



Photoelectric sensors
G6, Photoelectric retro-reflective sensor,
Standard optics

GL6G-N0611S43



Model Name > **GL6G-N0611S43**
Part No. > **1068695**



Illustration may differ

At a glance

- PinPoint LED for a bright, precise light spot
- Durable metal threaded inserts
- SICK ASIC technology - the result of decades of experience in photoelectric sensors
- Large, user-friendly potentiometer
- Large, bright indicator LEDs
- Adjustable receiver sensitivity via 270° turn potentiometer
- IP 67 enclosure rating

Your benefits

- Easy alignment and precise object detection due to a highly visible PinPoint LED
- Quick and easy mounting and high durability due to threaded metal inserts
- SICK ASIC technology provides high performance, excellent reliability and crosstalk immunity
- Easy to adjust due to large, user-friendly potentiometers
- Easy to monitor due to large, bright indicator LEDs
- Easy installation with SICK accessories
- Detection of transparent objects



Features

Sensor/detection principle:	Photoelectric retro-reflective sensor, Standard optics
Dimensions (W x H x D):	12 mm x 31.5 mm x 21 mm
Housing design (light emission):	Rectangular
Sensing range max.:	≤ 6 m ¹⁾
Sensing range:	≤ 5 m ²⁾
Type of light:	Visible red light
Light source:	PinPoint LED ³⁾
Wave length:	650 nm
Adjustment:	Potentiometer, 270 °
Light spot size (distance):	Ø 8 mm (350 mm)

