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DATA SHEET

S32B-0011BA

S300 Mini
Safety laser scanners

SICK Sensor Intelligence

Illustration may differ

SAFETY LASER SCANNERS

S32B-0011BA

ORDERING INFORMATION

Type	part no.
S32B-0011BA	1058000

Further device versions and accessories at www.sick.com/S300_Mini

DETAILED TECHNICAL DATA

FEATURES

Product version	S300 Mini Standard
Application	Indoor
Protective field range	1 m
Warning field range	8 m (at 15 % reflectivity)
Distance measuring range	30 m
Type of field set	Triple field sets
Number of field sets	1
Number of fields	3
Number of monitoring cases	1
Scanning angle	270°
Resolution (can be configured)	30 mm, 40 mm, 50 mm, 70 mm
Angular resolution	0.5°
Response time	80 ms [1]
Protective field supplement	100 mm
Number of multiple samplings	2 ... 16, configurable
Delay of automatic reset	2 s ... 60 s, configurable

[1] Depending on basic response time and multiple sampling.

SAFETY-RELATED PARAMETERS

Type	Type 3 (IEC 61496)
Safety integrity level	SIL 2 (IEC 61508)
Category	Category 3 (EN ISO 13849)
Performance level	PL d (EN ISO 13849)
PFH_D (mean probability of a dangerous failure per hour)	8.0×10^{-8}
T_M (mission time)	20 years (EN ISO 13849)

Safe state in the event of a fault	At least one OSSD is in the OFF state.

FUNCTIONS

Restart interlock	✓
External device monitoring (EDM)	✓
Multiple sampling	✓
Contour as a reference	✓
Measured data output	None

INTERFACES

Connection type	Cable, 250 mm, with male connector M12, 8-pin
Universal I/Os	2
Inputs	
External device monitoring (EDM)	1 [1]
Reset/restart	1 [1]
Standby	1 [1]
Outputs	
Output signal switching devices (OSSDs)	2
Outputs for warning field	2 [1]
Reset required	1 [1]
Configuration method	PC with CDS (Configuration and Diagnostic Software)
Configuration and diagnostics interface	RS-232
Transmission rate	38.4 kBaud

[1] Availability depends on the configuration of the universal I/Os.

ELECTRONICS

Protection class	III (EN 50178, EN 60950)
Supply voltage V_s	24 V DC (16.8 V DC ... 30 V DC)
Power consumption	0.2 A [1] 1.35 A [2]

[1] At 24 V DC without output load.

[2] At 24 V DC including maximum output load.

MECHANICS

Dimensions (W x H x D)	102 mm x 116 mm x 105 mm
Weight	0.8 kg, without connecting cables
Housing material	Aluminum die cast
Housing color	RAL 1021 (yellow), RAL 9005 (black)
Optics cover material	Polycarbonate
Optics cover surface finish	Outside with scratch-resistant coating

AMBIENT DATA

Enclosure rating	IP65 (EN 60529)
Ambient operating temperature	–10 °C ... +50 °C
Storage temperature	–25 °C ... +50 °C
Vibration resistance	IEC 60068-2-6, IEC 60068-2-64, IEC 60721-3-5, IEC TR 60721-4-5, IEC 61496-3

Class	5M1 (IEC 60721-3-5)
Shock resistance	IEC 60068-2-27, IEC 60721-3-5, IEC TR 60721-4-5, IEC 61496-3
Class	5M1 (IEC 60721-3-5)
Continuous shock	50 m/s², 11 ms 100 m/s², 16 ms

