



Ordering information

Type	Part no.
IQ40-20BNOKK0S	1071849

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	20 mm
Safe sensing range S_a	16.2 mm
Installation type	Flush
Switching frequency	150 Hz
Connection type	Cable gland
Switching output	NPN
Output function	NC
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	$\leq 10 V_{pp}$ ¹⁾
Voltage drop	$\leq 2 V$
Time delay before availability	$\leq 50 ms$
Hysteresis	3 % ... 15 % ²⁾
Reproducibility	$\leq 2 \%$
Temperature drift (of S_n)	$\pm 10 \%$
Continuous current I_a	$\leq 200 mA$
Cable gland clamping area	M20 1.5
Wire size	$\leq 2.5 mm^2$

¹⁾ Of U_b .

²⁾ Of S_r .

³⁾ Reference voltage: 50 V DC.

Short-circuit protection	✓
Reverse polarity 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.

³⁾ Reference voltage: 50 V DC.

Safety-related parameters

MTTF_D	1,406 years
DC_{avg}	0 %

Reduction factors

Note	The values are reference values which may vary
Stainless steel (V2A, 304)	Approx. 0.71
Aluminum (Al)	Approx. 0.3
Copper (Cu)	Approx. 0.25
Brass (Br)	Approx. 0.36

Installation note

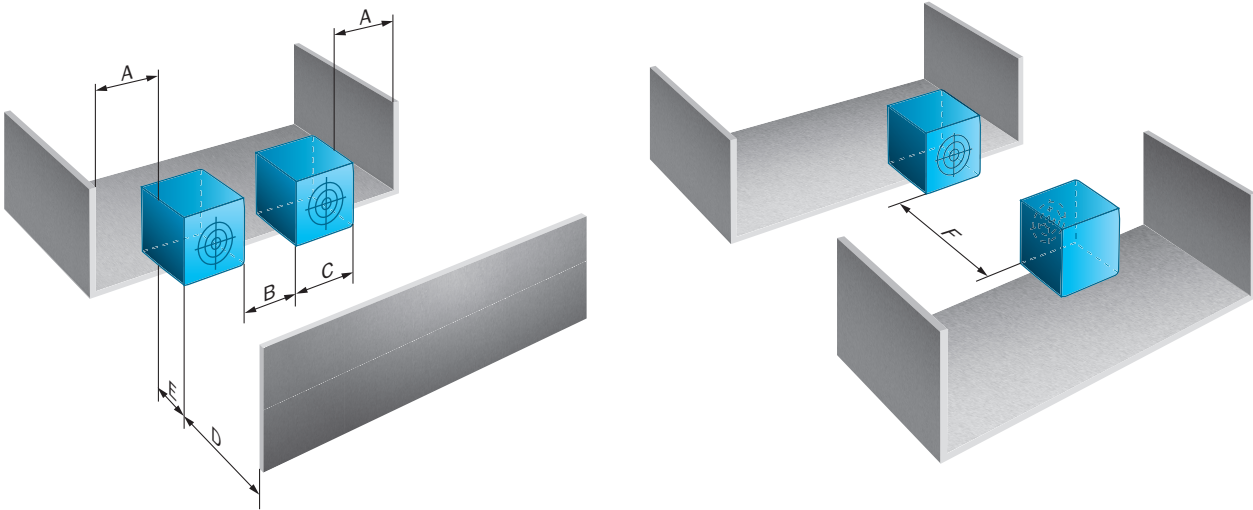
Remark	Associated graphic see "Installation"
A	0 mm
B	40 mm
C	40 mm
D	60 mm
E	0 mm
F	70 mm

Classifications

ECl@ss 5.0	27270101
ECl@ss 5.1.4	27270101
ECl@ss 6.0	27270101
ECl@ss 6.2	27270101
ECl@ss 7.0	27270101
ECl@ss 8.0	27270101
ECl@ss 8.1	27270101
ECl@ss 9.0	27270101
ECl@ss 10.0	27270101

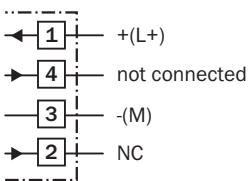
ECI@ss 11.0	27270101
ETIM 5.0	EC002714
ETIM 6.0	EC002714
ETIM 7.0	EC002714
ETIM 8.0	EC002714
UNSPSC 16.0901	39122230

Installation note



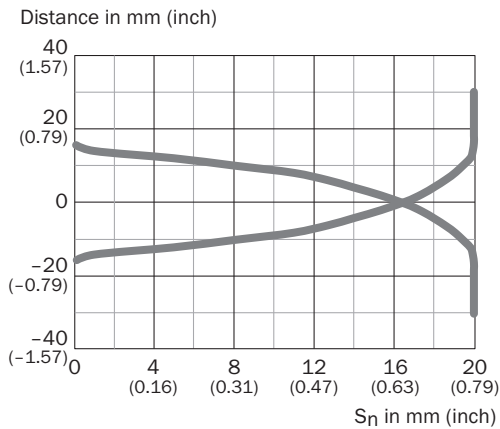
Connection diagram

Cd-341



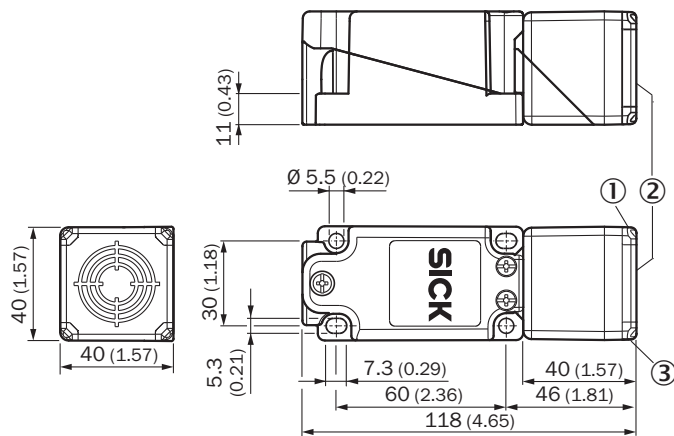
Characteristic curve

IQ40-20Bxxxx



Dimensional drawing (Dimensions in mm (inch))

IQG Standard, cable gland






- 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	Type	Part no.
Plug connectors and cables			
	Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YF2A14-050VB3XLEAX	2096235

	Brief description	Type	Part no.
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YG2A14-050VB3XLEAX	2095897
	Head A: female connector, M12, 4-pin, straight Head B: - Cable: unshielded	DOS-1204-G	6007302
	Head A: male connector, M12, 4-pin, straight Head B: - Cable: unshielded	STE-1204-G	6009932

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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.

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