



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

GL6-N6212



Model Name > **GL6-N6212**
Part No. > **1062588**



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 critical surfaces and shiny 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

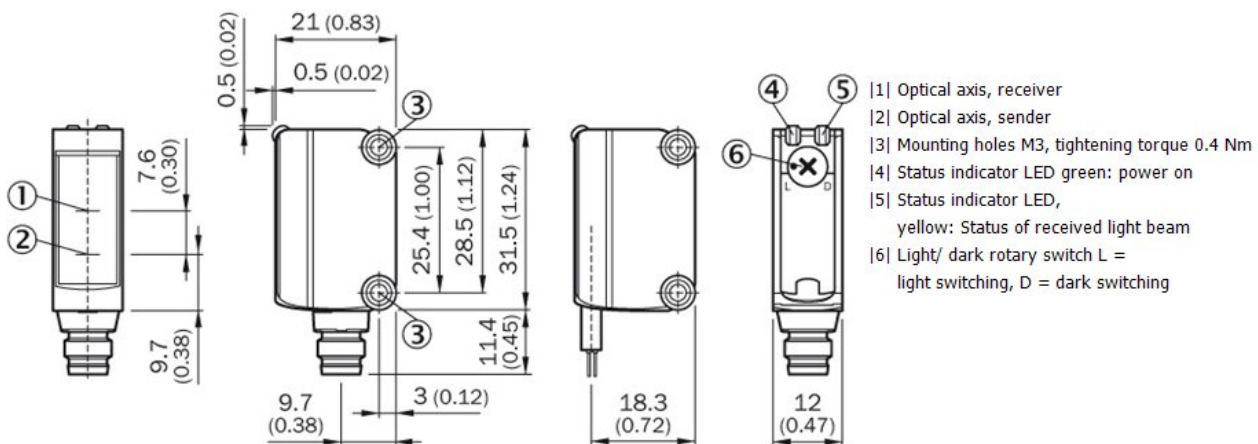
Mechanics/electronics

Supply voltage:	10 V DC ... 30 V DC ¹⁾
Power consumption:	≤ 30 mA ²⁾

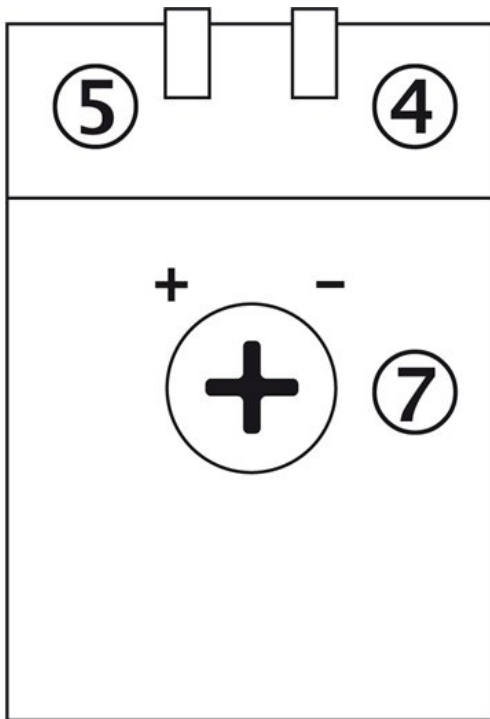
Output type:	NPN
Switching mode:	Light/dark-switching
Switching mode selector:	Selectable via light/dark selector
Signal voltage PNP HIGH/LOW:	$V_S - (\leq 3 \text{ V}) / \text{approx. } 0 \text{ V}$
Output current I_{max} :	$\leq 100 \text{ mA}$ ³⁾
Response time:	$< 625 \mu\text{s}$ ⁴⁾
Switching frequency:	1,000 Hz ⁵⁾
Connection type:	Cable with connector M8, 4-pin, 300 mm
Cable material:	PVC
Circuit protection:::	A, B, D ⁶⁾ 7) 8)
Weight:	50 g
Polarisation filter:	✓
AS-Interface-Chip:	-
Housing material:	ABS/PC, Plastic
Optics material:	PMMA
Enclosure rating:	IP 67
Items supplied:	Stainless steel mounting bracket (1.4301/304) BEF-W100-A, Reflector P250
Ambient operating temperature:	-25 °C ... 55 °C
Ambient storage temperature:	-40 °C ... 70 °C

