GL6-E4411V

G6 Inox

MINIATURE PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.

GL6-E4411V | G6 Inox

MINIATURE PHOTOELECTRIC SENSORS

Illustration may differ

Ordering information

Type	Part no.
GL6-E4411V	1084104

Other models and accessories ➜ www.sick.com/G6_Inox

Detailed technical data

Features

Sensor/ detection principle	Photoelectric retro-reflective sensor, Dual lens
Dimensions (W x H x D)	15 mm x 44 mm x 22 mm
Housing design (light emission)	Rectangular
Sensing range max.	0.03 m ... 6 m [1]
Sensing range	0.07 m ... 5 m [1]
Type of light	Visible red light
Light source	PinPoint LED [2]
Light spot size (distance)	Ø 8 mm (350 mm)
Wave length	650 nm
Adjustment	Potentiometer, 270 °
Special applications	Hygienic and washdown zones

[1] Reflector PL80A.
[2] Average service life: 100,000 h at T_U = +25 °C.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC [1]
Ripple	± 10 % [2]
Power consumption	30 mA [3]
Switching output	NPN
Output function	Complementary switching output
Switching mode	Light/dark switching
Signal voltage NPN HIGH/LOW	Approx. V_S / ≤ 3 V
Output current I$_{max.}$	≤ 100 mA [4]
Response time	< 625 µs [5]
Switching frequency	1,000 Hz [6]
Connection type	Male connector M8, 4-pin
Circuit protection	A [7] B [8] D [9]
Protection class	III
Weight	40 g
Polarisation filter	✓
Housing material	Stainless steel, Stainless steel V4A (1.4404, 316L)
Optics material	Plastic, PMMA
Enclosure rating	IP67 IP69K [10]
Ambient operating temperature	–25 °C ... +55 °C [11]
Ambient storage temperature	–30 °C ... +75 °C
UL File No.	NRKH.E348498 & NRKH7.E348498

[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] At Uv > 24 V, IA max. = 50 mA.

[5] Signal transit time with resistive load.

[6] With light/dark ratio 1:1.

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

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

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

[10] According to ISO 20653:2013-03.
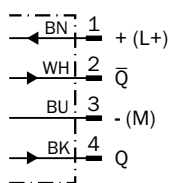
[11] Temperature stability following adjustment +/-10 °C.

Classifications

ECl@ss 5.0	27270902
ECl@ss 5.1.4	27270902
ECl@ss 6.0	27270902
ECl@ss 6.2	27270902
ECl@ss 7.0	27270902
ECl@ss 8.0	27270902
ECl@ss 8.1	27270902

ECl@ss 9.0	27270902
ECl@ss 10.0	27270902
ECl@ss 11.0	27270902
ETIM 5.0	EC002717
ETIM 6.0	EC002717
ETIM 7.0	EC002717
UNSPSC 16.0901	39121528

Connection diagram

Cd-084

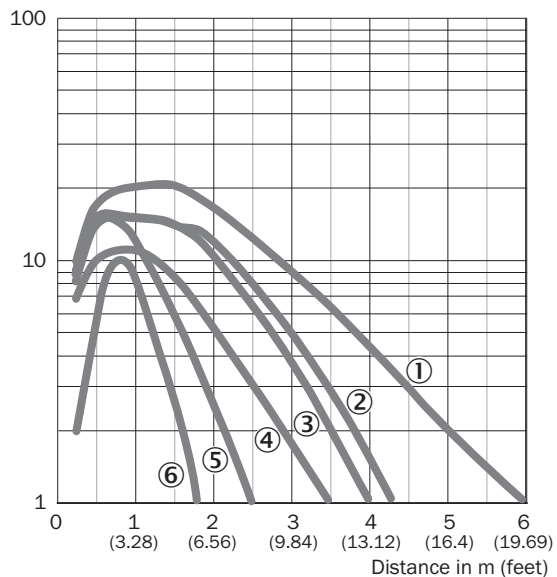BN 1 + (L+)
WH 2 $\overline{Q}$
BU 3 - (M)
BK 4 Q

Characteristic curve

GL6 Inox, Red, Standard

Function reserve

Distance in m (feet)
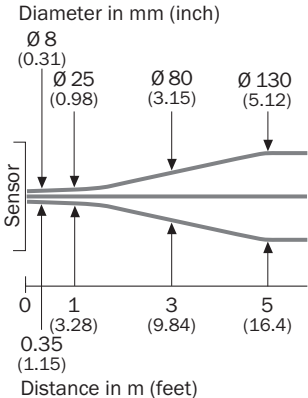
① Reflector PL80A
② Reflector PL40A
③ Reflector P250
④ Reflector P250 CHEM
⑤ Reflector PL20A
⑥ Reflective tape REF-IRF-56

