



M25S-04130C112

M2000 Standard in IP69K Housing

SAFETY MULTIBEAM SENSORS

SICK
Sensor Intelligence.



Illustration may differ

Ordering information

Type	part no.
M25S-04130C112	1024212

Other models and accessories → www.sick.com/M2000_Standard_in_IP69K_Housing

Detailed technical data

Features

Scanning range	0 m ... 19 m, configurable
Number of beams	4
Beam separation	300 mm
Response time	8 ms
Synchronization	Optical synchronization

Safety-related parameters

Type	Type 2 (IEC 61496-1)
Safety integrity level	SIL 1 (IEC 61508)
Category	Category 2 (EN ISO 13849)
Test rate (internal test)	13 /s (EN ISO 13849) ¹⁾
Maximum demand rate	8 min ⁻¹ (EN ISO 13849) ²⁾
Performance level	PL c (EN ISO 13849)
PFH_D (mean probability of a dangerous failure per hour)	6.6 x 10 ⁻⁹ (EN ISO 13849)
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.

¹⁾ Internal test. The test rate may not be exceeded if an external test is performed.

²⁾ Between two requirements on a safety-related response of the device, at least 100 internal or external tests must be carried out.

Functions

	Functions	Delivery status
Beam coding	✓	Uncoded
External device monitoring (EDM)	✓	

Interfaces

System connection	
Length of cable	15 m
Cable diameter	6 mm

Conductor cross section	0.25 mm ²
Configuration method	Hard wired
Display elements	LEDs 7-segment display

Electronics

Protection class	III (IEC 61140)
Supply voltage V_s	24 V DC (19.2 V DC ... 28.8 V DC) ¹⁾
Power consumption	≤ 3.7 W (DC)

¹⁾ The external voltage supply must be capable of buffering brief mains voltage failures of 20 ms as specified in EN 60204-1. Suitable power supplies are available as accessories from SICK.

Mechanics

Dimensions	See dimensional drawing
Housing diameter	50 mm
Material	
Plastic tube	PMMA
End caps	Stainless steel
Compensating element (membrane)	PA 6
Cable glands	PA 6

Ambient data

Enclosure rating	IP69K, IP67, IP66, IP65 (EN 60529)
Ambient operating temperature	0 °C ... +55 °C
Storage temperature	-25 °C ... +70 °C
Air humidity	15 % ... 95 %, Non-condensing
Vibration resistance	5 g/10 Hz ... 55 Hz (IEC 68-2-6)
Shock resistance	10 g/16 ms (IEC 68-2-29)

Other information

Wave length	950 nm
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Classifications

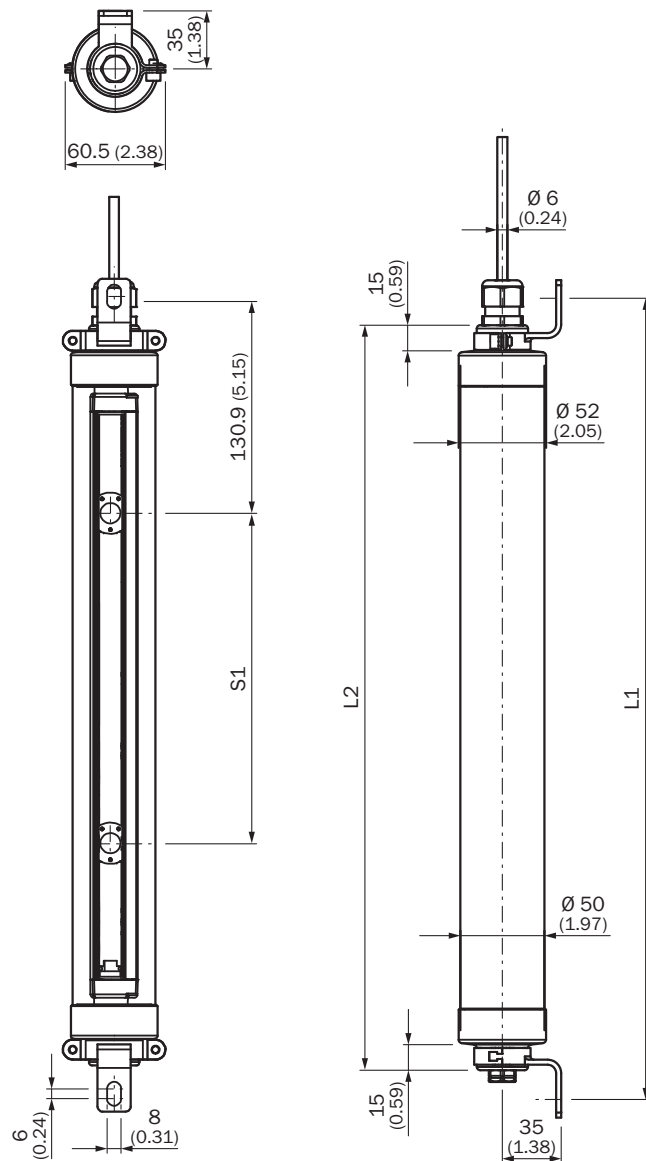
ECLASS 5.0	27272703
ECLASS 5.1.4	27272703
ECLASS 6.0	27272703
ECLASS 6.2	27272703
ECLASS 7.0	27272703
ECLASS 8.0	27272703
ECLASS 8.1	27272703
ECLASS 9.0	27272703
ECLASS 10.0	27272703
ECLASS 11.0	27272703
ECLASS 12.0	27272703
ETIM 5.0	EC001832

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ETIM 6.0	EC001832
ETIM 7.0	EC001832
ETIM 8.0	EC001832
UNSPSC 16.0901	46171620

Dimensional drawing








Dimensions in mm (inch)

Number of beams	Beam separation	L1	L2
2	500 (19.69)	777 (30.59)	744 (29.29)
3	400 (15.75)	1,078 (42.44)	1,045 (41.14)
4	300 (11.81)	1,228 (48.35)	1,195 (47.05)

Recommended accessories

Other models and accessories → www.sick.com/M2000_Standard_in_IP69K_Housing

	Brief description	Type	part no.
Mounting systems			
	<ul style="list-style-type: none"> Description: Stainless steel support bracket Material: Stainless steel Details: Stainless steel 1.4350 Packing unit: 2 pieces 	BEF-2AAAADES2	2026849
	<ul style="list-style-type: none"> Description: Stainless steel bracket, rotatable Material: Stainless steel Details: Stainless steel 1.4350, stainless steel 1.4301 Packing unit: 4 pieces 	BEF-2SMMEAES4	2023708
	<ul style="list-style-type: none"> Description: Reinforced stainless steel bracket, rotatable Material: Stainless steel Details: Stainless steel 1.4350, stainless steel 1.4301 Packing unit: 4 pieces 	BEF-2SMMVAES4	2026850
	<ul style="list-style-type: none"> Description: Reinforced stainless steel bracket, rotatable Material: Stainless steel Details: Stainless steel 1.4350, stainless steel 1.4301 Packing unit: 2 pieces 	BEF-2SMMVAES2	2048373
device protection and care			
	<ul style="list-style-type: none"> Description: Bidirectional ventilation membrane made from Gore-Tex 	Bidirectional ventilation membrane	5309082

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