1) Limit values, operation in short-circuit protected network max. 8 A
light/dark ratio 1:1
2) Without load
3) At $V_S > 24 \text{ V}$, $I_{\text{A max}} = 50 \text{ mA}$
4) Signal transit time with resistive load
5) With
6) $A = V_S$ connections reverse-polarity protected
7) B = inputs and output reverse-polarity protected
8) D = outputs overcurrent and short-circuit protected

Dimensional drawing

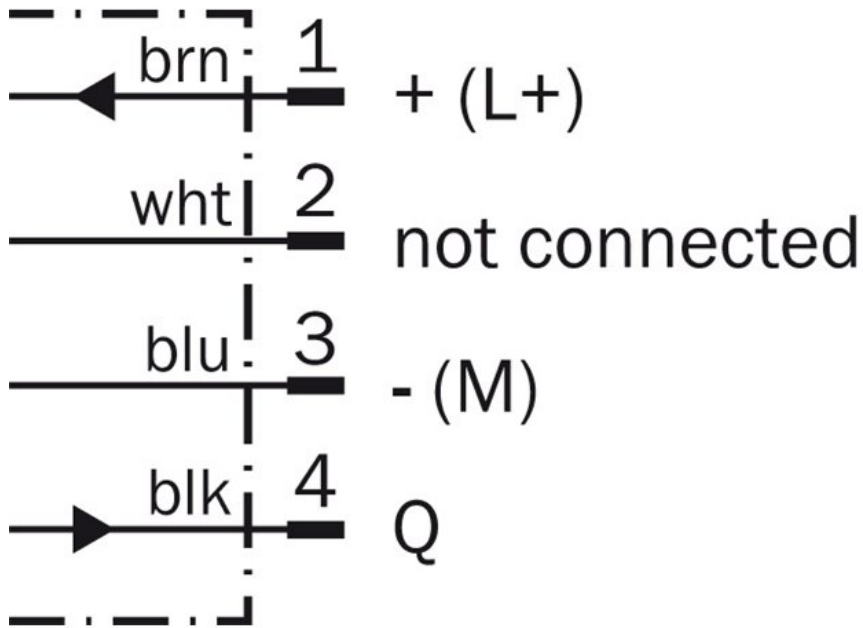


Adjustments possible

