



Photoelectric sensors G6, Photoelectric proximity sensor, energetic

GTE6-P0212S49



Model Name > **GTE6-P0212S49**
Part No. > **1070071**



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
- 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 proximity sensor, energetic
Dimensions (W x H x D):	12 mm x 31.5 mm x 21 mm
Housing design (light emission):	Rectangular
Sensing range max.:	≤ 300 mm ¹⁾
Sensing range:	≤ 250 mm
Type of light:	Visible red light
Light source:	PinPoint LED ²⁾
Wave length:	650 nm
Adjustment:	Mechanical spindle, 5 turns
Light spot size (distance):	Ø 7 mm (90 mm)

¹⁾ Object with 90 % reflectance (referred to standard white, DIN 5033) ²⁾ Average service life of 100,000 h at T_A = +25 °C

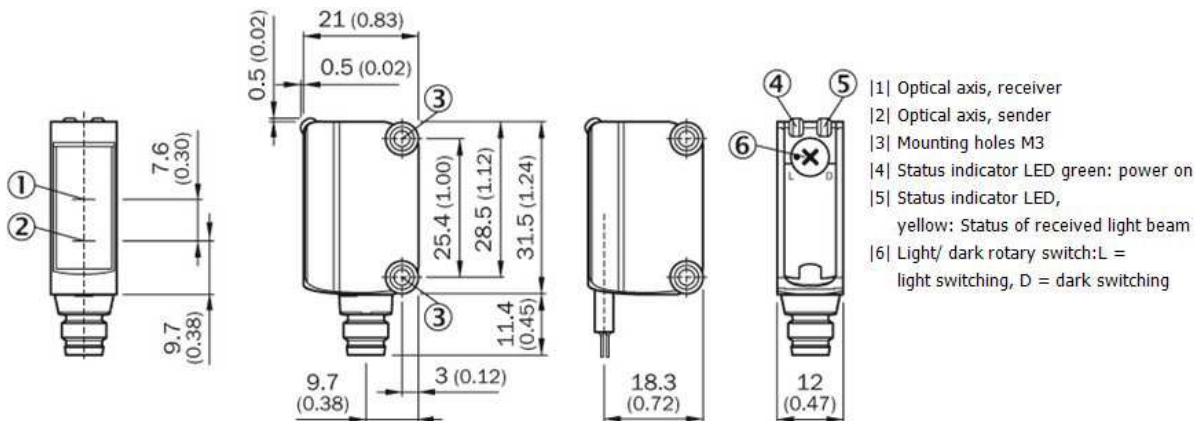
Mechanics/electronics

Supply voltage:	10 V DC ... 30 V DC ¹⁾
Residual ripple:	± 10 % ²⁾
Power consumption:	≤ 30 mA ³⁾
Output type:	PNP

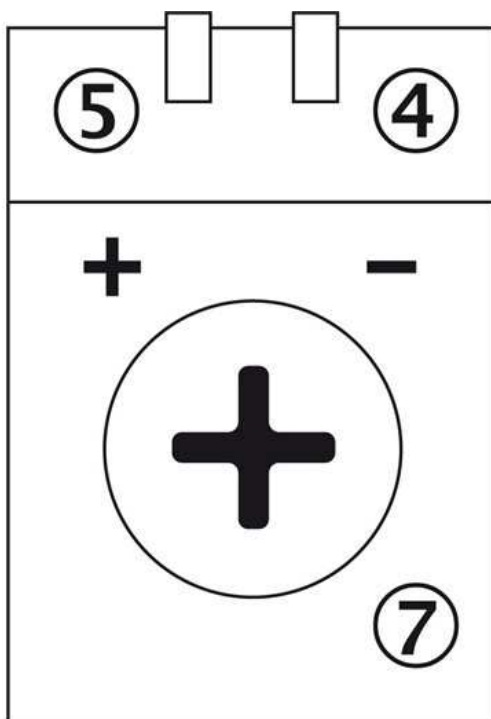
Switching mode:	Light/dark switching
Switching mode selector:	Selectable via light/dark selector
Output current I _{max} :	≤ 100 mA ⁴⁾
Response time:	< 1,250 ms ⁵⁾
Switching frequency:	500 Hz ⁶⁾
Electrical connection:	Cable, 3-wire, 5 m ⁷⁾
Cable material:	PVC
Conductor cross-section:	0.14 mm ²
Circuit protection:::	A, B, D ⁸⁾ ⁹⁾ ¹⁰⁾
Protection class:	III
Weight:	120 g
Polarisation filter:	-
Optics material:	PMMA
Enclosure rating:	IP 67
Items supplied:	Stainless steel mounting bracket (1.4301/304) BEF-W100-A
Ambient operating temperature:	-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 $V_S > 24 \text{ V}$, $I_{A \text{ max}} = 50 \text{ mA}$
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

