



Photoelectric sensors
G6, Photoelectric proximity sensor, energetic

GTE6-N4231



Model Name > [GTE6-N4231](#)
Part No. > [1065761](#)



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.:	≤ 900 mm
Sensing range:	≤ 760 mm
Type of light:	Visible red light
Light source:	PinPoint LED
Wave length:	650 nm
Adjustment:	Mechanical spindle, 5 turns
Light spot size (distance):	Ø 5 mm (150 mm)

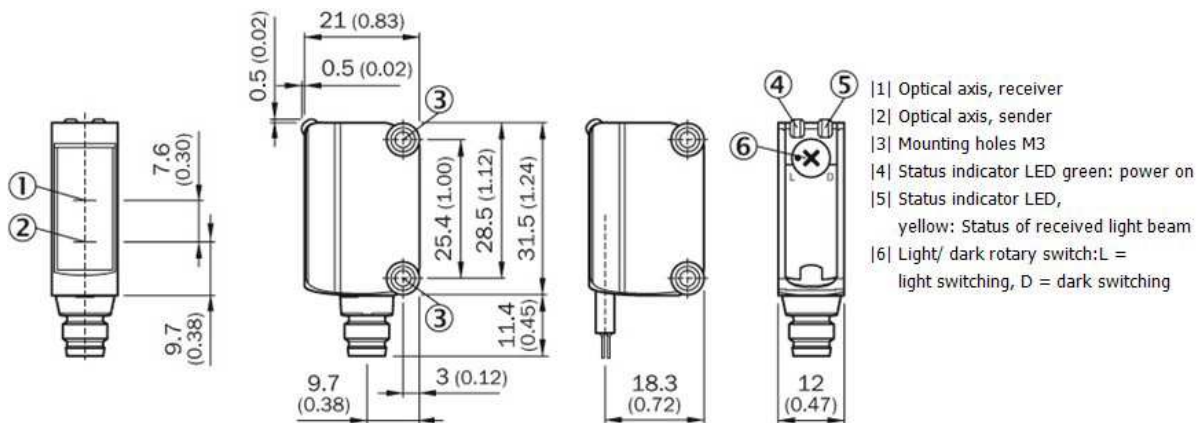
Mechanics/electronics

Supply voltage:	10 V DC ... 30 V DC ¹⁾
Ripple:	± 10 % ²⁾
Power consumption:	≤ 30 mA ³⁾
Output type:	NPN, open collector
Switching mode:	Light/dark switching
Switching mode selector:	Selectable via light/dark selector

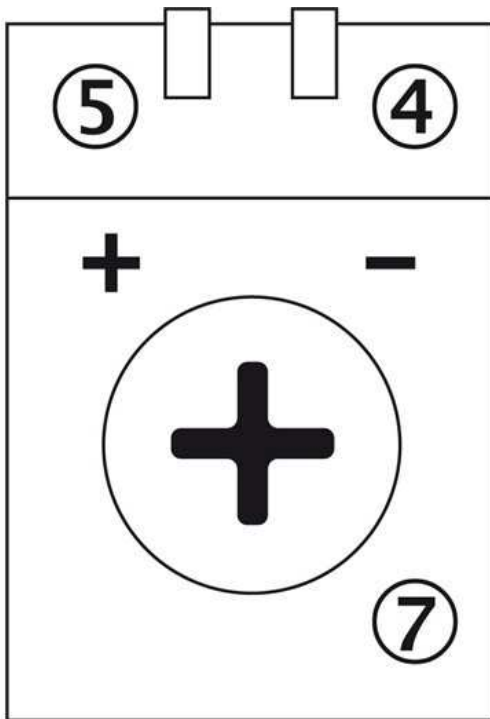
Output current I _{max} ..:	≤ 100 mA ⁴⁾
Response time:	1.25 ms ⁵⁾
Switching frequency:	± 500 Hz ⁶⁾
Connection type:	Connector M8, 4-pin
Circuit protection:::	A, B, D ^{7) 8) 9)}
Protection class:	III
Weight:	20 g
Polarisation filter:	-
Optics material:	PMMA
Enclosure rating:	IP 67
Ambient temperature operation:	-25 °C ... +55 °C ¹⁰⁾
Ambient storage temperature:	-40 °C ... +70 °C
UL File No.:	E348498
Signal voltage NPN HIGH/LOW:	Approx. V _S /≤ 3 V
Housing material:	ABS/PC, Plastic

- 1) Limit values, operation in short-circuit protected network max. 8 A²⁾ May not exceed or fall short of V_S tolerances³⁾ Without load⁴⁾ At V_S > 24 V, I_A max = 50 mA
5) Signal transit time with resistive load⁶⁾ With light/dark ratio 1:1⁷⁾ A = V_S connections reverse-polarity protected⁸⁾ B = inputs and output reverse-polarity protected
9) D = outputs overcurrent and short-circuit protected¹⁰⁾ Temperature stability after adjustment +/-10°C