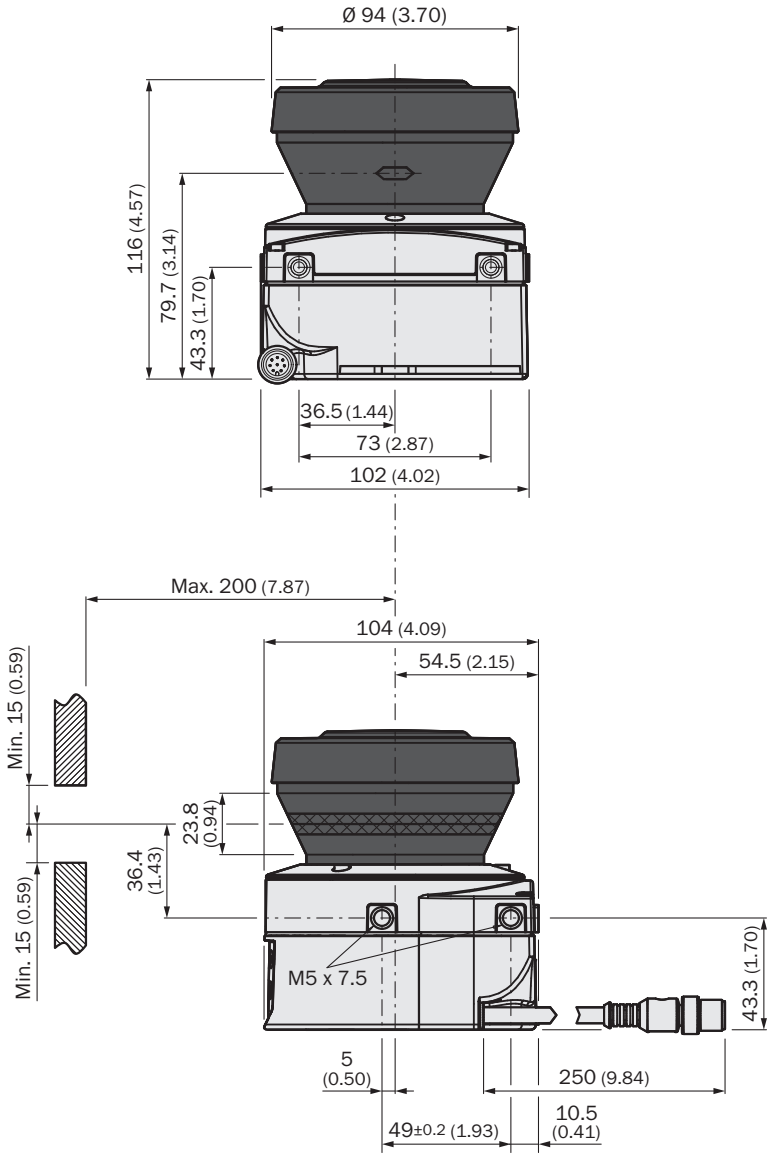
OTHER INFORMATION

Type of light	Pulsed laser diode
Wave length	905 nm
Detectable remission factor	1.8 % ... > 1,000 %, reflectors
Laser class	1 (21 CFR 1040.10 and 1040.11, IEC 60825-1)

CERTIFICATES

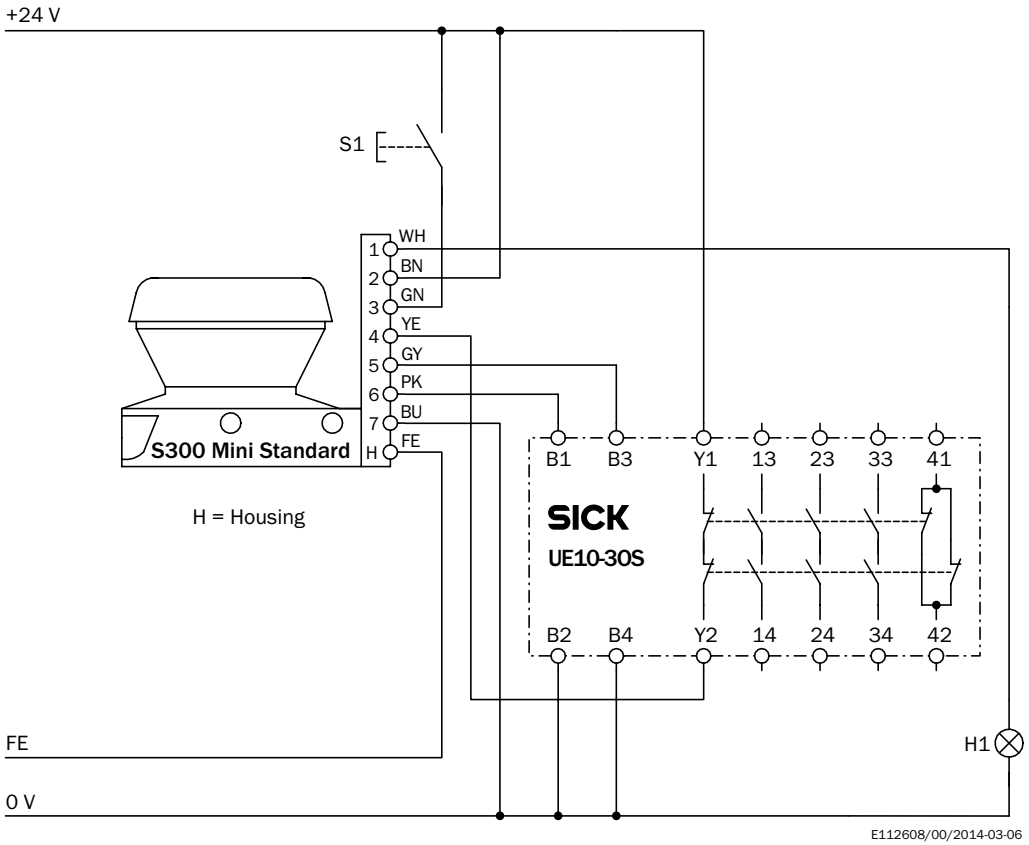
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
China RoHS	✓
cULus certificate	✓
EC-Type-Examination approval	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

