



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

GL6-P0511S17



Model Name > **GL6-P0511S17**
Part No. > **1061393**



Illustration may differ

At a glance

- Durable metal threaded inserts
- SICK ASIC technology - the result of decades of experience in photoelectric sensors
- Large, bright indicator LEDs
- IP 67 enclosure rating

Your benefits

- 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 monitor due to large, bright indicator LEDs
- Easy installation with SICK accessories



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.:	≤ 4.5 m ¹⁾
Type of light:	Visible red light
Light source:	LED ²⁾
Wave length:	650 nm
Light spot size (distance):	Ø 15 mm (350 mm)

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

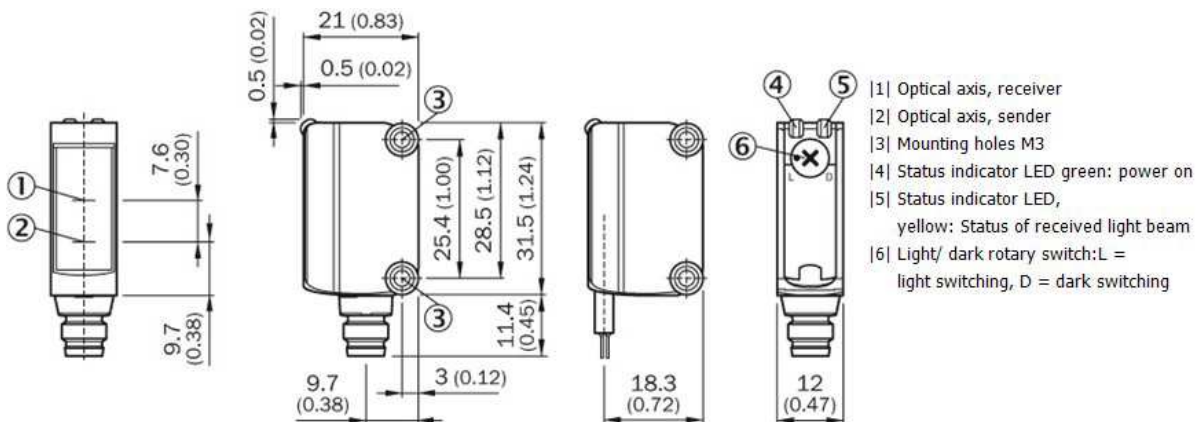
Mechanics/electronics

Supply voltage:	10 V DC ... 30 V DC ¹⁾
Ripple:	± 10 % ²⁾
Power consumption:	≤ 30 mA ³⁾
Output type:	PNP
Switching mode:	Light switching
Output current I _{max.} :	≤ 100 mA ⁴⁾
Response time:	< 625 µs ⁵⁾
Switching frequency:	1,000 Hz ⁶⁾
Connection type:	Cable with connector M8, 4-pin, 200 mm ⁷⁾
Cable material:	PVC

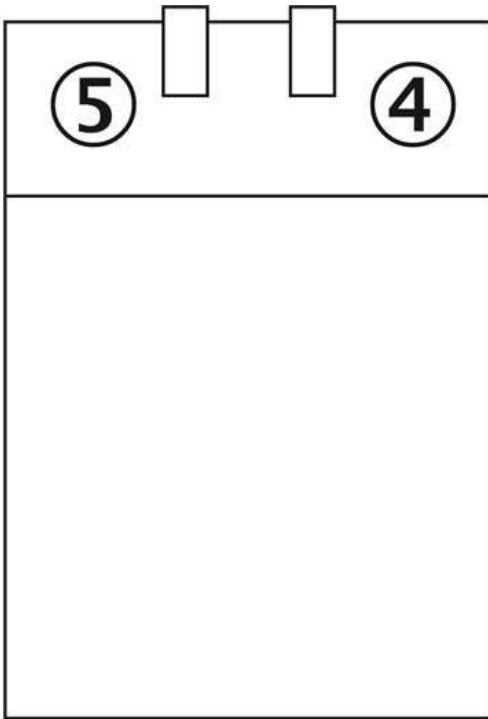
Conductor cross-section:	0.14 mm ²
Circuit protection:::	A, B, D ^{8) 9) 10)}
Protection class:	III
Weight:	60 g
Polarisation filter:	✓
Optics material:	PMMA
Enclosure rating:	IP 67
Ambient temperature operation:	-25 °C ... +55 °C ¹¹⁾
Ambient storage temperature:	-40 °C ... +70 °C
UL File No.:	NRKH.E348498 & NRKH7.E348498
Signal voltage PNP HIGH/LOW:	VS - (≤ 3 V)/approx. 0 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 $V_S > 24 V$, $I_{A \max} = 50 \text{ mA}$
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