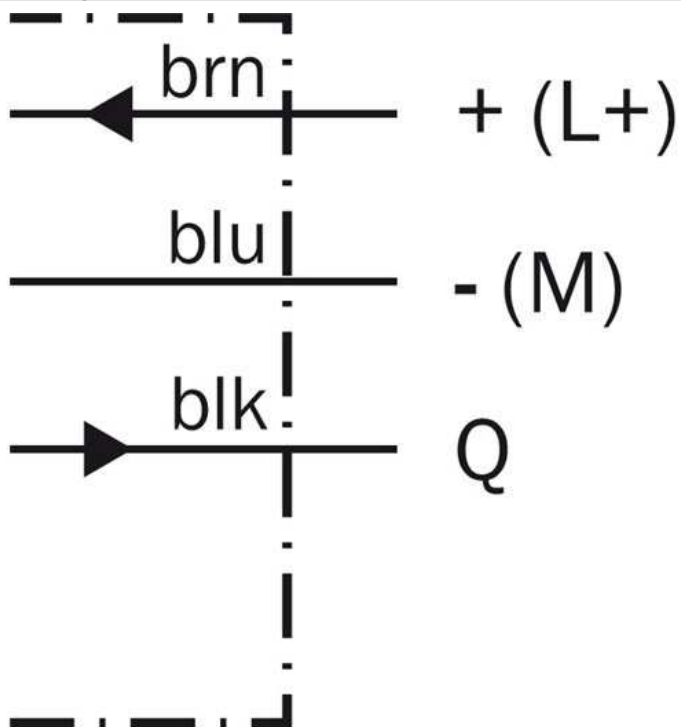


Adjustments possible

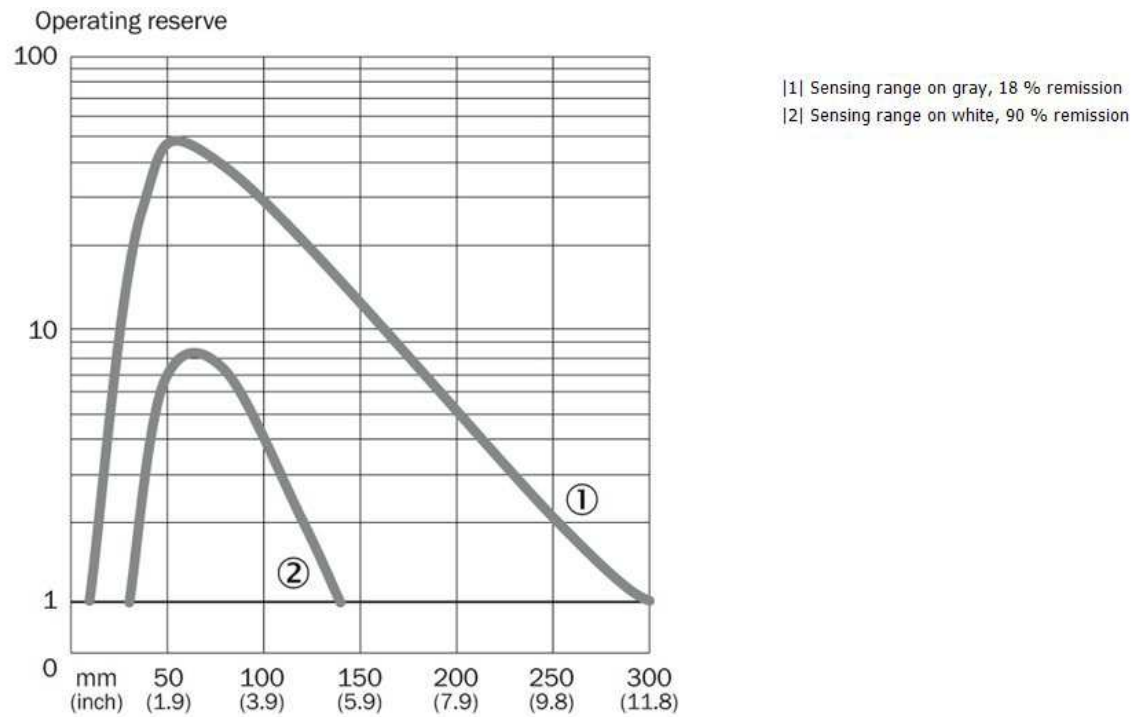


- |4| Status indicator LED green: power on
- |5| Status indicator LED,
yellow: Status of received light beam
- |7| Sensitivity adjustment: poti

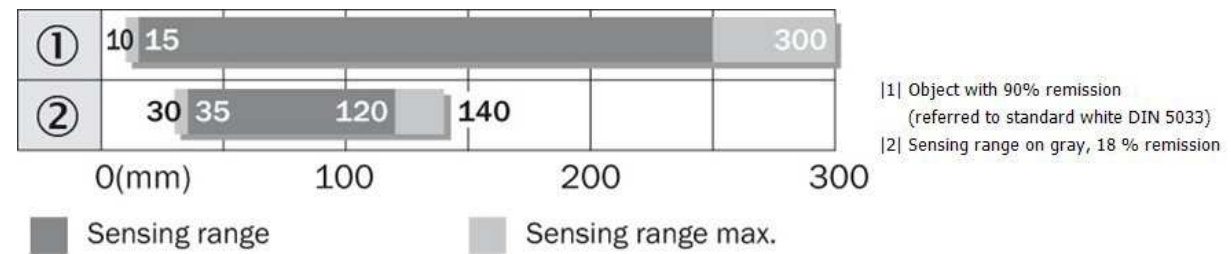
Connection diagram



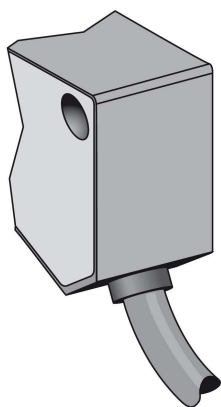
Characteristic curve



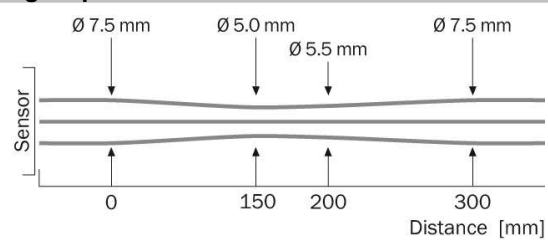
Sensing range diagram



Connection type



Light spot size



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