^{1) 2)} PL80A ³⁾ Average service life of 100,000 h at T_A = +25 °C

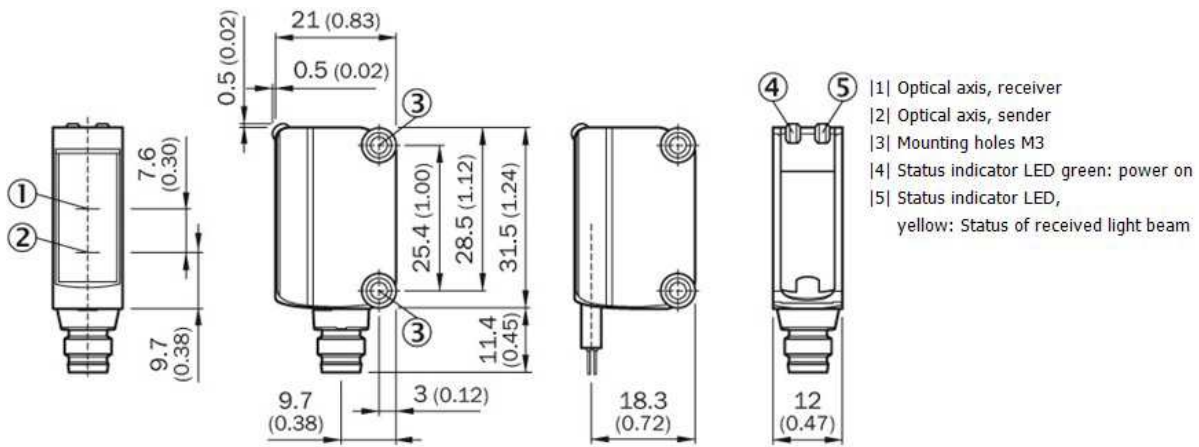
Mechanics/electronics

Supply voltage:	10 V DC ... 30 V DC ¹⁾
Residual ripple:	± 10 % ²⁾

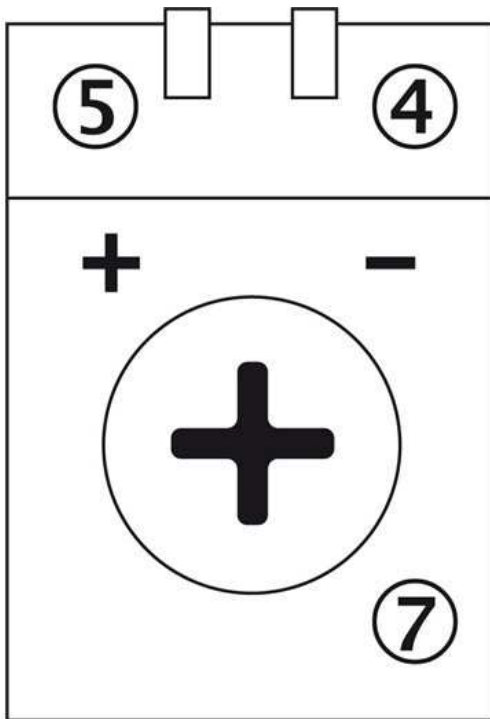
Power consumption:	$\leq 30 \text{ mA}$ ³⁾
Output type:	NPN, open collector
Switching mode:	Light switching
Output current I _{max} :	$\leq 100 \text{ mA}$ ⁴⁾
Response time:	$< 625 \mu\text{s}$ ⁵⁾
Switching frequency:	1,000 Hz ⁶⁾
Attenuation along light beam:	$> 20 \%$
Electrical connection:	Cable, 3-wire, 3 m ⁷⁾
Cable material:	PVC
Conductor cross-section:	0.14 mm ²
Circuit protection:::	A, B, D ^{8) 9) 10)}
Protection class:	III
Weight:	60 g
Polarisation filter:	✓
Optics material:	PMMA
Enclosure rating:	IP 67
Special feature:	Detection of transparent objects
Ambient operating temperature:	-25 °C ... +55 °C ¹¹⁾
Ambient storage temperature:	-40 °C ... +70 °C
UL File No.:	NRKH.E348498 & NRKH7.E348498
Signal voltage NPN HIGH/LOW:	Approx. $V_S/\leq 3 \text{ V}$
Housing material:	ABS/PC, Plastic

- 1) Limit values, operation in short-circuit protected network max. 8 A ²⁾ May not exceed or fall short of V_S tolerances ³⁾ Without load ⁴⁾ At $V_S > 24 \text{ V}$, $I_{A \text{ max}} = 50 \text{ mA}$
5) Signal transit time with resistive load ⁶⁾ With light/dark ratio 1:1 ⁷⁾ Do not bend below 0 °C ⁸⁾ $A = V_S$ connections reverse-polarity protected ⁹⁾ B = inputs and
output reverse-polarity protected ¹⁰⁾ D = outputs overcurrent and short-circuit protected ¹¹⁾ Temperature stability after adjustment +/-10°C

