



S10B-9011BA

S100

2D LIDAR SENSORS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
S10B-9011BA	1042266

Other models and accessories → www.sick.com/S100



Detailed technical data

Features

Application	Indoor
Light source	Infrared (905 nm)
Laser class	1, complies with 21 CFR 1040.10 and 1040.11 except for the tolerance according to "Laser Notice No. 50" from June 24, 2007 (IEC 60825-1:2014, EN 60825-1:2014)
Aperture angle	Horizontal 270°
Scanning frequency	25 Hz
Angular resolution	0.5° 1°
Working range	0 m ... 10 m
Scanning range	At 10% remission 4.5 m

Performance

Detectable object shape	Almost any (diameter: 30 mm, 40 mm, 50 mm, 70 mm, 150 mm (selectable))
Integrated application	Field evaluation
Number of field sets	1 field pair (2 fields)
Simultaneous evaluation cases	1 (2 fields)

Interfaces

Serial	✓, RS-232
CANopen	✓
Switching inputs	1 (standby)
Switching outputs	5 (Q1, Q2, Q̄1, Q̄2, diagnosis)
Optical indicators	1 7-segment display (contamination warning, initial condition)

Mechanics/electronics

Electrical connection	1 x system plug with screw terminal block (accessory)
Operating voltage	16.8 V DC ... 30 V DC

Power consumption	8 W
Output current	≤ 250 mA
Housing color	Black (RAL 9005)
Enclosure rating	IP65 (EN 60529, Section 14.2.5)
Protection class	II (VDE 0106, EN50178)
Weight	1.2 kg, without connecting cables
Dimensions (L x W x H)	105 mm x 102 mm x 152 mm

Ambient data

Object remission	1.8 % ... > 1,000 % (reflectors)
Electromagnetic compatibility (EMC)	EN 61000-6-2:2005-08
Vibration resistance	IEC 60068-2-6:2007-12
Shock resistance	IEC 60068-2-29:1987
Ambient operating temperature	-10 °C ... +50 °C
Storage temperature	-30 °C ... +70 °C

General notes

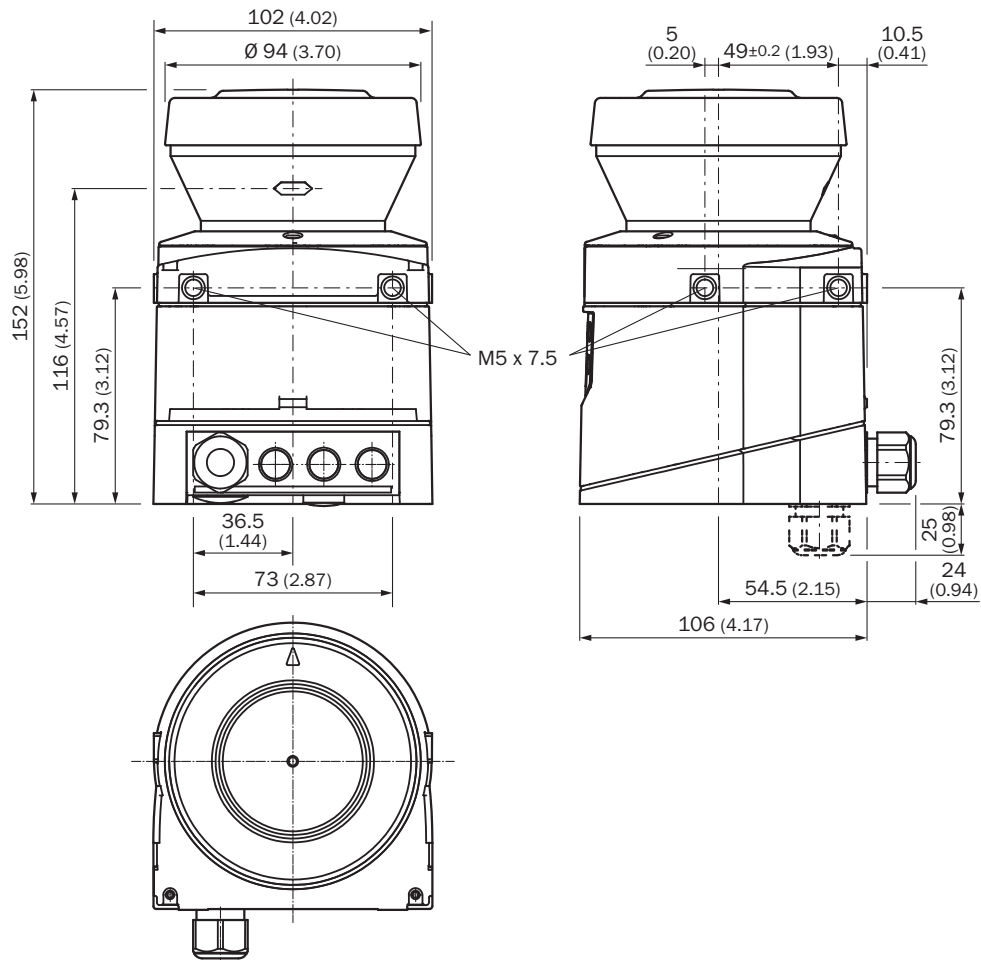
Note on use	The sensor does not constitute a safety component as defined by relevant legislation on machine safety.
--------------------	---

