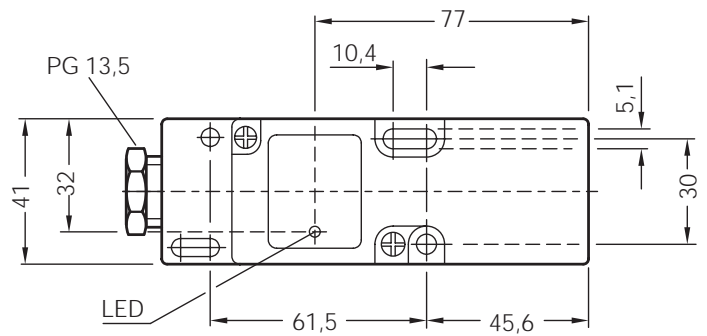
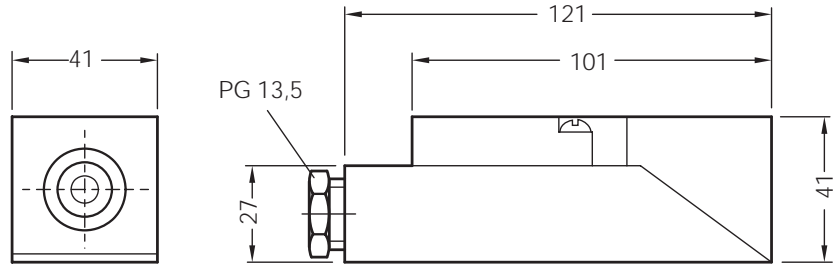


Inductive proximity sensors

IQ 40 series, sensing range 15 / 20 mm

DC 3-wire, plastic housing

Dimensions in mm



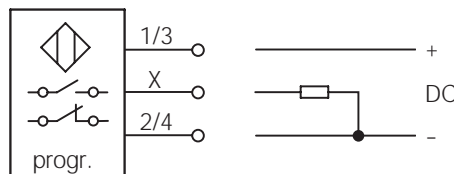
Features



- ▶ Can be installed flush or non-flush in metal
- ▶ Variable switching zone
- ▶ PNP output
- ▶ Programmable NO/NC function
- ▶ Short-circuit protection (pulsed)
- ▶ Plastic housing
- ▶ Terminal
- ▶ Enclosure rating IP 65
- ▶ LED status indicator
- ▶ Installation notes see page 17
- ▶  

Connection diagram

PNP




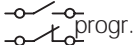

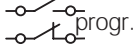
Programming with wirelinks
 Link closed: NO
 Link open: NC

Terminal	Assignment
1/3	+ V DC
X	NO/NC
2/4	- V DC

Electrical and mechanical data

Operating voltage U_b	10 ... 36 V DC	Short-circuit protection (pulsed)	yes
Voltage drop U_d (at I_a max. and U_b 24 V)	≤ 2.5 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 EN 60529	IP 65
Time delay before availability t_v	approx. 4 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
15		PNP		300	Terminal up to 2.5 mm ²	IQ40-15BPP-KK0	7900219
20		PNP		300	Terminal up to 2.5 mm ²	IQ40-20NPP-KK0	7900221



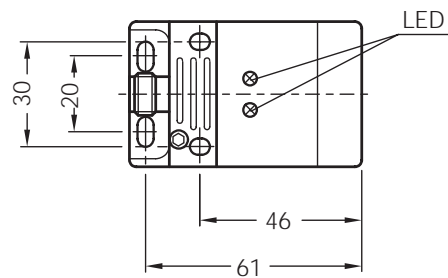
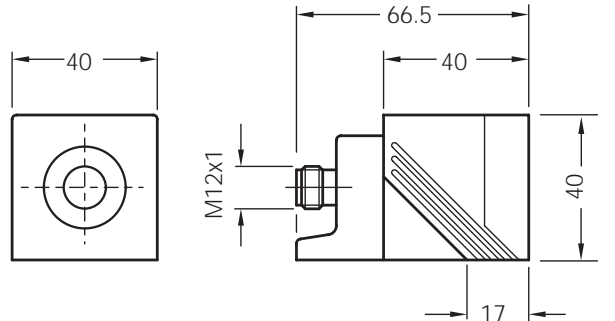
Short version

Inductive proximity sensors

IQ 40 series, sensing range 15 / 20 / 35 mm

DC 3/4-wire, plastic housing

Dimensions in mm



Features

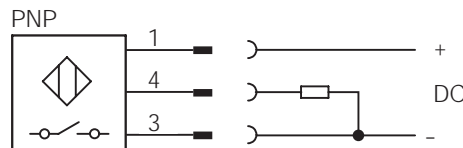


- ▶ Can be installed flush or non-flush in metal
- ▶ Variable switching zone
- ▶ PNP output
- ▶ NO and complementary output function
- ▶ Short-circuit protection (pulsed)
- ▶ Plastic housing
- ▶ Connector
- ▶ Enclosure rating IP 67
- ▶ LED status indicator
- ▶ LED function indicator
- ▶ Installation notes see page 17
- ▶ (only normaly open function)

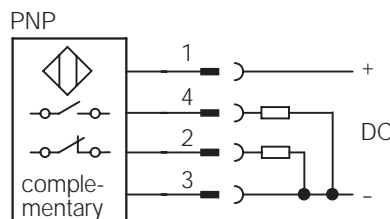
Accessories

Round connectors

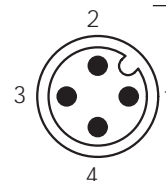
Connection diagram




Contact	Assignment
1	+ V DC
4	NO
3	- V DC
2	free











Contact	Assignment
1	+ V DC
2	NC
3	- V DC
4	NO



Electrical and mechanical data

Operating voltage U_b	10 ... 36 V DC	Short-circuit protection (pulsed)	yes
Voltage drop U_d (at I_a max. and U_b 24 V)	≤ 2.5 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 EN 60529	IP 67
Time delay before availability t_v	approx. 4 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 ... + 70 °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
15		PNP		300	Connector M12 x 1 mm	IQ40-15BPS-KC0	7900223
20		PNP	 antivalent	200	Connector M12 x 1 mm	IQ40-20BPP-KCK	6012014
35		PNP		100	Connector M12 x 1 mm	IQ40-35NPS-KC0	7900224
35		PNP	 antivalent	100	Connector M12 x 1 mm	IQ40-35NPP-KCK	6012015