

GSE10-R3722 G10

**SMALL PHOTOELECTRIC SENSORS** 





## Ordering information

Туре	Part no.
GSE10-R3722	1065914

Included in delivery: BEF-G10UC01(2)

Other models and accessories → www.sick.com/G10

Illustration may differ



#### Detailed technical data

#### **Features**

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

 $<sup>^{1)}</sup>$  Average service life: 100,000 h at T<sub>U</sub> = +25 °C.

# Mechanics/electronics

Supply voltage	24 V AC/DC 240 V AC/DC <sup>1)</sup>	
Ripple	< 5 V <sub>pp</sub> <sup>2)</sup>	
Power consumption, sender	≤ 2 VA	
Power consumption, receiver	≤ 2.5 VA	
Switching output	Relay, SPDT, electrically isolated <sup>3)</sup>	

<sup>&</sup>lt;sup>1)</sup> +- 10 %.

 $<sup>^{2)}\,\</sup>mbox{May}$  not exceed or fall below  $\mbox{U}_{\mbox{\scriptsize V}}$  tolerances.

 $<sup>^{\</sup>rm 3)}$  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>&</sup>lt;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>&</sup>lt;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).

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

<sup>1) +- 10 %.</sup> 

#### Classifications

eCl@ss 5.0	27270901
eCl@ss 5.1.4	27270901
eCl@ss 6.0	27270901
eCl@ss 6.2	27270901
eCl@ss 7.0	27270901
eCl@ss 8.0	27270901
eCl@ss 8.1	27270901
eCl@ss 9.0	27270901
eCl@ss 10.0	27270901
eCl@ss 11.0	27270901
eCl@ss 12.0	27270901

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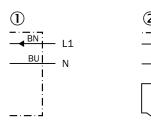
# **GSE10-R3722 | G10**

# SMALL PHOTOELECTRIC SENSORS

ETIM 5.0	EC002716
ETIM 6.0	EC002716
ETIM 7.0	EC002716
ETIM 8.0	EC002716
UNSPSC 16.0901	39121528

# Connection diagram

Cd-170

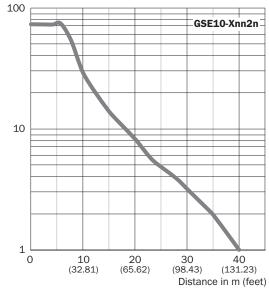


- ① Sender
- ② Receiver

## Characteristic curve

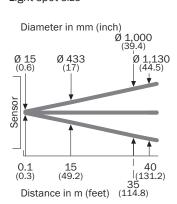
Operating reserve

## Operating reserve



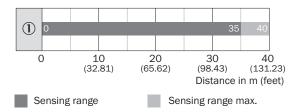
## Light spot size

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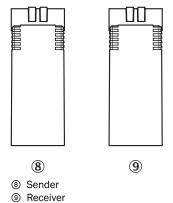


# Sensing range diagram

### Scanning range

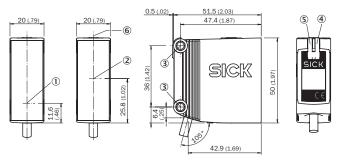


## Adjustments



## 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

	Brief description	Туре	Part no.	
Universal bar clamp systems				
	Q-Lock, bar clamp system for G10 and reflector P250, Die-cast zinc, steel, zinc coated	BEF-KHSQ12R01	2071260	
Plug connectors and cables				
	Head A: male connector, M12, 5-pin, straight Cable: unshielded For field bus technology	STE-1205-G	6022083	

# 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

