



Photoelectric sensors
G2S, Through-beam photoelectric sensor

GSE2S-N1311



Model Name > GSE2S-N1311
Part No. > 1064365



Illustration may differ

At a glance

- Sensing range up to 2 m
- Rugged metal mounting bushes ensure reliable installation and a long service life
- PinPoint LED technology is precise and fast-reacting for optimal, quick detection of a wide range of objects
- Clearly visible LED display

Your benefits

- Easy alignment thanks to the small, brilliant and highly visible light spot
- High throughput and less machine and system downtime, since the sensors are pre-set and have high operating reserves
- Very high sensing ranges with high reserve factors, since the powerful PinPoint LED detects objects at distances due to a high light intensity
- The 45-degree tilted cable entry offers maximum installation flexibility with additional soft rubber bearings to absorb vibrations and tensile loads
- Installation flexibility since several sensors can be installed in close proximity to one another without causing false trips due to interference



Features

Sensor/detection principle:	Through-beam photoelectric sensor
Dimensions (W x H x D):	7.7 mm x 21.8 mm x 13.5 mm
Housing design (light emission):	Rectangular
Sensing range max.:	0 m ... 2 m
Sensing range:	0 m ... 1.5 m
Type of light:	Visible red light
Light source:	PinPoint LED ¹⁾
Wave length:	640 nm
Light spot size (distance):	Ø 23 mm (500 mm)

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

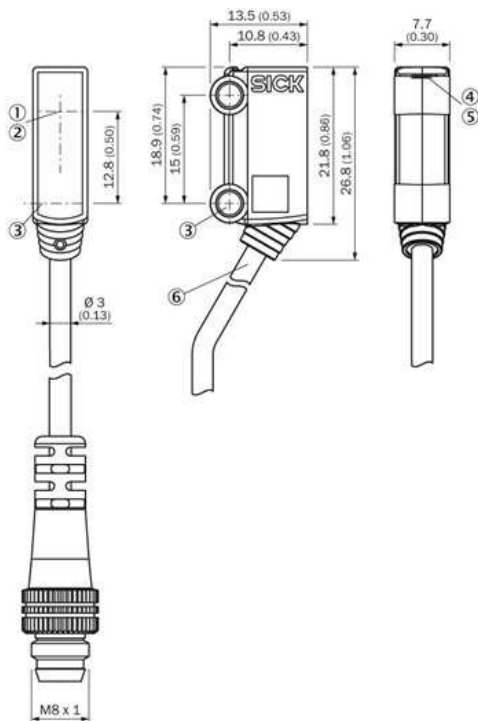
Mechanics/electronics

Supply voltage:	10 V DC ... 30 V DC ¹⁾
Ripple:	≤ 5 Vpp ²⁾
Power consumption:	≤ 20 mA ³⁾
Output type:	NPN
Switching mode:	Light switching
Output current I _{max.} :	< 50 mA

Response time:	< 0.6 ms ⁴⁾
Switching frequency:	800 Hz ⁵⁾
Connection type:	Cable, 3-wire, 2 m ⁶⁾
Cable diameter:	Ø 3 mm
Circuit protection:::	A, C, D ⁷⁾ 8) 9)
Optics material:	PMMA
Enclosure rating:	IP 67
Ambient temperature operation:	-25 °C ... +50 °C
Ambient storage temperature:	-40 °C ... +75 °C
UL File No.:	NRKH.E181493
Housing material:	ABS, Plastic

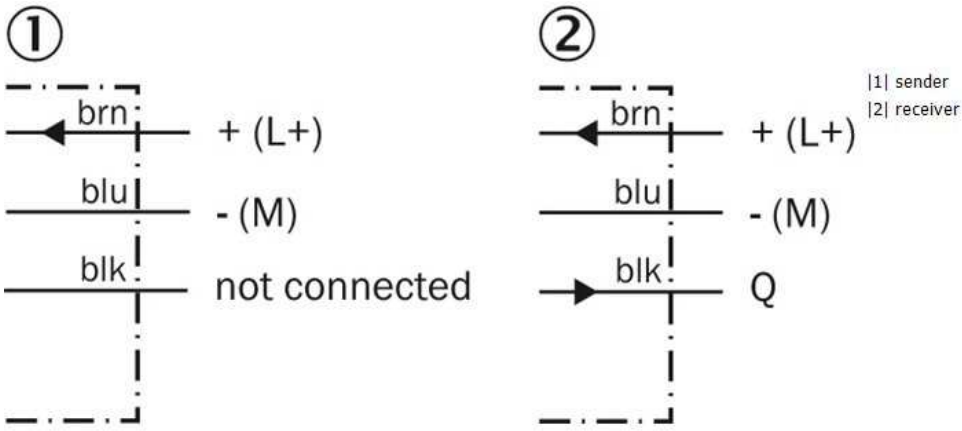
1) Limit values, operation in short-circuit protected network max. 8 A 2) May not exceed or fall short of V_S tolerances 3) Without load 4) Signal transit time with resistive load 5) With light/dark ratio 1:1 6) Do not bend below 0 °C 7) A = V_S connections reverse-polarity protected 8) C = interference suppression 9) D = outputs overcurrent and short-circuit protected

