


ONLINE DATA SHEET
www.mysick.com

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

GL6-N1211



SICK
Sensor Intelligence.

SICK
Sensor Intelligence.

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

**Model Name** > GL6-N1211
**Part No.** > 1059923





*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

## 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

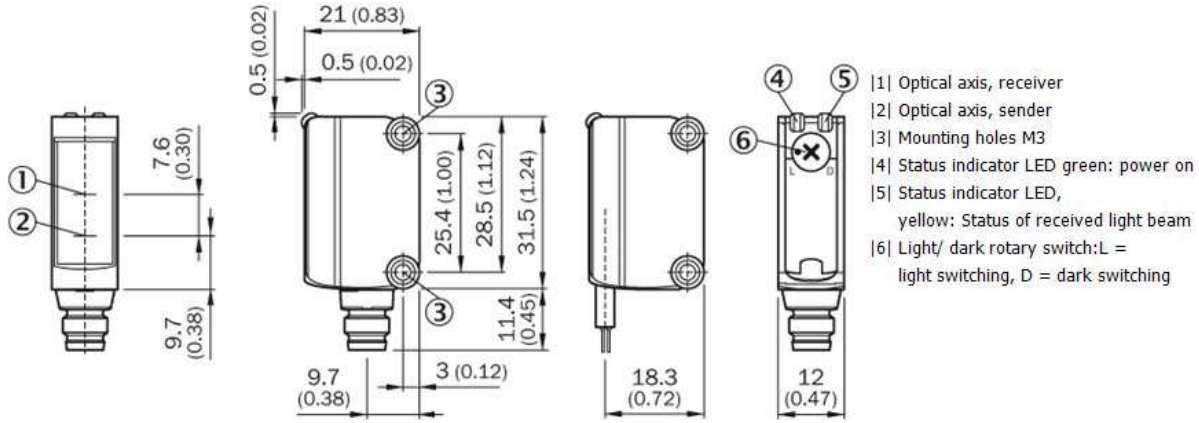
| | |
|---|---|
| Supply voltage: | 10 V DC ... 30 V DC [1)] |
| Ripple: | ± 10 % [2)] |
| Power consumption: | ≤ 30 mA [3)] |


© SICK AG. Subject to change without notice.

| | |
|---|---|
| Output type: | NPN, open collector |
| Switching mode: | Light/dark switching |
| Switching mode selector: | Selectable via light/dark selector |
| Output current Imax.: | ≤ 100 mA [4] |
| Response time: | < 625 µs [5] |
| Switching frequency: | 1,000 Hz [6] |
| Connection type: | Cable, 3-wire, 2 m [7] |
| Cable material: | PVC |
| Circuit protection::: | A, B, D [8] [9] [10] |
| Protection class: | III |
| Weight: | 60 g |
| Polarisation filter: | ✓ |
| Special device: | - |
| Optics material: | PMMA |
| Enclosure rating: | IP 67 |
| 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. VS／≤ 3 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 Vs > 24 V, $I_A$ max = 50 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

