SICK.COM

DATA SHEET

C45E-0403AG220

C4000 Micro in IP69K Housing
Safety light curtains

SICK Sensor Intelligence

Illustration may differ

SAFETY LIGHT CURTAINS

C45E-0403AG220

ORDERING INFORMATION

Type	part no.
C45E-0403AG220	1025730

Further device versions and accessories at www.sick.com/C4000_Micro_in_IP69K_Housing

DETAILED TECHNICAL DATA

FEATURES

System part	Receiver
Resolution	30 mm
Scanning range	14.5 m
Protective field height	450 mm
Synchronization	Optical synchronization

SAFETY-RELATED PARAMETERS

Type	Type 4 (IEC 61496-1)
Safety integrity level	SIL 3 (IEC 61508)
Category	Category 4 (EN ISO 13849)
Performance level	PL e (EN ISO 13849)
PFH_D (mean probability of a dangerous failure per hour)	$15 * 10^{-9}$ (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.

FUNCTIONS

	Functions	Delivery status
Protective operation	✓	
Restart interlock	✓	Internal
External device monitoring (EDM)	✓	Activated

INTERFACES

System connection	
Direction of cable connection	Straight
Cable diameter	6 mm
Conductor cross section	0.25 mm²
Permitted cable length	15 m
Configuration method	Hard wired
Display elements	7-segment display

ELECTRONICS

Protection class	III (IEC 61140)
Supply voltage V_S	24 V DC (19.2 V ... 28.8 V) [1]
Residual ripple	≤ 10 % [2]
Output signal switching devices (OSSDs)	
Type of output	2 PNP semiconductors, short-circuit protected, cross-circuit monitored
ON state, switching voltage HIGH	24 V DC (15 V DC ... 28.8 V DC)
OFF state, switching voltage LOW	2 V DC
Current-carrying capacity per OSSD	≤ 500 mA

[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.

[2] Within the limits of V_S.

MECHANICS

Housing diameter	50 mm
Material	
End caps	Stainless steel V4A
Plastic tube	PMMA
Compensating element (membrane)	PA 6
PG connector	PA 6

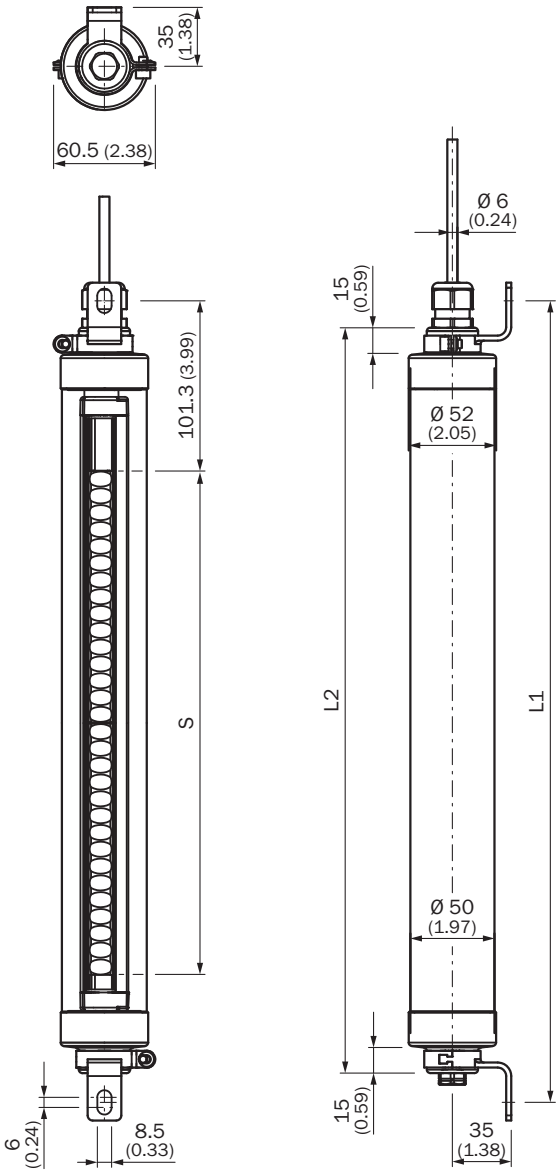
AMBIENT DATA

Enclosure rating	IP69K, IP67, IP66, IP65 (IEC 60529)
Ambient operating temperature	–30 °C ... +55 °C
Storage temperature	–30 °C ... +70 °C
Air humidity	15 % ... 95 %, Non-condensing
Vibration resistance	5 g, 10 Hz ... 55 Hz (EN 60068-2-6)
Shock resistance	10 g, 16 ms (EN 60068-2-27)

OTHER INFORMATION

Wave length	850 nm

DIMENSIONAL DRAWING



Dimensions in mm (inch)
illustration sender (receiver mirror image)

Protective field height S	L1	L2
150	357	324
300	476	443
450	626	593
600	777	744
750	927	894
900	1.078	1.045
1.050	1.228	1.195
1.200	1.377	1.344
1.350	1.529	1.496
1.500	1.680	1.647
1.650	1.830	1.797
1.800	1.981	1.948

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/1025730

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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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