Dimensional drawing

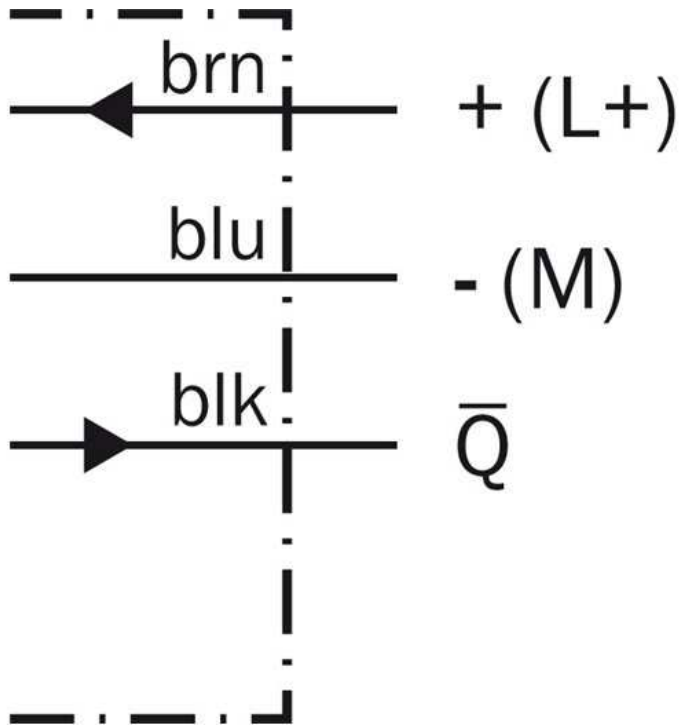


Adjustments possible



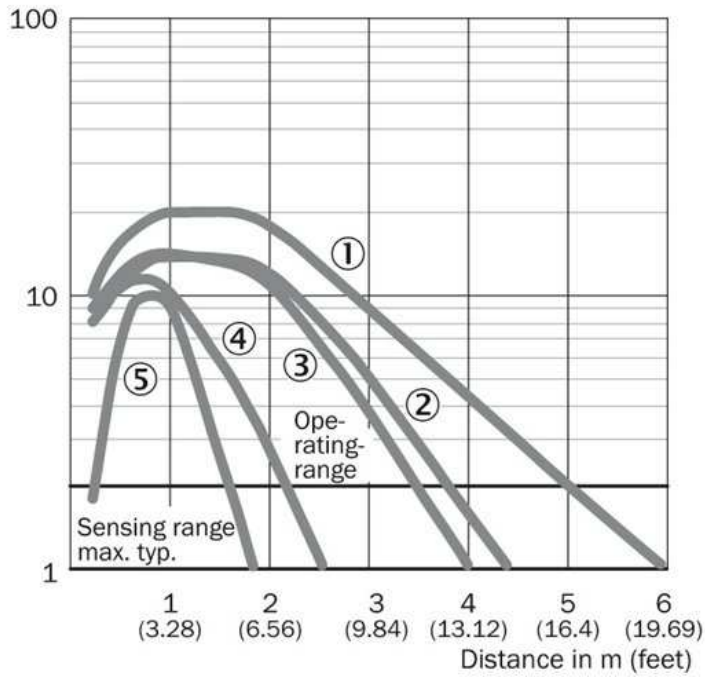
- 4 | Status indicator LED green: power on
- 5 | Status indicator LED, yellow: Status of received light beam
- 7 | Sensitivity adjustment: poti

Connection diagram



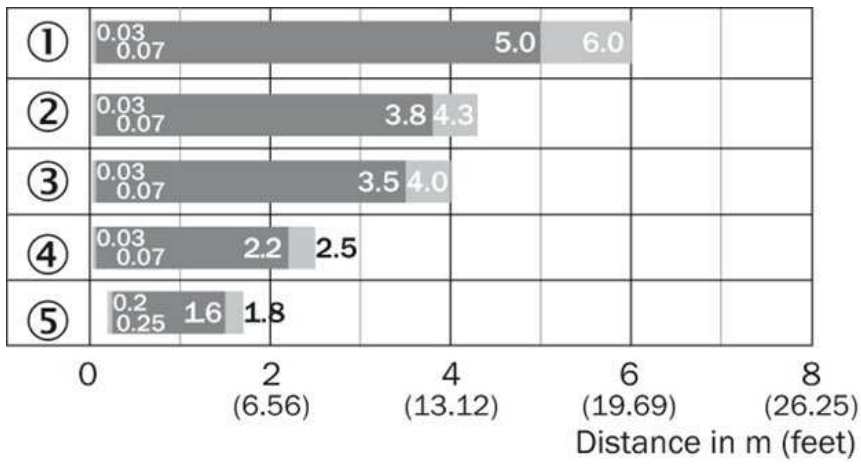
Characteristic curve

Operating reserve



- [1] PL80A
- [2] PL40A
- [3] P250
- [4] PL20A
- [5] REF-IRF-56

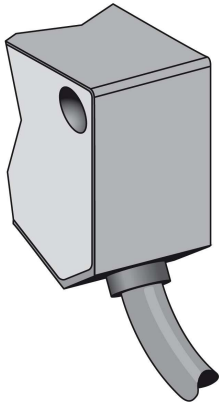
Sensing range diagram



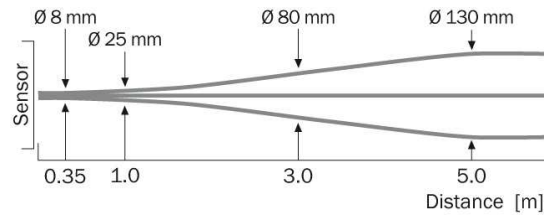
- |1| PL80A
- |2| PL40A
- |3| P250
- |4| PL20A
- |5| REF-IRF-56

■ Sensing range ■ Sensing range max.

Connection type



Light spot size



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