

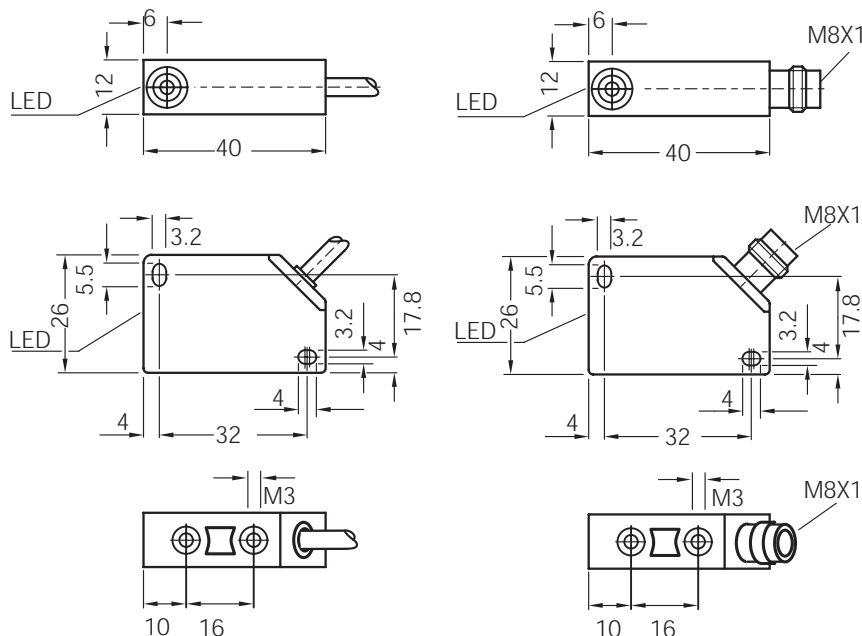


Inductive proximity sensors

IQ 12 series, sensing range 3 / 6 mm

DC 3-wire, plastic housing

Dimensions in mm



Features

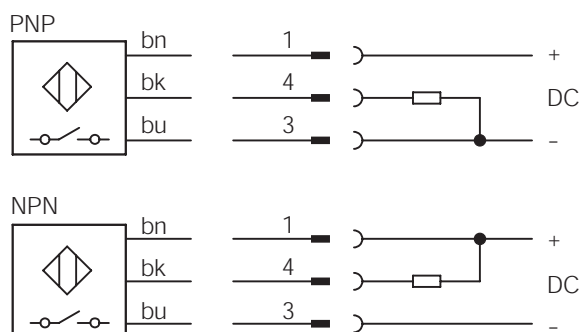


- Can be installed flush or non-flush in metal
- PNP or NPN output
- High switching frequency
- Short-circuit protection (pulsed)
- Plastic housing
- Cable or connector
- Enclosure rating IP 67
- LED status indicator
- Installation notes see page 17

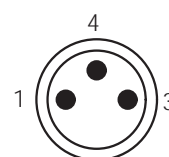
Accessories

Round connectors

Connection diagram



Wire colour	Contact	Assignment
bn brown	1	+ V DC
bk black	4	NO
bu blue	3	- V DC



Electrical and mechanical data

Operating voltage U_b	6 ... 36 V DC	Wire-break protection	yes
Ripple U_{pp}	$\leq 10\%$ of U_b	Short-circuit protection (pulsed)	yes
Voltage drop U_d (at I_a max.)	≤ 1.5 V	Reverse polarity protection	yes
Power consumption (without load)	≤ 5 mA	Power-up pulse suppression	yes
Continuous current I_a	≤ 300 mA	Enclosure rating to EN 60529	IP 67
Time delay before availability t_v	≤ 10 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 ... + 75 °C
Repeatability R (U_b and T_a constant)	$\leq 1\%$ of s_r	Housing material	Plastic
Temperature drift EMC	$\pm 10\%$ of s_r to EN 60 947-5-2	Connection cable	PVC, 3 x 0.25 mm ²

Selection table

Sensing range s_n mm	Installation in metal	Switching output	Output function	Switching frequency f in Hz	Connection	Type	Order number
3		PNP		3000	Cable 2 m	IQ12-03BPS-KW1	1016275
3		NPN		3000	Cable 2 m	IQ12-03BNS-KW1	1016299
3		PNP		3000	Connector M8 x 1 mm	IQ12-03BPS-KT1	1016276
3		NPN		3000	Connector M8 x 1 mm	IQ12-03BNS-KT1	1016461
6		PNP		1000	Cable 2 m	IQ12-06NPS-KW1	1016463
6		PNP		1000	Connector M8 x 1 mm	IQ12-06NPS-KT1	1016467