

IQ40-40NPSKKOS

INDUCTIVE PROXIMITY SENSORS





Ordering information

Туре	part no.
IQ40-40NPSKK0S	1071851

Other models and accessories → www.sick.com/IQG



Detailed technical data

Features

Housing	Rectangular
Housing	Standard design
Dimensions (W x H x D)	40 mm x 40 mm x 118 mm
Sensing range S _n	40 mm
Safe sensing range S _a	32.4 mm
Installation type	Non-flush
Switching frequency	100 Hz
Connection type	Cable gland
Switching output	PNP
Switching output detail	PNP
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP67, IP68, IP69K
Special applications	Difficult application conditions

Mechanics/electronics

Supply voltage	10 V DC 30 V DC
Ripple	≤ 10 V _{pp} ¹⁾
Voltage drop	≤ 2 V
Time delay before availability	≤ 50 ms
Hysteresis	3 % 15 % ²⁾
Reproducibility	≤ 6 %
Temperature drift (of S _r)	± 10 %

¹⁾ Of Ub.

 $^{^{2)}}$ Of S_{r} .

³⁾ Reference voltage: 50 V DC.

Continuous current I _a	≤ 200 mA
No load current	12.5 mA
Cable gland clamping area	M20 1.5
Wire size	≤ 2.5 mm²
Short-circuit protection	√
Power-up pulse protection	√
Shock and vibration resistance	30 g, 11 ms / 10 55 Hz, 1 mm
Ambient operating temperature	-25 °C +85 °C
Ambient temperature, storage	-40 °C +85 °C
Housing material	Plastic, PA 66
Sensing face material	Plastic, PA 66
Tightening torque, max.	1.8 Nm
Protection class	II ³⁾
UL File No.	E348498

 $^{^{1)}}$ Of Ub. $^{2)}$ Of S_r.

Safety-related parameters

MTTF _D	1,125 years
DC _{avg}	0 %
T _M (mission time)	20 years

Reduction factors

Note	The values are reference values which may vary
Stainless steel (V2A, 304)	Approx. 0.8
Aluminum (AI)	Approx. 0.34
Copper (Cu)	Approx. 0.27
Brass (Br)	Approx. 0.38

Installation note

Remark	Associated graphic see "Installation"
A	42 mm
В	150 mm
С	40 mm
D	120 mm
E	40 mm
F	150 mm

Certificates

EU declaration of conformity	1
UK declaration of conformity	1
ACMA declaration of conformity	1
Moroccan declaration of conformity	✓

³⁾ Reference voltage: 50 V DC.

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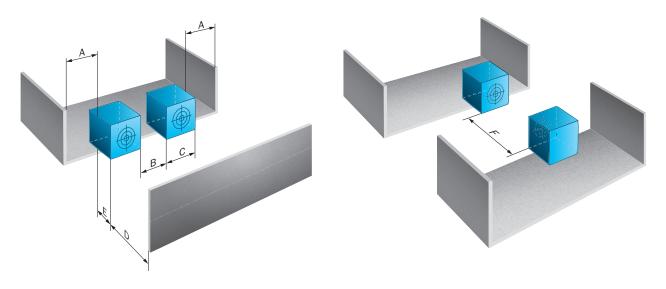
INDUCTIVE PROXIMITY SENSORS

China RoHS	✓
cULus certificate	✓

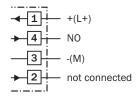
Classifications

ECLASS 5.0	27270101
ECLASS 5.1.4	27270101
ECLASS 6.0	27270101
ECLASS 6.2	27270101
ECLASS 7.0	27270101
ECLASS 8.0	27270101
ECLASS 8.1	27270101
ECLASS 9.0	27270101
ECLASS 10.0	27270101
ECLASS 11.0	27270101
ECLASS 12.0	27274001
ETIM 5.0	EC002714
ETIM 6.0	EC002714
ETIM 7.0	EC002714
ETIM 8.0	EC002714
UNSPSC 16.0901	39122230

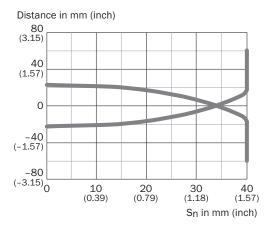
Installation note



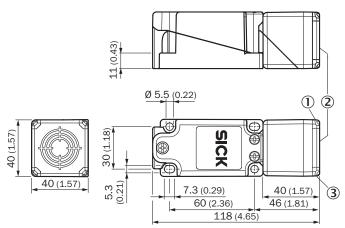
Connection diagram Cd-342



Response diagram



Dimensional drawing IQG Standard, cable gland



Dimensions in mm (inch)

- ① LED output state, yellow
- ② Sensing face
- 3 operational status LED, green

Recommended accessories

Other models and accessories → www.sick.com/IQG

	Brief description	Туре	part no.
connectors and cables			
	 Connection type head A: Female connector, M12, 4-pin, straight, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm² 	DOS-1204-G	6007302
The state of the s	 Connection type head A: Male connector, M12, 4-pin, straight, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm² 	STE-1204-G	6009932
P	Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones	YF2A14-050VB3XLEAX	2096235
3	Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones	YG2A14-050VB3XLEAX	2095897
	Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2A14-050UB3XLEAX	2095608

SICK AT A GLANCE

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We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

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