



# GSE10-R3722

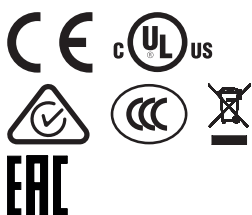
G10

SMALL PHOTOELECTRIC SENSORS

**SICK**  
Sensor Intelligence.



Illustration may differ



### Ordering information

Type	Part no.
GSE10-R3722	1065914

**Included in delivery:** BEF-G10UC01 (1)

Other models and accessories → [www.sick.com/G10](http://www.sick.com/G10)

### Detailed technical data

#### Features

<b>Sensor/ detection principle</b>	Through-beam photoelectric sensor
<b>Dimensions (W x H x D)</b>	20 mm x 50 mm x 51.5 mm
<b>Housing design (light emission)</b>	Rectangular
<b>Sensing range max.</b>	0 m ... 40 m
<b>Sensing range</b>	0 m ... 35 m
<b>Type of light</b>	Infrared light
<b>Light source</b>	LED <sup>1)</sup>
<b>Light spot size (distance)</b>	Ø 433 mm (15 m)
<b>Wave length</b>	850 nm
<b>Adjustment</b>	None

<sup>1)</sup> Average service life: 100,000 h at T<sub>J</sub> = +25 °C.

#### Mechanics/electronics

<b>Supply voltage</b>	24 V AC/DC ... 240 V AC/DC <sup>1)</sup>
<b>Ripple</b>	± 5 V <sub>pp</sub> <sup>2)</sup>
<b>Power consumption, sender</b>	≤ 2 VA

<sup>1)</sup> ± 10 %.

<sup>2)</sup> May not exceed or fall below U<sub>v</sub> tolerances.

<sup>3)</sup> Provide suitable spark suppression for inductive or capacitive loads.

<sup>4)</sup> With light/dark ratio 1:1.

<sup>5)</sup> Do not bend below 0 °C.

<sup>6)</sup> C = interference suppression.

<sup>7)</sup> Reference voltage: 250 V AC.

<sup>8)</sup> In the case of a DC supply (ref. to EN 61000-6-3) the length of cable between the supply source and the sensor must be < 30 m.

<sup>9)</sup> UL: 0 °C ... +50 °C.

<sup>10)</sup> Complies with the UL325 standard when used with sturdy protection hood (e.g. BEF-G10WSG, 2071960).

<b>Power consumption, receiver</b>	≤ 2.5 VA
<b>Switching output</b>	Relay, SPDT, electrically isolated <sup>3)</sup>
<b>Switching load max. (current/voltage)</b>	0.11 A (250 V DC) 3 A (30 V DC) 3 A (250 V AC)
<b>Response time</b>	≤ 10 ms
<b>Switching frequency</b>	20 Hz <sup>4)</sup>
<b>Connection type</b>	Cable, 5-wire, 2 m <sup>5)</sup>
<b>Cable material</b>	PVC
<b>Conductor cross-section</b>	0.25 mm <sup>2</sup>
<b>Circuit protection</b>	C <sup>6)</sup>
<b>Protection class</b>	II <sup>7)</sup>
<b>Weight</b>	+ 230 g
<b>Interference emission</b>	EN 61000-6-3 (2011-09) <sup>8)</sup>
<b>Housing material</b>	Plastic, ABS/PMMA
<b>Enclosure rating</b>	IP67
<b>Relay switching cycles min.</b>	100.000 cycles (3 A)
<b>Items supplied</b>	Mounting bracket BEF-G10UC01 (2x)
<b>Usage category</b>	AC-15, DC-13, according to EN 60947-1
<b>EMC</b>	EN 60947-5-2
<b>Ambient operating temperature</b>	-30 °C ... +60 °C <sup>9)</sup>
<b>Ambient storage temperature</b>	-40 °C ... +70 °C
<b>UL File No.</b>	NRKH.E348498 & NRKH7.E348498
<b>More standards</b>	UL325 <sup>10)</sup>

1) +- 10 %.

2) May not exceed or fall below U<sub>y</sub> tolerances.

3) Provide suitable spark suppression for inductive or capacitive loads.

4) With light/dark ratio 1:1.

5) Do not bend below 0 °C.

6) C = interference suppression.

7) Reference voltage: 250 V AC.

8) In the case of a DC supply (ref. to EN 61000-6-3) the length of cable between the supply source and the sensor must be < 30 m.

9) UL: 0 °C ... +50 °C.

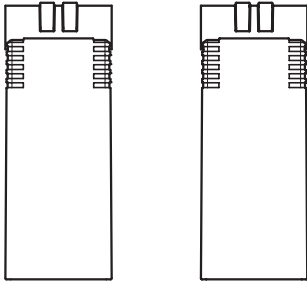
10) Complies with the UL325 standard when used with sturdy protection hood (e.g. BEF-G10WSG, 2071960).