Dimensional drawing

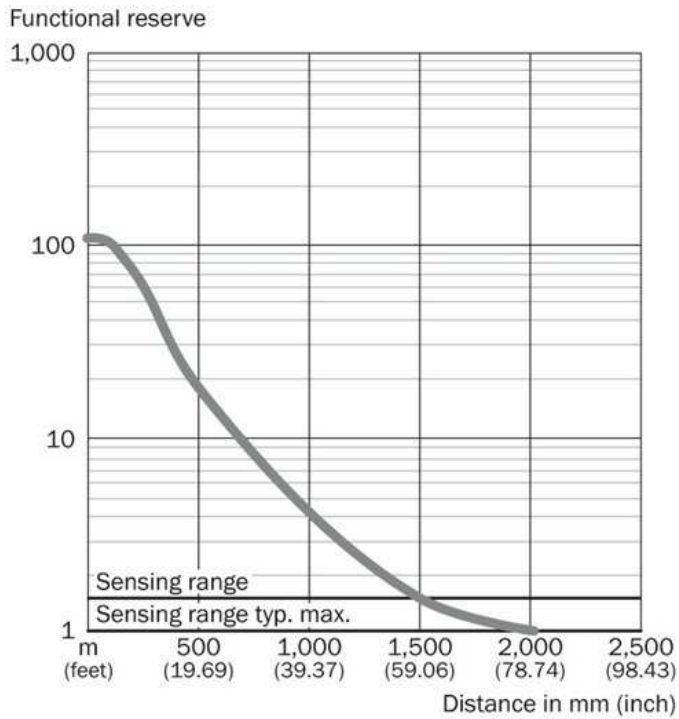


- |1| Optical axis receiver
- |2| Optical axis sender
- |3| Mounting hole, Ø 3.2 mm
- |4| Status indicator LED green: supply voltage on
- |5| Status indicator LED, yellow: Status of received light beam
- |6| Connection

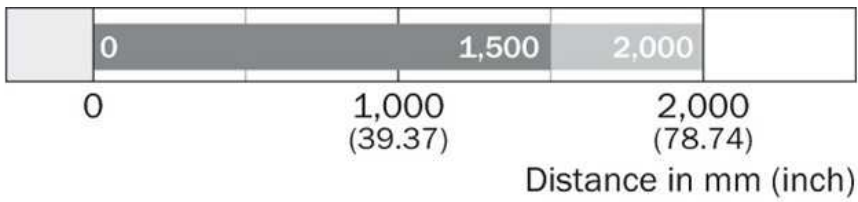
Connection diagram



Characteristic curve



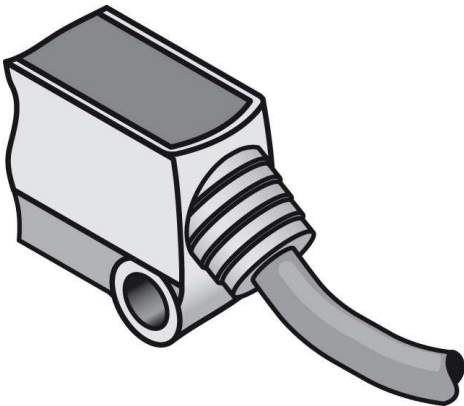
Sensing range diagram



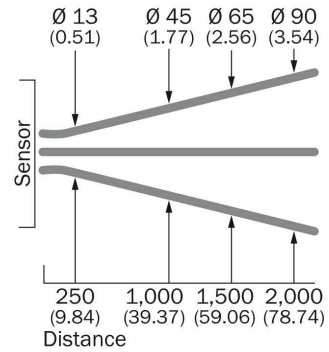
■ Sensing range

■ Sensing range typ. max.

Connection type



Light spot size



All dimensions in mm (inch)

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