Classifications

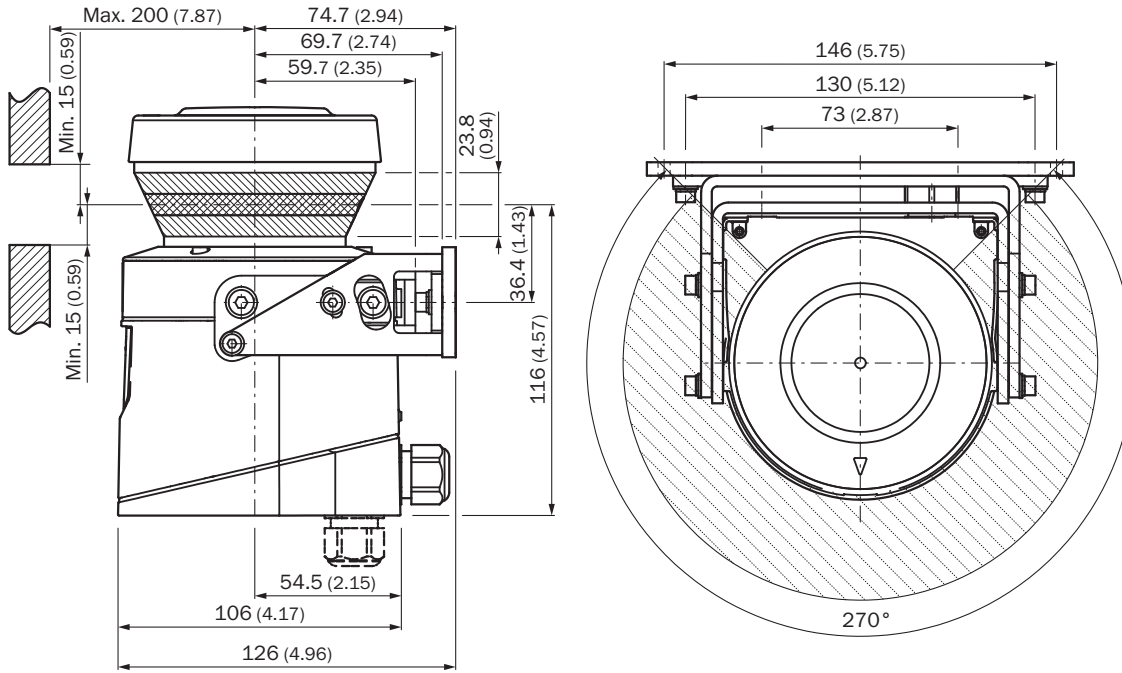
ECl@ss 5.0	27270990
ECl@ss 5.1.4	27270990
ECl@ss 6.0	27270913
ECl@ss 6.2	27270913
ECl@ss 7.0	27270913
ECl@ss 8.0	27270913
ECl@ss 8.1	27270913
ECl@ss 9.0	27270913
ETIM 5.0	EC002550
ETIM 6.0	EC002550
UNSPSC 16.0901	46171620

Dimensional drawing (Dimensions in mm (inch))

Laser scanner

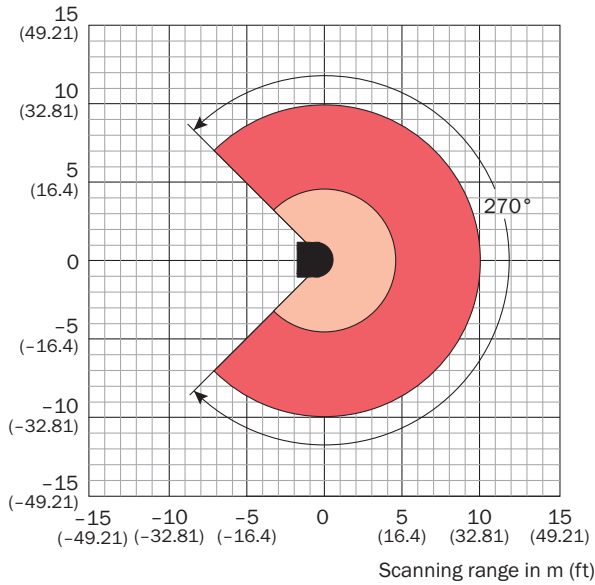


Origin of scan plane



Working range diagram

Scanning range in m (ft)



- Scanning range max. 10 m (32.81 ft)
- Scanning range for objects up to 10 % remission 4.5 m (14.76 ft)

Recommended accessories

Other models and accessories → www.sick.com/S100

	Brief description	Type	Part no.
Mounting brackets and plates			
	1 piece, mounting bracket for rear mounting on wall or machine	Mounting kit 1a	2034324
	1 piece, mounting bracket for rear mounting on wall or machine with protection of optics hood	Mounting kit 1b	2034325
	1 piece, mounting bracket, adjustable lateral axis, only in conjunction with mounting kit 1a (2034324) or 1b (2034325)	Mounting kit 2	2039302
	1 piece, mounting plate, adjustable longitudinal axis, only in conjunction with mounting kit 2 (2039302)	Mounting kit 3	2039303
Power supply units and power supply cables			
		PS50WE24V	7028789
		PS95WE24V	7028790
Plug connectors and cables			
	Head A: male connector, M8, 4-pin, straight Head B: male connector, USB-A, straight Cable: PVC, unshielded, 2 m	DSL-8U04G02M025KM1	6034574
	Head A: system plug Cable: without cable Not for use of incremental encoders, integrated configuration storage	SX0B-A0000G	2032807
	Head A: system plug Cable: pre-assembled, Not for use of incremental encoders, integrated configuration storage, PVC, unshielded, 10 m	SX0B-B1110G	2032860
Optics cloths			
	Cloth for cleaning the front screen	Lens cloth	4003353

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

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.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com