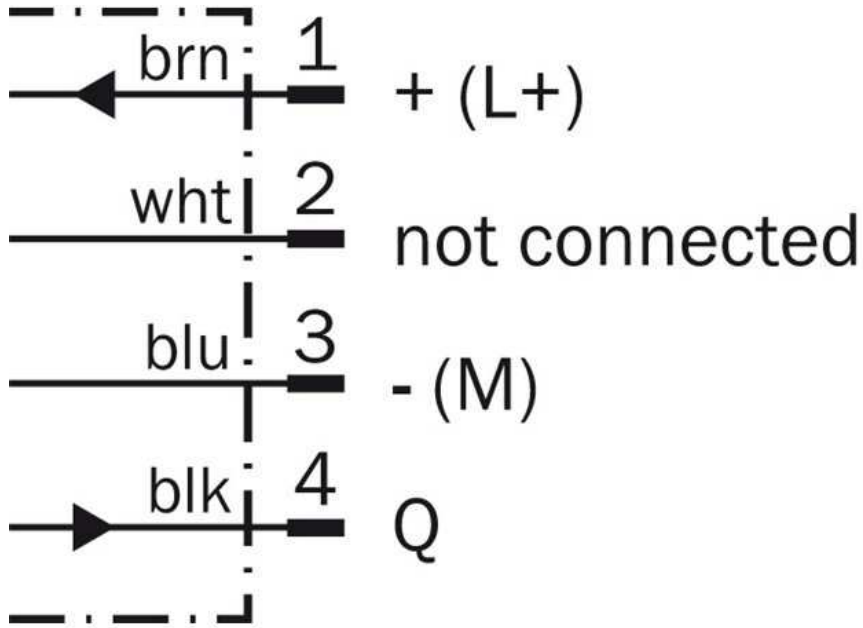


Adjustments possible



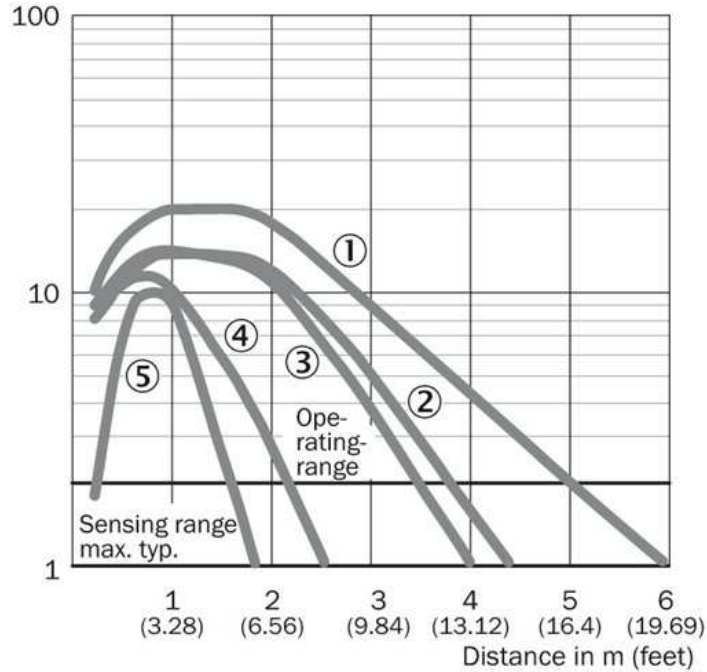
- |4| Status indicator LED green: power on
- |5| Status indicator LED,
yellow: Status of received light beam

Connection diagram



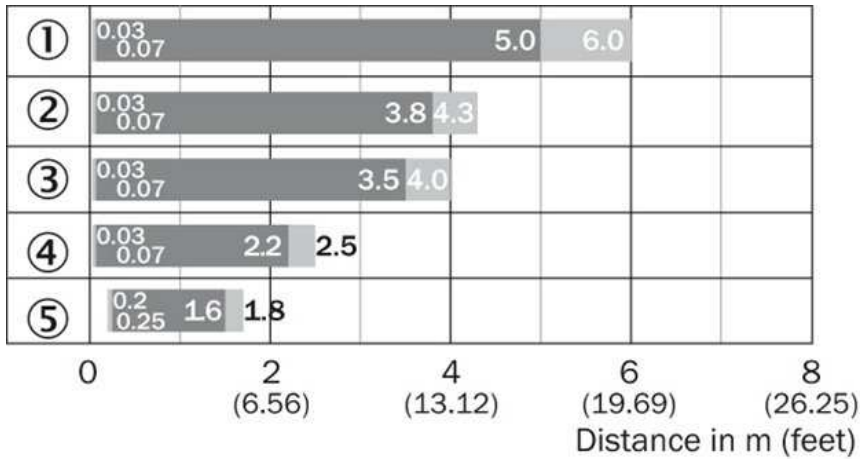
Characteristic curve

Operating reserve



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

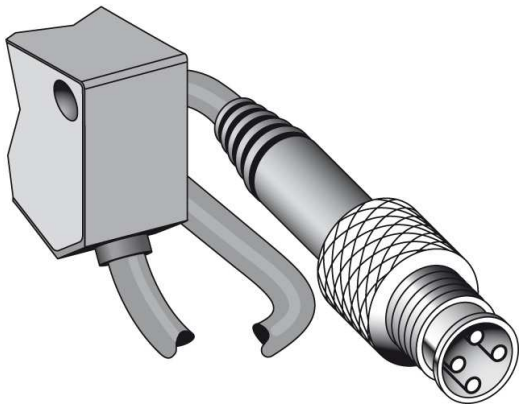
Sensing range diagram



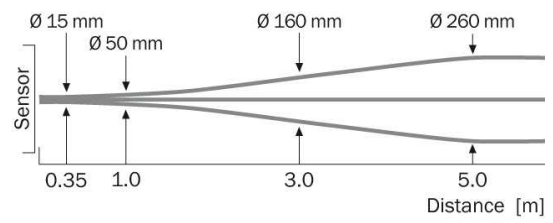
- |1| PL80A
- |2| PL40A
- |3| P250
- |4| PL20A
- |5| REF-IRF-56

■ Sensing range ■ Sensing range max.

Connection type



Light spot size



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