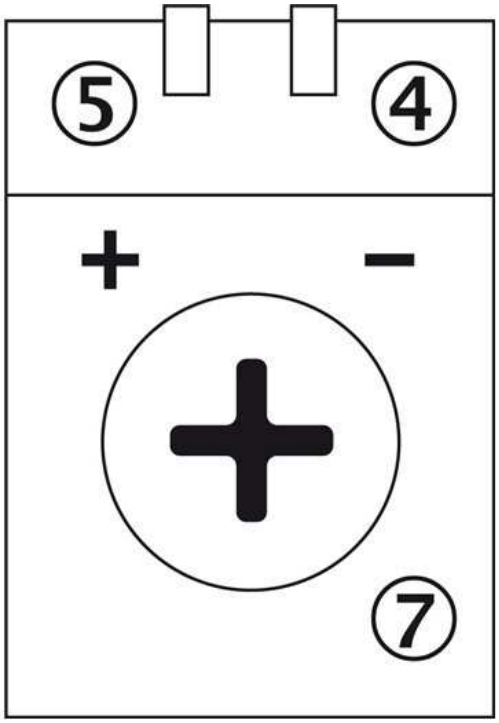
**Dimensional drawing**





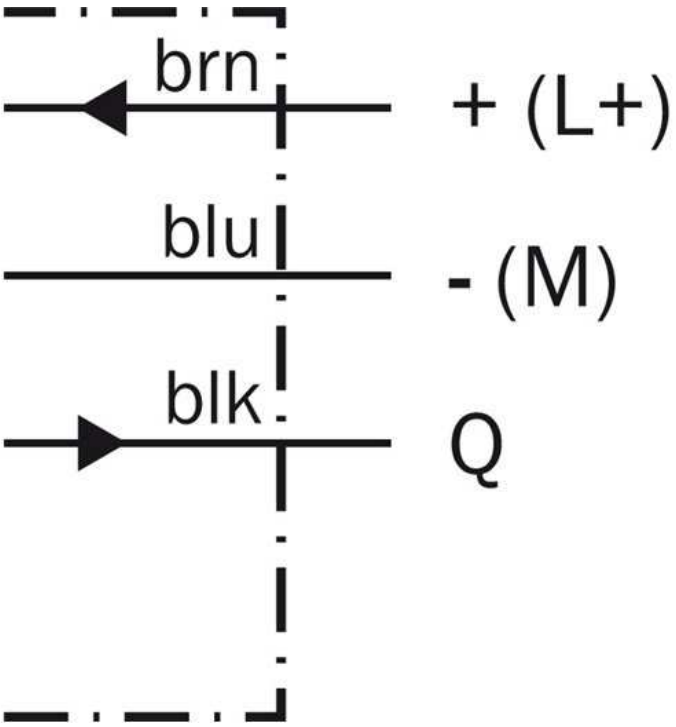
© SICK AG. Subject to change without notice.

## Adjustments possible




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

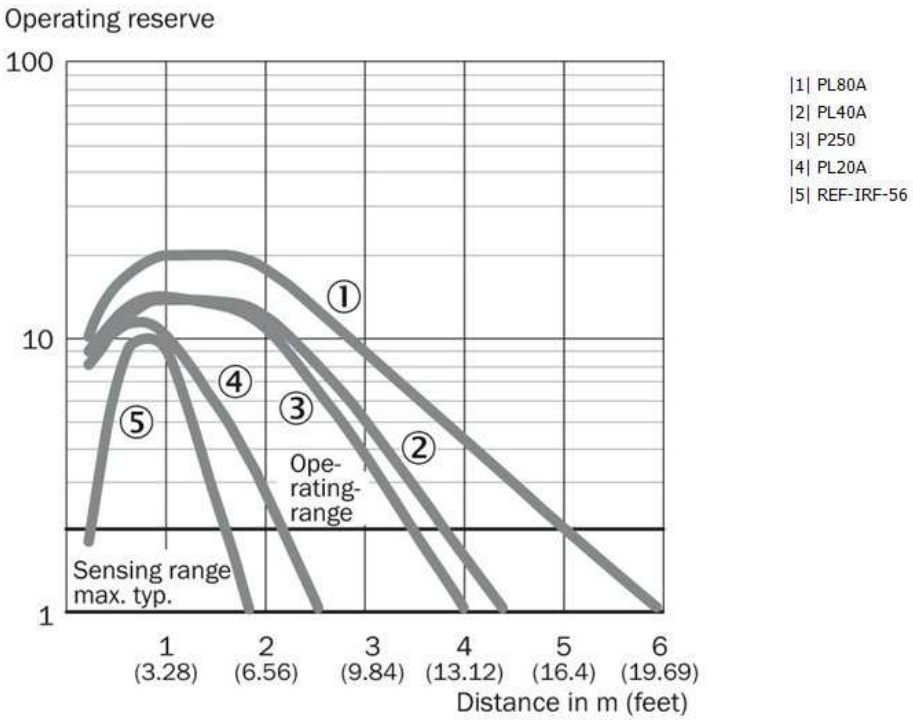
## Connection diagram



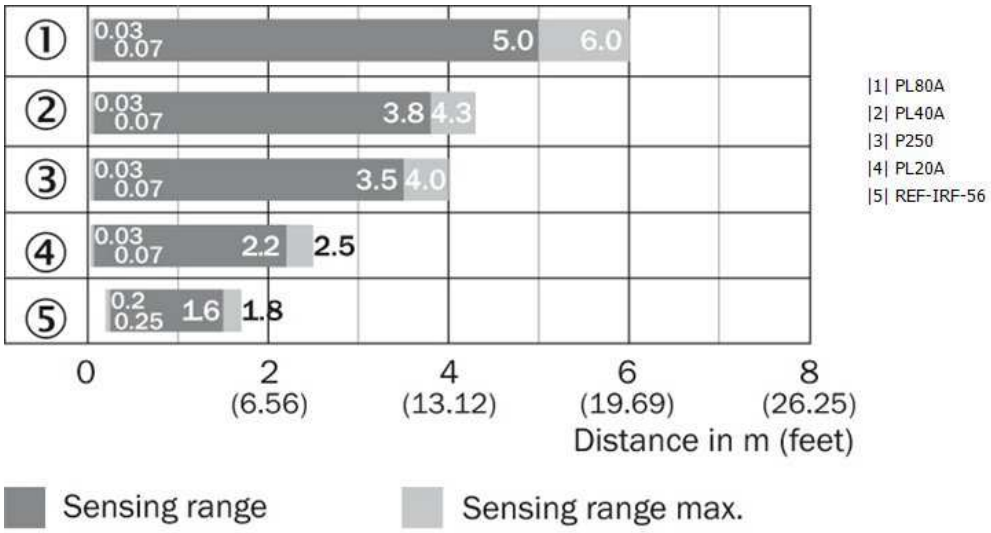


© SICK AG. Subject to change without notice.

