



## Photoelectric sensors G2S, Through-beam photoelectric sensor

GSE2S-P1311



**Model Name** > GSE2S-P1311  
**Part No.** > 1064362



#### 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



*Illustration may differ*



#### 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 <sup>1)</sup>
Wave length:	640 nm
Light spot size (distance):	Ø 23 mm (500 mm)

<sup>1)</sup> Average service life of 100,000 h at  $T_A = +25\text{ °C}$

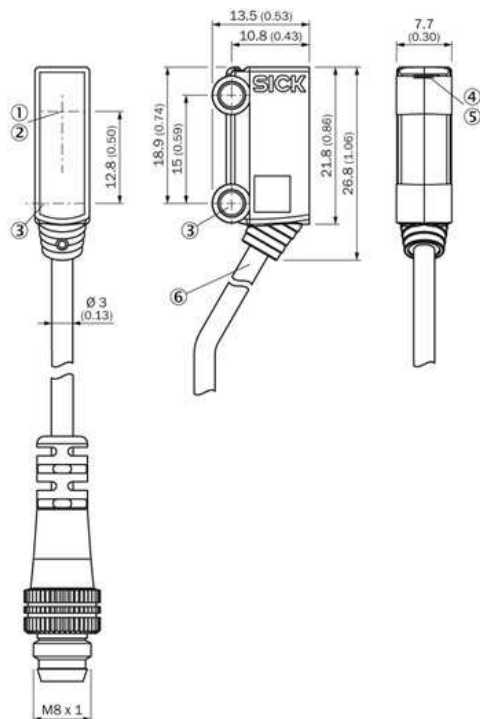
#### Mechanics/electronics

Supply voltage:	10 V DC ... 30 V DC <sup>1)</sup>
Ripple:	$\leq 5\text{ Vpp}$ <sup>2)</sup>
Power consumption:	$\leq 20\text{ mA}$ <sup>3)</sup>
Output type:	PNP
Switching mode:	Light switching
Output current I <sub>max.</sub> :	< 50 mA

Response time:	< 0.6 ms <sup>4)</sup>
Switching frequency:	800 Hz <sup>5)</sup>
Connection type:	Cable, 3-wire, 2 m <sup>6)</sup>
Cable diameter:	Ø 3 mm
Circuit protection:::	A, C, D <sup>7)</sup> 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

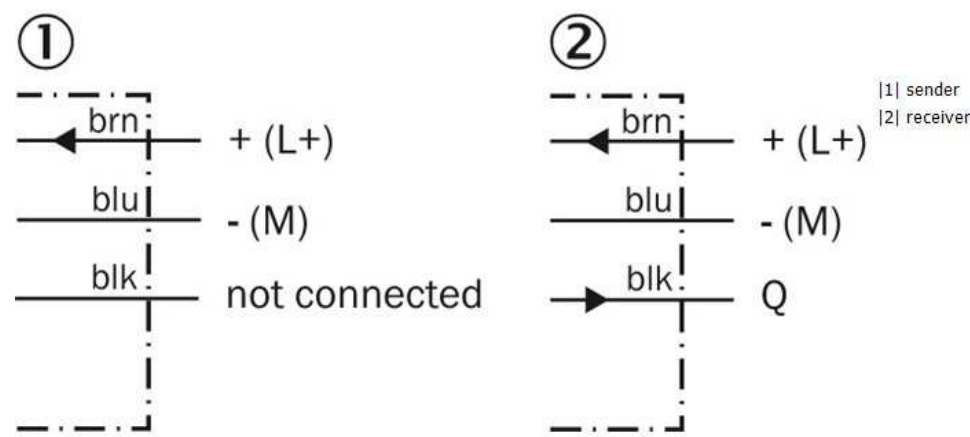
<sup>1)</sup> Limit values, operation in short-circuit protected network max. 8 A    <sup>2)</sup> May not exceed or fall short of  $V_S$  tolerances    <sup>3)</sup> Without load    <sup>4)</sup> Signal transit time with resistive load  
<sup>5)</sup> With light/dark ratio 1:1    <sup>6)</sup> Do not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