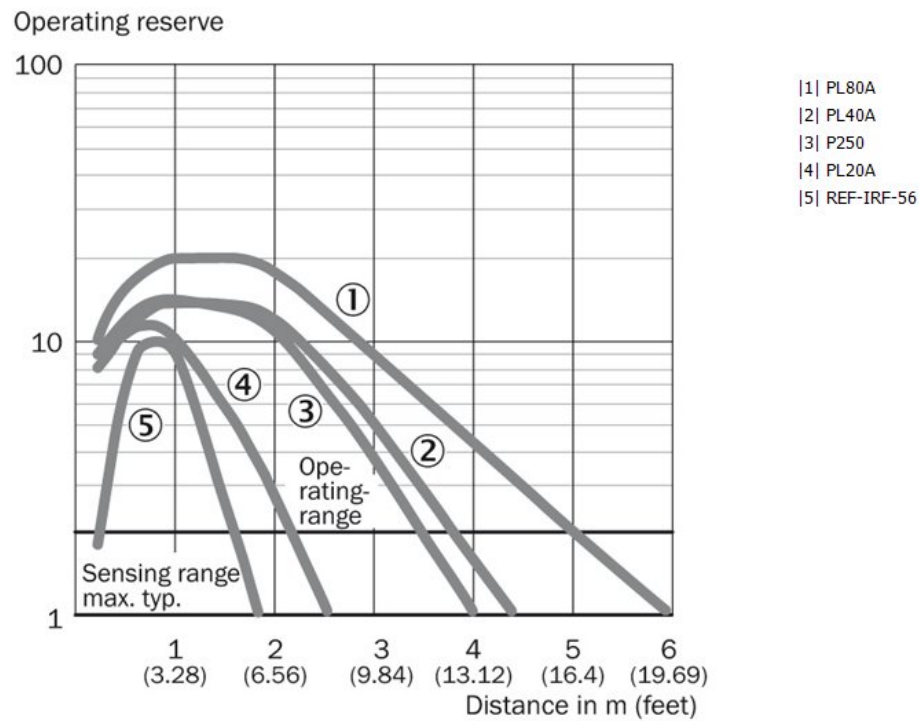


- |4| Status indicator LED green: power on
- |5| Status indicator LED,
yellow: Status of received light beam
- |7| Sensitivity adjustment: poti

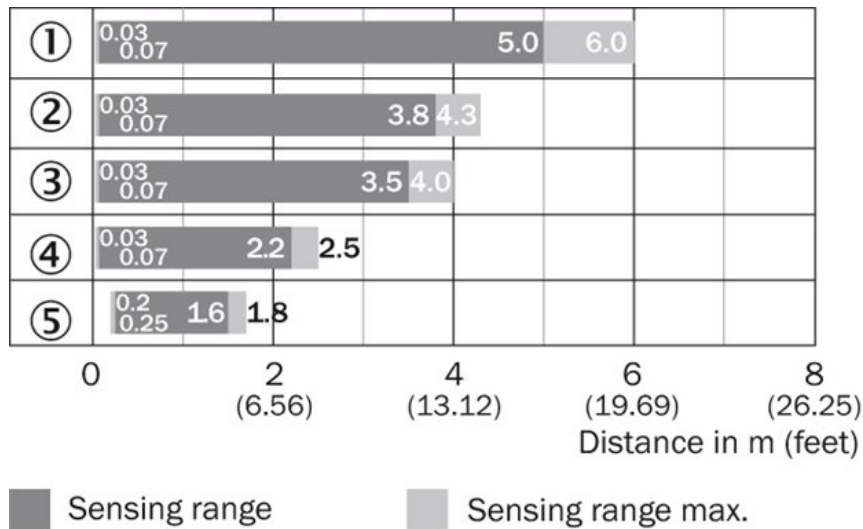
Connection diagram



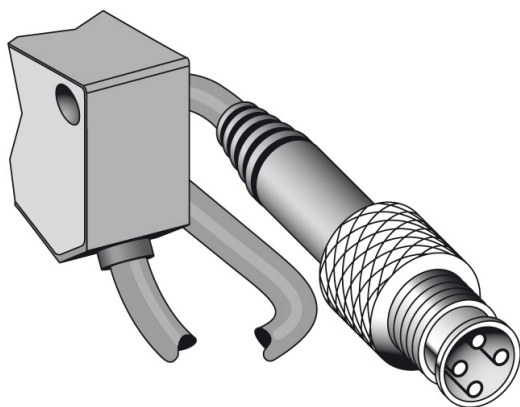
Characteristic curve



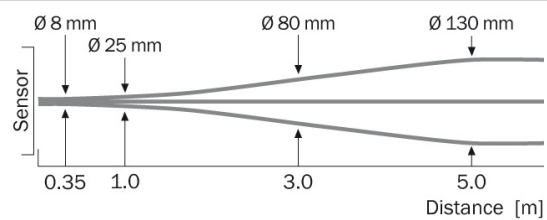
Sensing range diagram



Connection type



Light spot size



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