Light spot size

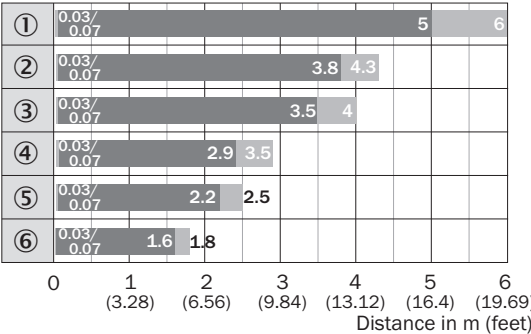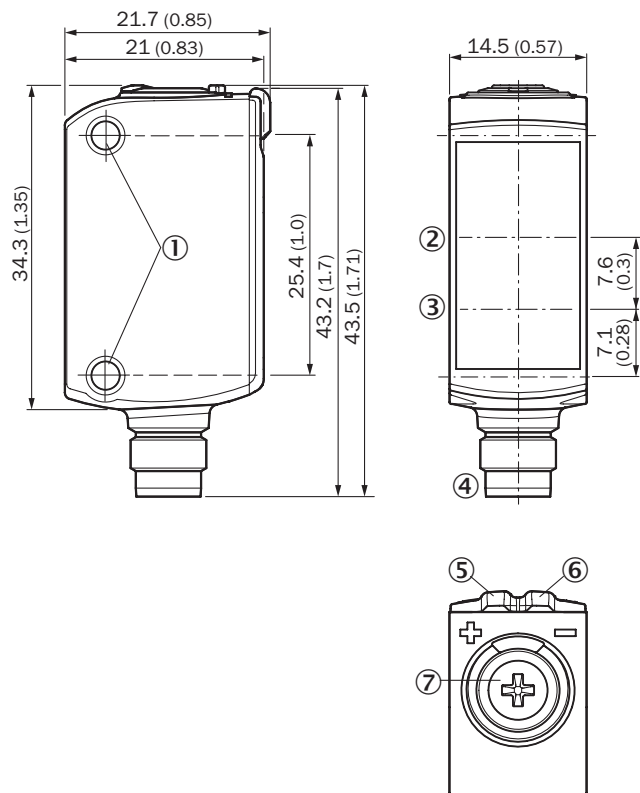GL6 Inox, Red, Standard

Diameter in mm (inch)

Ø 8 (0.31)
Ø 25 (0.98)
Ø 80 (3.15)
Ø 130 (5.12)

Sensor

0
1 (3.28)
3 (9.84)
5 (16.4)
0.35 (1.15)

Distance in m (feet)

Sensing range diagram

GL6 Inox, Red, Standard

①	0.03/0.07	5 — 6
②	0.03/0.07	3.8 — 4.3
③	0.03/0.07	3.5 — 4
④	0.03/0.07	2.9 — 3.5
⑤	0.03/0.07	2.2 — 2.5
⑥	0.03/0.07	1.6 — 1.8

0 1 (3.28) 2 (6.56) 3 (9.84) 4 (13.12) 5 (16.4) 6 (19.69)

Distance in m (feet)

■ Sensing range   ■ Sensing range max.

① Reflector PL80A
② Reflector PL40A
③ Reflector P250
④ Reflector P250 CHEM
⑤ Reflector PL20A
⑥ Reflective tape REF-IRF-56

Dimensional drawing (Dimensions in mm (inch))

GTB6, GTE6, GL6, GSE6 Inox, male connector

① M3 mounting hole
② Optical axis, receiver
③ Optical axis, sender
④ Connection
⑤ LED indicator yellow: Status of received light beam
⑥ LED indicator green: Supply voltage active
⑦ Potentiometer

Recommended accessories

Other models and accessories ➜ www.sick.com/G6_Inox

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting bracket for wall mounting, stainless steel, mounting hardware included	BEF-W100-A	5311520
	Universal mounting bracket for reflectors, steel, zinc coated	BEF-WN-REFX	2064574
Plug connectors and cables			
	Head A: female connector, M8, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YF8U14-050VA3XLEAX	2095889

	Brief description	Type	Part no.
	Head A: male connector, M8, 4-pin, straight Head B: - Cable: unshielded	STE-0804-G	6037323
Reflectors			
	Chemically resistant, screw connection, 47 mm x 47 mm, plastic, Screw-on, 2 hole mounting	P250 CHEM	5321097

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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.

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