## Classifications

<b>ECl@ss 5.0</b>	27270901
<b>ECl@ss 5.1.4</b>	27270901
<b>ECl@ss 6.0</b>	27270901
<b>ECl@ss 6.2</b>	27270901
<b>ECl@ss 7.0</b>	27270901
<b>ECl@ss 8.0</b>	27270901
<b>ECl@ss 8.1</b>	27270901
<b>ECl@ss 9.0</b>	27270901

<b>ETIM 5.0</b>	EC002716
<b>ETIM 6.0</b>	EC002716
<b>UNSPSC 16.0901</b>	39121528

### Adjustments possible



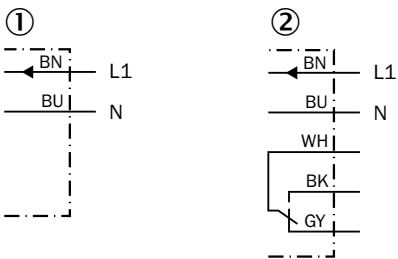
⑧

⑨

- ⑧ Sender
- ⑨ Receiver

### Connection diagram

Cd-170

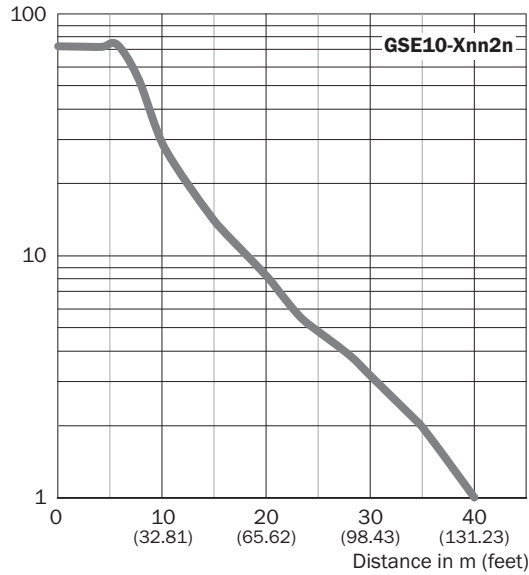


- ① Sender
- ② Receiver

### Characteristic curve

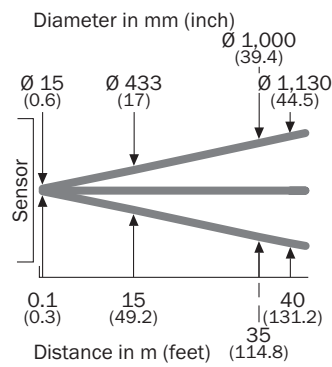
GSE10, infrared light

Operating reserve



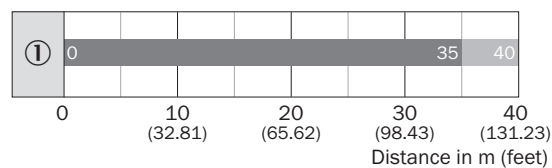
### Light spot size

GSE10, infrared light



### Sensing range diagram

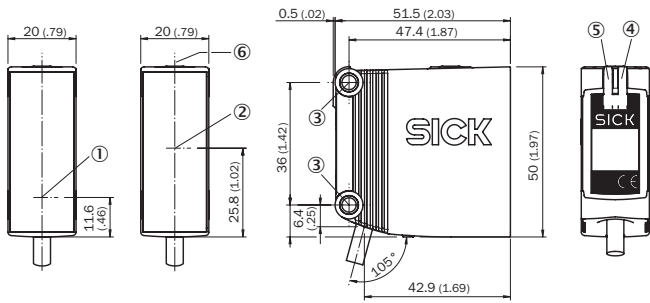
GSE10-xxx2x



■ Sensing range      ■ Sensing range max.

### Dimensional drawing (Dimensions in mm (inch))

GSE10, AC/DC, cable





- ① Center of optical axis, sender
- ② Center of optical axis, receiver
- ③ Mounting hole, Ø 4.2 mm
- ④ LED indicator yellow: Status of received light beam
- ⑤ LED indicator green: power on

### Recommended accessories

Other models and accessories → [www.sick.com/G10](http://www.sick.com/G10)

	Brief description	Type	Part no.
<b>Universal bar clamp systems</b>			
	Clamp bar to fix G10 sensors on rods of 10 mm, clamp-on design up to 4 mm wall thickness, aluminum (clamp bar), stainless steel (bracket), clamp bar mounting and clamp function, mounting bracket, mounting hardware	BEF-KHS-ISG10	2073756
	Q-Lock, bar clamp system for G10 and reflector P250, Die-cast zinc, steel, zinc coated	BEF-KHSQ12R01	2071260
	Bar clamp system for G10 and reflector P250, Die-cast zinc, steel, zinc coated, mounting hardware included	BEF-KHSQ12R02	2087586
	Q-Lock, bar clamp system for G10 and reflector P250, Die-cast zinc, steel, zinc coated, incl. slot-in sheet clamp	BEF-KHSQ12ZR01	2071262
	Mounting bar, straight, 200 mm, steel, steel, zinc coated, without mounting hardware	BEF-MS12G-A	4056054
	Mounting bar, straight, 300 mm, steel, steel, zinc coated, without mounting hardware	BEF-MS12G-B	4056055
	Mounting bar, L-shaped, 150 mm x 150 mm, steel, steel, zinc coated, without mounting hardware	BEF-MS12L-A	4056052
	Mounting bar, L-shaped, 250 x 250 mm, steel, steel, zinc coated, without mounting hardware	BEF-MS12L-B	4056053
	Mounting bar, Z-shaped, 150 mm x 70 mm x 150 mm, steel, steel, zinc coated, without mounting hardware	BEF-MS12Z-A	4056056
	Mounting bar, Z-shaped, 150 mm x 70 mm x 250 mm, steel, steel, zinc coated, without mounting hardware	BEF-MS12Z-B	4056057
	Bar clamp for bar diameter of 12 mm (fixing the mounting rod), Aluminum, 2 screws M6 x 30, 2 spring discs	BEF-RMC-D12	5321878

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting bracket for wall and floor mounting for G10 DC, Stainless steel (1.4301), mounting hardware included	BEF-G10DC01	2071258
	Mounting bracket for wall and floor mounting for G10 AC/DC, steel, zinc coated, mounting hardware included	BEF-G10UC01	2071259

## 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](http://www.sick.com)