## Characteristic curve



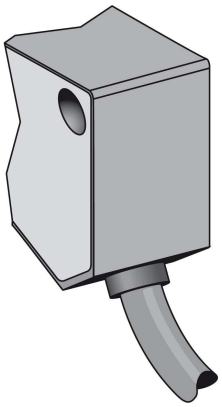

## Sensing range diagram



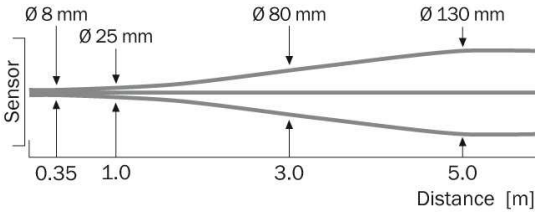


© SICK AG. Subject to change without notice.

## Connection type



## Light spot size





© SICK AG. Subject to change without notice.

A4 4c int43

**Australia**
Phone +61 3 9457 0600
1800 33 48 02 – tollfree
E-Mail sales@sick.com.au

**Belgium/Luxembourg**
Phone +32 (0)2 466 55 66
E-Mail info@sick.be

**Brasil**
Phone +55 11 3215-4900
E-Mail marketing@sick.com.br

**Canada**
Phone +1 905 771 14 44
E-Mail information@sick.com

**Česká republika**
Phone +420 2 57 91 18 50
E-Mail sick@sick.cz

**China**
Phone +86 4000 121 000
E-Mail info.china@sick.net.cn
Phone +852-2153 6300
E-Mail ghk@sick.com.hk

**Danmark**
Phone +45 45 82 64 00
E-Mail sick@sick.dk

**Deutschland**
Phone +49 211 5301-301
E-Mail info@sick.de

**España**
Phone +34 93 480 31 00
E-Mail info@sick.es

**France**
Phone +33 1 64 62 35 00
E-Mail info@sick.fr

**Great Britain**
Phone +44 (0)1727 831121
E-Mail info@sick.co.uk

**India**
Phone +91–22–4033 8333
E-Mail info@sick-india.com

**Israel**
Phone +972-4-6881000
E-Mail info@sick-sensors.com

**Italia**
Phone +39 02 27 43 41
E-Mail info@sick.it

**Japan**
Phone +81 (0)3 5309 2112
E-Mail support@sick.jp

**Magyarország**
Phone +36 1 371 2680
E-Mail office@sick.hu

**Nederland**
Phone +31 (0)30 229 25 44
E-Mail info@sick.nl

**Norge**
Phone +47 67 81 50 00
E-Mail sick@sick.no

**Österreich**
Phone +43 (0)22 36 62 28 8-0
E-Mail office@sick.at

**Polska**
Phone +48 22 837 40 50
E-Mail info@sick.pl

**România**
Phone +40 356 171 120
E-Mail office@sick.ro

**Russia**
Phone +7-495-775-05-30
E-Mail info@sick.ru

**Schweiz**
Phone +41 41 619 29 39
E-Mail contact@sick.ch

**Singapore**
Phone +65 6744 3732
E-Mail sales.gsg@sick.com

**Slovenija**
Phone +386 (0)1-47 69 990
E-Mail office@sick.si

**South Africa**
Phone +27 11 472 3733
E-Mail info@sickautomation.co.za

**South Korea**
Phone +82 2 786 6321/4
E-Mail info@sickkorea.net

**Suomi**
Phone +358-9-25 15 800
E-Mail sick@sick.fi

**Sverige**
Phone +46 10 110 10 00
E-Mail info@sick.se

**Taiwan**
Phone +886 2 2375-6288
E-Mail sales@sick.com.tw

**Türkiye**
Phone +90 (216) 528 50 00
E-Mail info@sick.com.tr

**United Arab Emirates**
Phone +971 (0) 4 88 65 878
E-Mail info@sick.ae

**USA/México**
Phone +1(952) 941-6780
1 (800) 325-7425 – tollfree
E-Mail info@sickusa.com

More representatives and agencies
at **www.sick.com**



SICK
Sensor Intelligence.