## Dimensional drawing

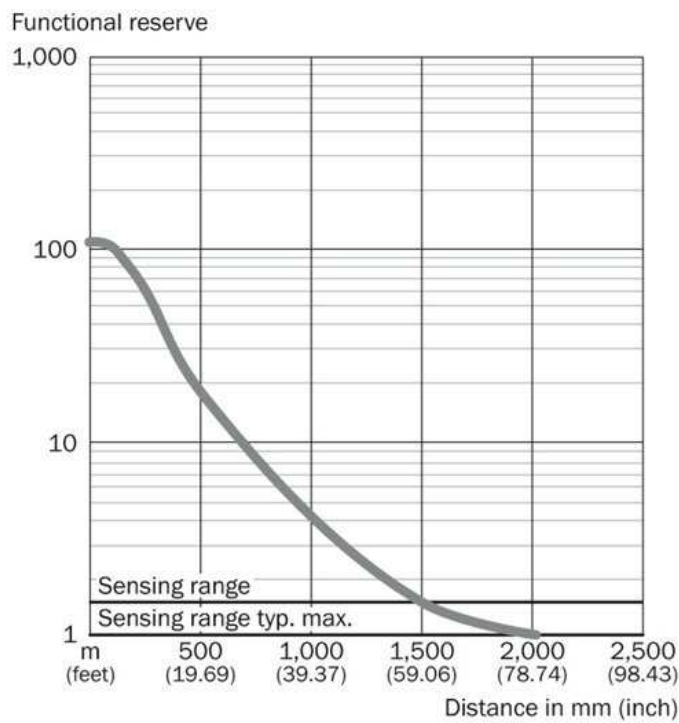


- |1| Optical axis receiver
- |2| Optical axis sender
- |3| Mounting hole, Ø 3.2 mm
- |4| Status indicator LED green: supply voltage on
- |5| Status indicator LED, yellow: Status of received light beam
- |6| Connection

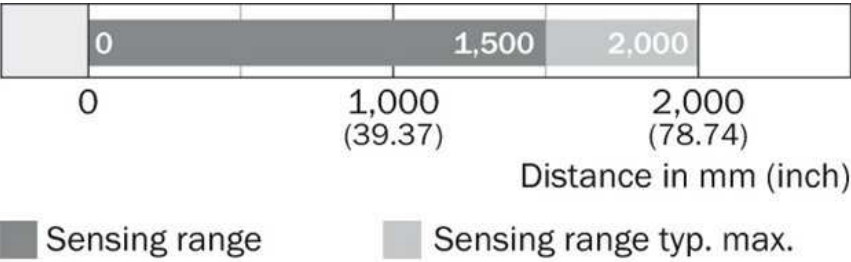
Connection diagram



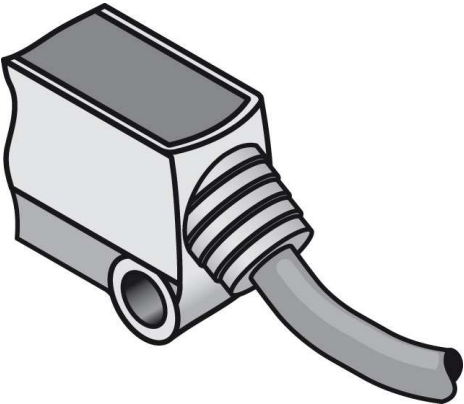
Characteristic curve



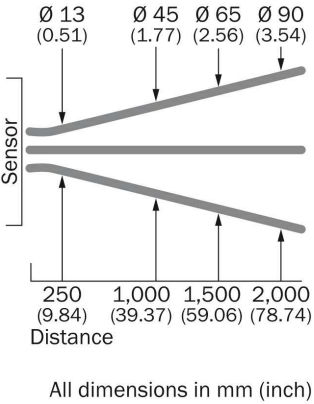
Sensing range diagram



Connection type



Light spot size



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