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DATA SHEET

C2C-EV18030B10000

deTec
Safety light curtains

SICK Sensor Intelligence



Illustration may differ

SAFETY LIGHT CURTAINS

C2C-EV18030B10000

ORDERING INFORMATION

Type	part no.
C2C-EV18030B10000	1137303

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

DETAILED TECHNICAL DATA

FEATURES

Product version	deTec2 Core Vibes
Application	Machines with strong shock or vibration loads
System part	Receiver
Resolution	30 mm
Scanning range	3.8 m
Protective field height	1,800 mm
Response time	13 ms
No blind zones	Yes
Synchronization	Optical synchronization
Items supplied	Receiver Test rod with diameter corresponding to the resolution of the safety light curtain Safety instruction Mounting instructions Operating instructions for download

SAFETY-RELATED PARAMETERS

Type	Type 2 (IEC 61496-1)
Safety integrity level	SIL 1 (IEC 61508)
Category	Category 2 (ISO 13849-1)
Performance level	PL c (ISO 13849-1)
PFH_D (mean probability of a dangerous failure per hour)	31.0×10^{-9}
T_M (mission time)	20 years (ISO 13849-1)
Safe state in the event of a fault	At least one OSSD is in the OFF state.

INTERFACES

System connection	Plug, M12, 5-pin
Length of cable	150 mm
Cable diameter	4.3 mm
Cable bend radius	
Stationary position	> 12 x cable diameter
Flexible use	> 15 x cable diameter
Display elements	LEDs

ELECTRONICS

Protection class	III (IEC 61140)
Supply voltage V_S	24 V DC (19.2 V ... 28.8 V)
Ripple	≤ 10 %
Power consumption typical	2.59 W (DC)
Output signal switching devices (OSSDs)	
Type of output	2 PNP semiconductors, short-circuit protected, cross-circuit monitored [1]
ON state, switching voltage HIGH	24 V DC (V_S – 2.25 V DC ... V_S)
OFF state, switching voltage LOW	≤ 2 V DC
Current-carrying capacity per OSSD	≤ 300 mA

[1] Applies to the voltage range between –30 V and +30 V.

MECHANICS

Dimensions	See dimensional drawing
Housing material	Aluminum extruded profile

AMBIENT DATA

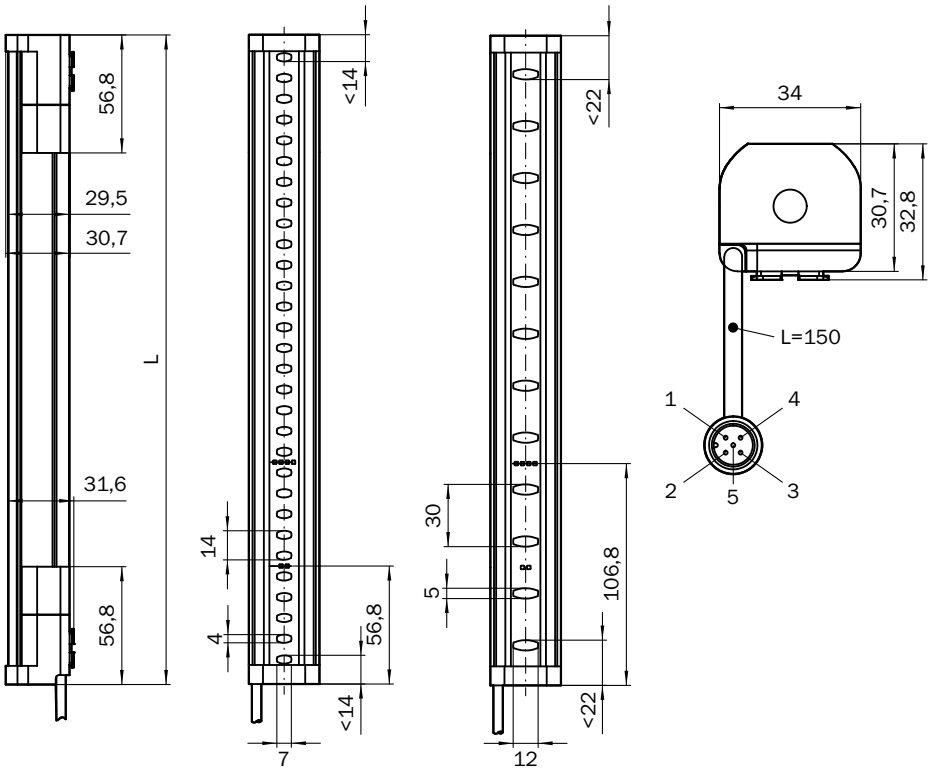
Enclosure rating	IP65 (IEC 60529) IP67 (IEC 60529)
Ambient operating temperature	–30 °C ... +55 °C
Storage temperature	–30 °C ... +70 °C
Air humidity	15 % ... 95 %, Non-condensing
Vibration resistance	5 ... 150 Hz, 3,5 mm / 1 g (EN 60068-2-6)
Shock resistance	15 g / 6 ms (EN 60068-2-27)
Class	3M4 (IEC TR 60721-4-3)

CERTIFICATES

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
ULus approval	✓
cUL approval	✓
Taiwan OSHA certificate	✓
EC-Type-Examination approval	✓
China GB certificate	✓
China GB/T certificate	✓

Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

DIMENSIONAL DRAWING



Dimensions in mm (inch)

Protective field height	L
300 (11.81)	313 (12.32)
450 (17.72)	463 (18.23)
600 (23.62)	613 (24.13)
750 (29.53)	763 (30.04)
900 (35.43)	913 (35.94)
1,050 (41.34)	1,063 (41.85)
1,200 (47.24)	1,213 (47.76)
1,350 (53.15)	1,362 (53.62)
1,500 (59.06)	1,512 (59.53)
1,650 (64.96)	1,662 (65.43)
1,800 (70.87)	1,812 (71.34)
1,950 (76.77)	1,962 (77.24)
2,100 (82.68)	2,112 (83.15)

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/1137303

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WALDKIRCH
GERMANY
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SICK AT A GLANCE

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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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