



ELG1-0150P571

ELG

SWITCHING AUTOMATION LIGHT GRIDS

SICK
Sensor Intelligence.

Ordering information



Type	Part no.
ELG1-0150P571	1028333

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

Illustration may differ



Detailed technical data

Features

Technology	Sender/receiver
Minimum detectable object (MDO)	15 mm ¹⁾
Beam separation	10 mm
Number of beams	16
Detection height	150 mm
Evaluation beams	Parallel beam

¹⁾ Parallel beam.

Performance

Maximum range	7 m
Minimum range	≥ 0 mm
Operating range	5 m
Response time	12 ms ¹⁾

¹⁾ With resistive load.

Interfaces

Switching output	2 x PNP ¹⁾
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¹⁾ Q / \bar{Q} .

Mechanics/electronics

Wave length	880 nm
Supply voltage V_s	DC 15 V ... 30 V ¹⁾
Power consumption sender	< 100 mA ²⁾

¹⁾ Typical value.

²⁾ , Typical value.

³⁾ Operating in outdoor condition only with a external protection housing.

⁴⁾ Q = active, if at least one beam is interrupted, /Q = active, if all of the beams are free.

Power consumption receiver	< 100 mA ²⁾
Ripple	< 5 V _{pp}
Output load capacitive	100 nF
Output load inductive	1 H
Initialization time	1 s
Dimensions (W x H x D)	34 mm x 237 mm x 29 mm
Connection type	Male connector M12, 4-pin
Housing material	Aluminum
Indication	LED
Synchronization	Optical
Enclosure rating	IP65 ³⁾
Circuit protection	U _V connections, reverse polarity protected, Output Q short-circuit protected, Interference pulse suppression
Protection class	III
Weight	800 g
Pulse frequency	250 kHz
Front screen	PMMA
Output mode	Q dark switching ⁴⁾

¹⁾ Typical value.

²⁾ , Typical value.

³⁾ Operating in outdoor condition only with a external protection housing.

⁴⁾ Q = active, if at least one beam is interrupted, /Q = active, if all of the beams are free.

Ambient data

Protection class	III
EMC	EN 60947-5-2
Ambient operating temperature	-25 °C +55 °C
Ambient storage temperature	-40 °C +70 °C
Ambient light immunity	Indirect: ≤ 150,000 lx ¹⁾
Vibration resistance	5 g, 10 Hz ... 55 Hz (IEC 68-2-6)
Shock load	10 g / DIN EN 60068-2-29 / 16 ms

¹⁾ Sunlight.

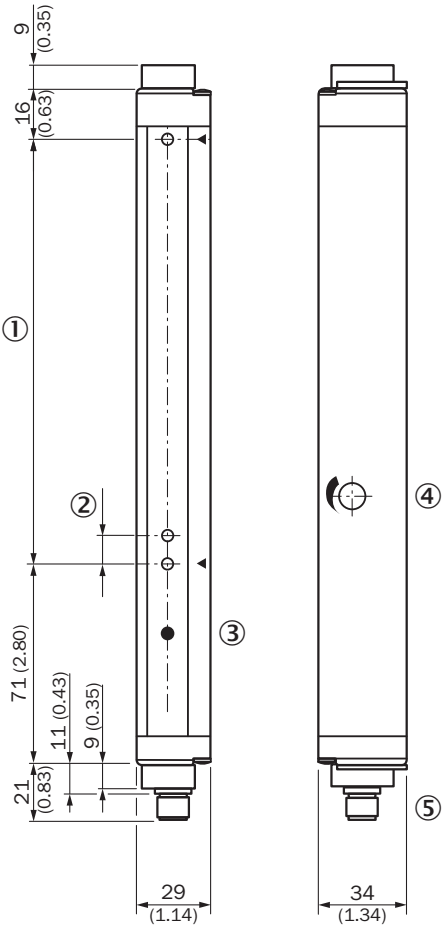
Classifications

ECI@ss 5.0	27270910
ECI@ss 5.1.4	27270910
ECI@ss 6.0	27270910
ECI@ss 6.2	27270910
ECI@ss 7.0	27270910
ECI@ss 8.0	27270910
ECI@ss 8.1	27270910
ECI@ss 9.0	27270910
ETIM 5.0	EC002549

ETIM 6.0	EC002549
UNSPSC 16.0901	39121528

Dimensional drawing (Dimensions in mm (inch))

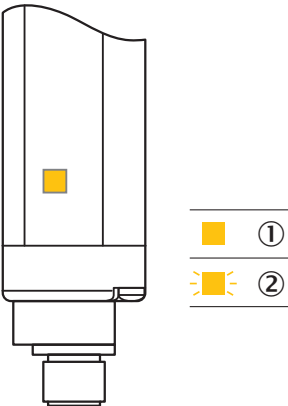
ELG1



- ① Detection height
- ② Beam spacing ELG1: 10 mm
- ③ Status indicator (ELGE)/Power on (ELGS)
- ④ Sensitivity control
- ⑤ Connection

Adjustments

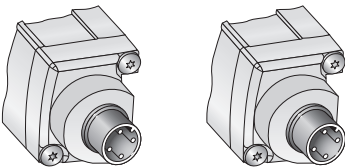
LED display receiver



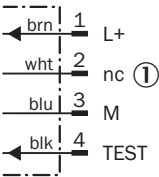
- ① No object in the light path (alignment OK)
- ② Contamination control

Connection type and diagram

ELG3/ELG6 Sender Connector M12, 4-pin Receiver Connector M12, 4-pin



Sender



- ① Not assigned

Receiver

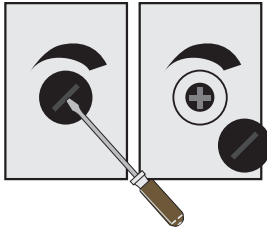


Concept of operation

Specific features

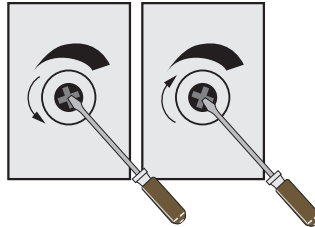
Sensitivity adjustment

1. Remove cap



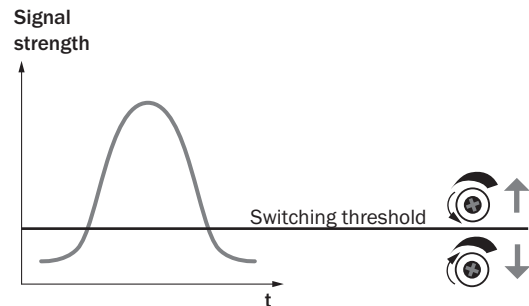
Remove cap with screw driver.

2. Potentiometer adjustment

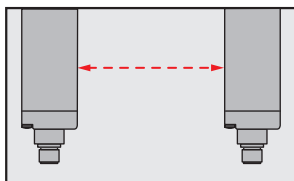


Turn left = for a lower range.
Turn right = for a higher range.

Sensitivity adjustment





Optical synchronisation



The light grid communicates via the light beams. A cable is not necessary for the optical synchronisation.

Recommended accessories

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

	Brief description	Type	Part no.
Terminal and alignment brackets			
	4 pieces, Mounting kit 1, rotatable, swivel mount, Plastic	BEF-2SMKEAKU4	2019649
Plug connectors and cables			
	Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YF2A14-050VB3XLEAX	2096235

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:

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