Dimensional drawing

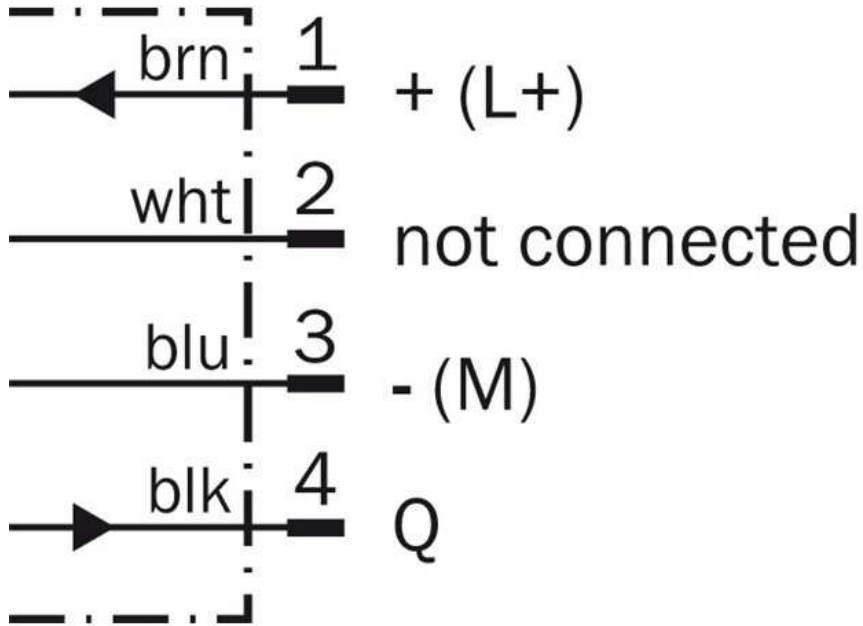


Adjustments possible

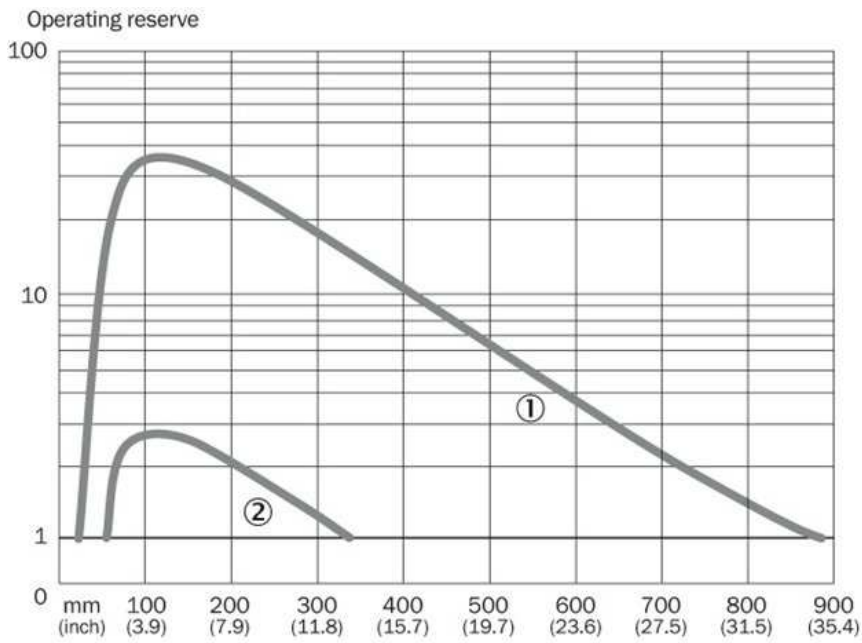


- |4| Status indicator LED green: power on
- |5| Status indicator LED,
yellow: Status of received light beam
- |7| Sensitivity adjustment: poti

Connection diagram

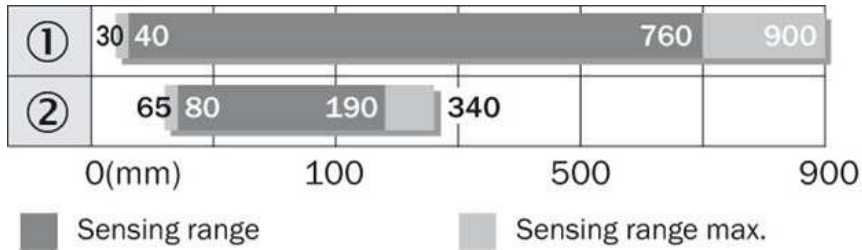


Characteristic curve



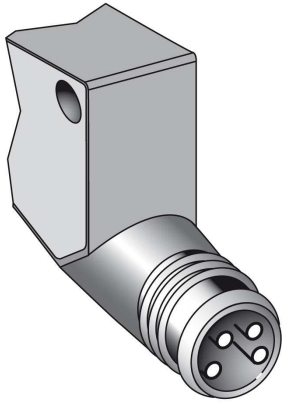
- |1| Sensing range on white, 90 % remission
- |2| Sensing range on black, 6.25 % remission

Sensing range diagram

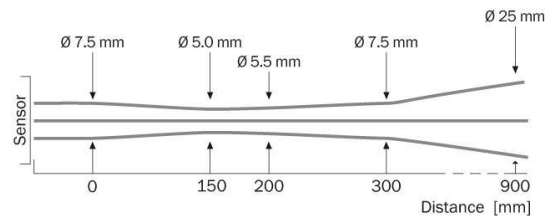


- |1| Sensing range on white, 90 % remission
- |2| Sensing range on black, 6.25 % remission

Connection type



Light spot size



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