GS6-D4311S63

G6

MINIATURE PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.

GS6-D4311S63 | G6
MINIATURE PHOTOELECTRIC SENSORS

Illustration may differ

Ordering information

Type	Part no.
GS6-D4311S63	2107413

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

Detailed technical data

Features

Functional principle	Through-beam photoelectric sensor
Sensing range max.	0 m ... 15 m
Sensing range	0 m ... 10 m
Polarisation filters	No
Emitted beam	
Light source	PinPoint LED [1]
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	Through-beam photoelectric sensor (sender only)

[1] Average service life: 100,000 h at T_U = +25 °C.

Safety-related parameters

MTTF$_D$	1,009 years
DC$_{avg}$	0 %

Electrical data

Supply voltage U$_B$	10 V DC ... 30 V DC [1]

[1] Limit values when operated in short-circuit protected network: max. 8 A.

[2] May not exceed or fall below U_v tolerances.

[3] Without load.

[4] A = V_S connections reverse-polarity protected.

[5] B = inputs and output reverse-polarity protected.

[6] D = outputs overcurrent and short-circuit protected.

Ripple	± 10 % [2]
Current consumption	30 mA [3]
Protection class	III
Circuit protection	A [4] B [5] D [6]
Special feature	Sender

[1] Limit values when operated in short-circuit protected network: max. 8 A.

[2] May not exceed or fall below U_V tolerances.

[3] Without load.

[4] A = V_S connections reverse-polarity protected.

[5] B = inputs and output reverse-polarity protected.

[6] D = outputs overcurrent and short-circuit protected.

Mechanical data

Housing	Rectangular
Dimensions (W x H x D)	12 mm x 31.5 mm x 21 mm
Connection	Male connector M8, 4-pin
Material	
Housing	Plastic, ABS/PC
Front screen	Plastic, PMMA
Weight	20 g

Ambient data

Enclosure rating	IP67
Ambient operating temperature	–25 °C … +55 °C [1]
Ambient temperature, storage	–40 °C … +70 °C
UL File No.	NRKH.E348498 & NRKH7.E348498

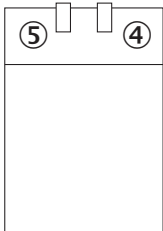[1] Temperature stability following adjustment +/-10 °C.

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

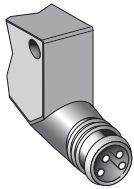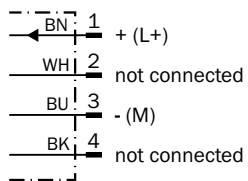| ETIM 8.0	EC002716
UNSPSC 16.0901	39121528

Adjustments

No adjustment possibility

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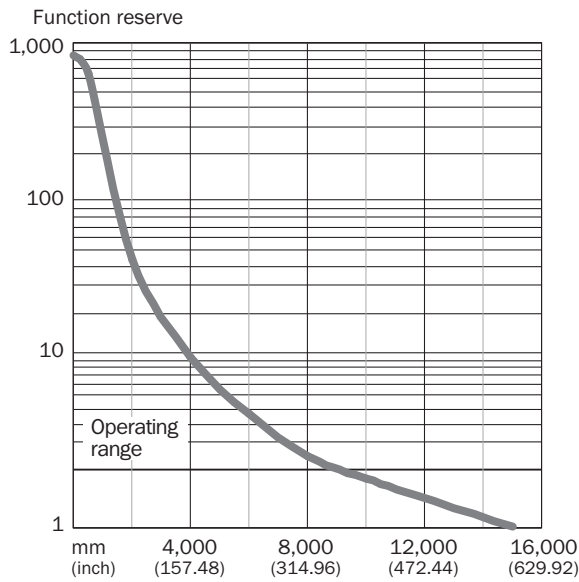⑤ LED indicator yellow: Status of received light beam
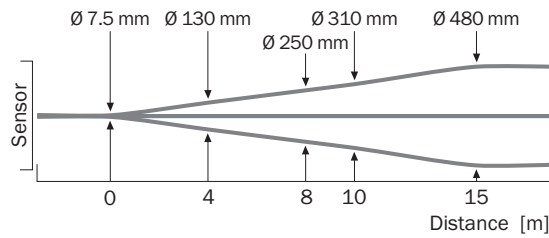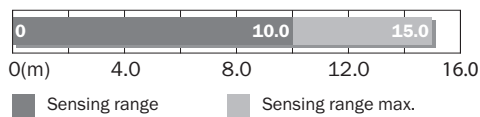
Connection type

Connection diagram

Cd-071

BN 1 + (L+)
WH 2 not connected
BU 3 - (M)
BK 4 not connected

Characteristic curve

Note: when used with GE6-P4111S64

Function reserve

mm	4,000	8,000	12,000	16,000
(inch)	(157.48)	(314.96)	(472.44)	(629.92)

Operating range

Light spot size

Ø 7.5 mm   Ø 130 mm   Ø 310 mm   Ø 480 mm
Ø 250 mm

Sensor

Distance [m]

Sensing range diagram

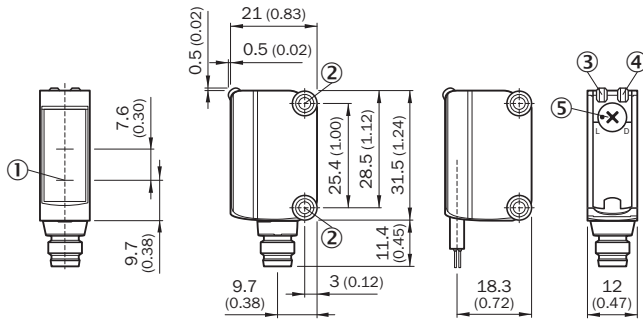| 0	10.0	15.0

0(m)   4.0   8.0   12.0   16.0

■ Sensing range   ■ Sensing range max.

Note: when used with GE6-P4111S64

Dimensional drawing (Dimensions in mm (inch))

① Optical axis, sender
② Mounting holes M3
③ LED indicator green: Supply voltage active
④ LED indicator yellow: Status of received light beam
⑤ Light/ dark rotary switch: L = light switching, D = dark switching

Recommended accessories

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

	Brief description	Type	Part no.
Universal bar clamp systems			
	Clamp bar to fix G6 sensors on rods of 12 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-IS12G6	2086865
Mounting brackets and plates			
	Stainless steel (1.4301)	BEF-WN-G6	2062909

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."

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