DIMENSIONAL DRAWING LASER SCANNER

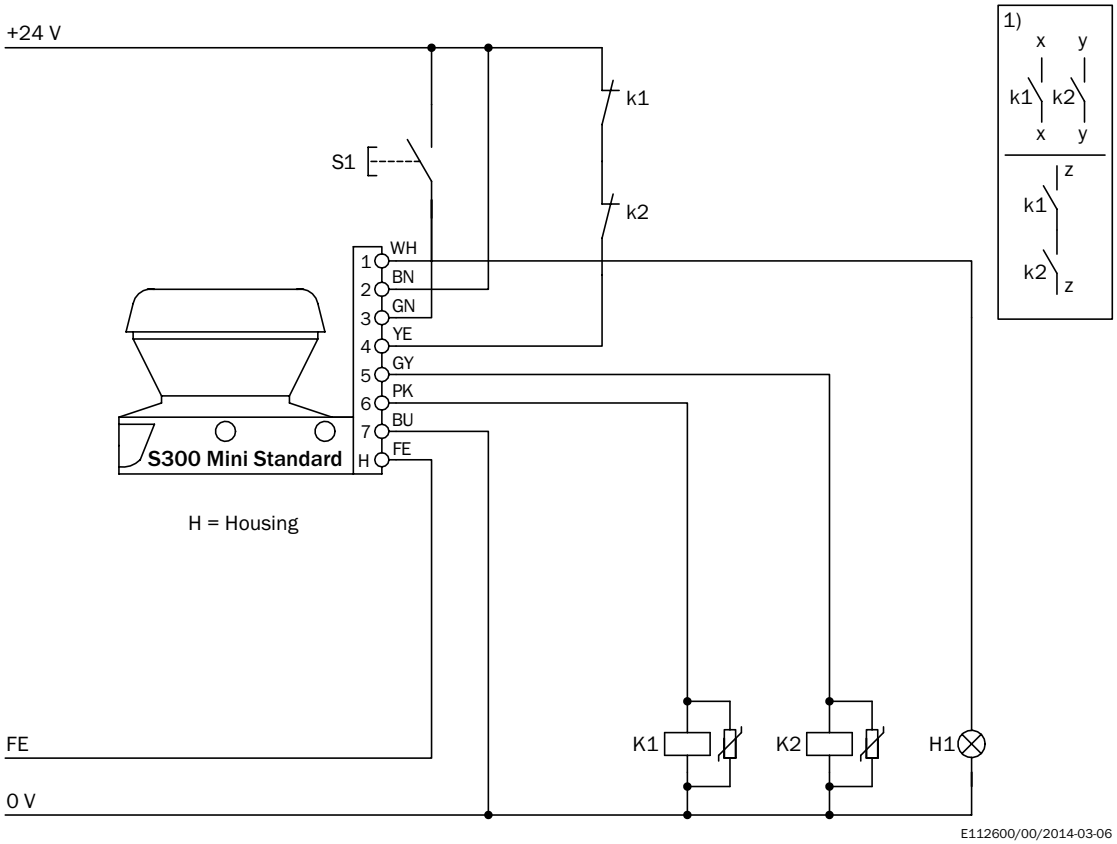


Dimensions in mm (inch)

CONNECTION DIAGRAM S300 MINI STANDARD TO UE10-3OS SAFETY RELAY



CONNECTION DIAGRAM S300 MINI STANDARD WITH RESTART INTERLOCK AND EXTERNAL DEVICE MONITORING



Comments

[1] Output circuits: These contacts are to be connected to the controller such that, with the output circuit open, the dangerous state is disabled. For categories 4 and 3, this integration must be dual-channel (x/y paths). Single-channel insertion in the control (z path) is only possible with a single-channel control and by taking the risk analysis into account.

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/1058000

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SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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