metal	Switching output	Output function	Switching frequency f in Hz	Connection	Type	Order number
60		PNP		4	Terminal up to 2.5 mm ²	IQ80-60NPP-KK0	7900227

Inductive proximity sensors

IQ 80 series, sensing range 60 mm

AC / DC 2-wire, plastic housing

Dimensions in mm

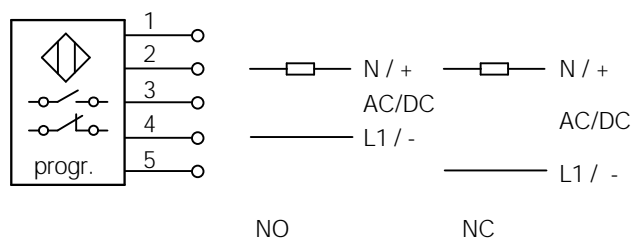


Features




- ▶ Can be installed non-flush in metal
- ▶ Adjustable switching distance between 20 and 60 mm
- ▶ Broad operating voltage range in AC and DC
- ▶ Programmable switching output: NO or NC
- ▶ Robust plastic housing
- ▶ Enclosure rating IP 65
- ▶ Terminal connection
- ▶ LED status indicator

Connection diagram


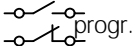


Terminal	Assignment
1	free
2	N / +
3	free
4	L1 / - (NO)
5	L1 / - (NC)

Electrical and mechanical data

Operating voltage U_b	20 ... 250 V AC / DC	Wire-break protection	-
Voltage drop U_d	≤ 6.5 V AC / ≤ 6 V DC at I_a max.	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 DIN 40050	IP 65
Residual current	≤ 2.5 mA (250 V AC) ≤ 1 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	Plastic
Temperature drift	$\pm 10\%$ of s_r		
EMC	to EN 60 947-5-2		

Selection table

Sensing range s_n mm	Installation in metal	Output function	Switching frequency f in Hz	Connection	Type	Order number
60			4	Terminal up to 2.5 mm ²	IQ80-60NUP-KK0	7902138