

GSE2FS-F0121S11

G2

PHOTOELECTRIC SENSORS





Ordering information

Туре	part no.
GSE2FS-F0121S11	1110899

Other models and accessories → www.sick.com/G2

Illustration may differ



Detailed technical data

Features

Functional principle	Through-beam photoelectric sensor
Dimensions (W x H x D)	4.5 mm x 21 mm x 11 mm
Housing design (light emission)	Rectangular
Minimum detectable object (MDO)	0.5 mm
Sensing range max.	0 mm 200 mm
Sensing range	0 mm 150 mm
Type of light	Visible red light
Light source	PinPoint LED ¹⁾
Light spot size (distance)	Ø 15 mm (150 mm)
Wave length	660 nm
Adjustment	None
Special features	Sender and receiver connected to one male connector M8, 4 pin, 500 mm

 $^{^{1)}}$ Average service life: 100,000 h at T_U = +25 °C.

Mechanics/electronics

Supply voltage U _B	10 V DC 30 V DC

 $^{^{1)}}$ May not fall below or exceed U_{V} tolerances.

²⁾ Without load.

 $^{^{3)}}$ Signal transit time with resistive load.

 $^{^{4)}}$ With light/dark ratio 1:1.

⁵⁾ Do not bend below 0 °C.

 $^{^{6)}}$ A = V_S connections reverse-polarity protected.

⁷⁾ C = interference suppression.

 $^{^{\}rm 8)}$ D = outputs overcurrent and short-circuit protected.

Ripple	< 5 V _{pp} ¹⁾
Current consumption	40 mA ²⁾
Switching output	PNP
Switching mode	Dark switching
Output current I _{max.}	≤ 50 mA
Response time	< 0.625 ms ³⁾
Switching frequency	800 Hz ⁴⁾
Connection type	Cable with male connector M8, 4 pin (common male connector for sender and receiver), 500 mm $^{5)}$
Cable material	Plastic, PVC
Cable diameter	Ø 2.3 mm
Circuit protection	A ⁶⁾ C ⁷⁾ D ⁸⁾
Weight	40 g
Housing material	Plastic, VISTAL®
Optics material	Plastic, MABS
Enclosure rating	IP67
Ambient operating temperature	-20 °C +50 °C
Ambient temperature, storage	-40 °C +70 °C
UL File No.	NRKH.E348498 & NRKH7.E348498
Repeatability (T _a not constant)	0.1 mm

 $^{^{1)}}$ May not fall below or exceed U_{V} tolerances.

Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
cRUus certificate	✓

Classifications

ECLASS 5.0	27270901
ECLASS 5.1.4	27270901
ECLASS 6.0	27270901
ECLASS 6.2	27270901
ECLASS 7.0	27270901

²⁾ Without load.

³⁾ Signal transit time with resistive load.

⁴⁾ With light/dark ratio 1:1.

⁵⁾ Do not bend below 0 °C.

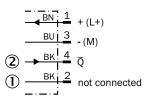
 $^{^{6)}}$ A = V_S connections reverse-polarity protected.

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ECLASS 8.0	27270901
ECLASS 8.1	27270901
ECLASS 9.0	27270901
ECLASS 10.0	27270901
ECLASS 11.0	27270901
ECLASS 12.0	27270901
ETIM 5.0	EC002716
ETIM 6.0	EC002716
ETIM 7.0	EC002716
ETIM 8.0	EC002716
UNSPSC 16.0901	39121528

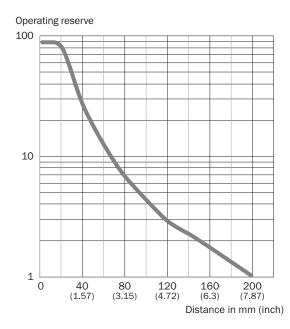
Connection diagram Cd-468



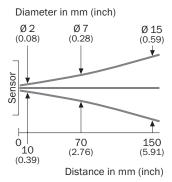
① sender

② receiver

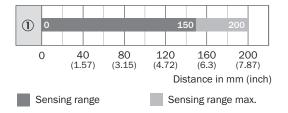
Characteristic curve GSE2 Flat, GSE2 Flat Side, 150 mm



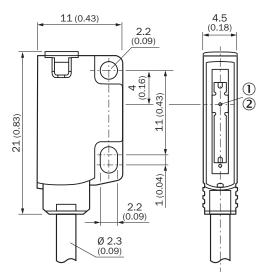
Light spot size GSE2 Flat Side, 150 mm



Sensing range diagram GSE2 Flat, GSE2 Flat Side, 150 mm



Dimensional drawing



- Dimensions in mm (inch)
- ① optical axis, receiver
- 2 optical axis, sender

Recommended accessories

Other models and accessories → www.sick.com/G2

	Brief description	Туре	part no.	
Mounting syst	Mounting systems			
	Description: Mounting plate for direct mounting, from the rear, on wall or machine, not adjustable. 10 Piece ,Black ,Plastic, VISTAL®. Suitable for GSE2FS only Packing unit: 10 pieces	BEF-G2F-SIDE- SPACER-M2	2107264	
connectors ar	connectors and cables			
	 Connection type head A: Male connector, M8, 3-pin, straight, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: 0.14 mm² 0.5 mm² 	STE-0803-G	6037322	

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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."

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