

# GE6-P1111S63

G6

**PHOTOELECTRIC SENSORS** 





## Ordering information

Туре	part no.
GE6-P1111S63	1092840

Other models and accessories → www.sick.com/G6

Illustration may differ



#### Detailed technical data

#### **Features**

Functional principle	Through-beam photoelectric sensor
Sensing range max.	0 m 15 m
Sensing range	0 m 10 m <sup>1)</sup>
Polarisation filter	No
Emitted beam	
Light source	PinPoint LED <sup>2)</sup>
Type of light	Visible red light
Light spot size (distance)	Ø 375 mm (12 m)
Key LED figures	
Wave length	650 nm
Adjustment	None
Special features	Receiver only. To work with GS6-P1111S62,1092839

<sup>1)</sup> With GS6-P1111S62, 1092839.

## Electronics

Supply voltage U <sub>B</sub>	10 V DC 30 V DC <sup>1)</sup>

 $<sup>^{1)}</sup>$  Limit values when operated in short-circuit protected network: max. 8 A.

 $<sup>^{2)}</sup>$  Average service life: 100,000 h at  $T_{U}$  = +25 °C.

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

<sup>3)</sup> Without load.

 $<sup>^{4)}</sup>$  At Uv > 24 V, IA max. = 50 mA.

<sup>&</sup>lt;sup>5)</sup> Signal transit time with resistive load.

<sup>6)</sup> With light/dark ratio 1:1.

 $<sup>^{7)}</sup>$  A = V<sub>S</sub> connections reverse-polarity protected.

 $<sup>^{8)}</sup>$  B = inputs and output reverse-polarity protected.

 $<sup>^{9)}</sup>$  D = outputs overcurrent and short-circuit protected.

Ripple	± 10 % <sup>2)</sup>
Current consumption	30 mA <sup>3)</sup>
Protection class	III
Digital output	
Туре	PNP
Switching mode	Light/dark switching
Switching mode selector	Selectable via light/dark selector
Signal voltage PNP HIGH/LOW	$V_S$ - ( $\leq 3 \text{ V}$ ) / approx. 0 V
Output current I <sub>max.</sub>	$\leq$ 100 mA $^{4)}$
Response time	< 500 µs <sup>5)</sup>
Switching frequency	1,000 Hz <sup>6)</sup>
Circuit protection	A <sup>7)</sup> B <sup>8)</sup> D <sup>9)</sup>

 $<sup>^{1)}</sup>$  Limit values when operated in short-circuit protected network: max. 8 A.

#### Mechanics

Housing	Rectangular
Dimensions (W x H x D)	12 mm x 31.5 mm x 21 mm
Connection	Cable, 3-wire, 2 m <sup>1)</sup>
Connection detail	
Conductor size	0.14 mm <sup>2</sup>
Length of cable (L)	2 m <sup>1)</sup>
Material	
Housing	Plastic, ABS/PC
Front screen	Plastic, PMMA
Cable	Plastic, PVC
Weight	60 g

 $<sup>^{1)}</sup>$  Do not bend below 0 °C.

## Ambient data

Enclosure rating	IP67
Ambient operating temperature	-25 °C +55 °C <sup>1)</sup>
Ambient temperature, storage	-40 °C +70 °C
UL File No.	NRKH.E348498 & NRKH7.E348498

 $<sup>^{1)}</sup>$  Temperature stability following adjustment +/-10 °C.

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

<sup>3)</sup> Without load.

<sup>&</sup>lt;sup>4)</sup> At Uv > 24 V, IA max. = 50 mA.

<sup>&</sup>lt;sup>5)</sup> Signal transit time with resistive load.

<sup>6)</sup> With light/dark ratio 1:1.

 $<sup>^{7)}</sup>$  A = V<sub>S</sub> connections reverse-polarity protected.

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<sup>9)</sup> D = outputs overcurrent and short-circuit protected.

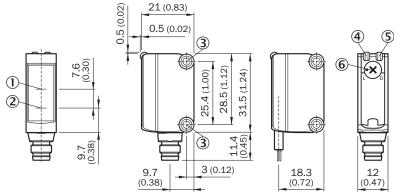
## Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
cULus certificate	✓
Photobiological safety (DIN EN 62471) certificate	<b>✓</b>

## Classifications

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

## **Dimensional drawing**

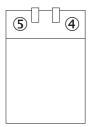


Dimensions in mm (inch)

- ① Optical axis, receiver
- 2 Optical axis, sender

- 3 Mounting holes M3
- ④ LED indicator green: Supply voltage active
- ⑤ LED indicator yellow: Status of received light beam
- 6 Light/ dark rotary switch: L = light switching, D = dark switching

## Adjustments No adjustment possibility



- ④ LED indicator green: Supply voltage active
- ⑤ LED indicator yellow: Status of received light beam

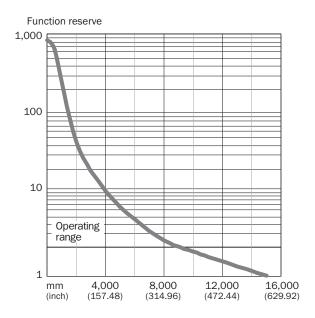
## Connection type



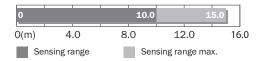
## Connection diagram Cd-043



## Characteristic curve With GE6-P1111, GE6-N1111, GE6-P1111S63



## Sensing range diagram GE6-P1111, GE6-N1111, GE6-P1111S63



## Recommended accessories

Other models and accessories → www.sick.com/G6

	Brief description	Туре	part no.	
Mounting syst	Mounting systems			
	<ul> <li>Description: Clamp bar to fix G6 sensors on rods of 12 mm, clamp-on design up to 4 mm wall thickness</li> <li>Material: Steel</li> <li>Details: Aluminum (clamp bar), stainless steel (bracket)</li> <li>Items supplied: Clamp bar mounting and clamp function, mounting bracket, mounting hardware</li> </ul>	BEF-KHS-IS12G6	2086865	
	<ul> <li>Material: Stainless steel</li> <li>Details: Stainless steel (1.4301)</li> <li>Suitable for: W4S, W4S</li> </ul>	BEF-WN-G6	2062909	
000	<ul> <li>Description: Mounting bracket for wall mounting</li> <li>Material: Stainless steel</li> <li>Details: Stainless steel</li> <li>Items supplied: Mounting hardware included</li> <li>Suitable for: W8, W8G, W8 Laser, W8 Inox, G6, G6 Inox, W100 Laser, W100-2, KTM Core, KTM Prime, CSM, LUTM, W4S</li> </ul>	BEF-W100-A	5311520	

## 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

