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DATA SHEET

GS2S-D1311

G2
Photoelectric sensors

SICK Sensor Intelligence



Illustration may differ

PHOTOELECTRIC SENSORS

GS2S-D1311

ORDERING INFORMATION

Type	part no.
GS2S-D1311	2068762

Further device versions and accessories at www.sick.com/G2

DETAILED TECHNICAL DATA

FEATURES

Functional 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]
Light spot size (distance)	Ø 23 mm (500 mm)
Wave length	640 nm
Adjustment	None
Special features	Through-beam photoelectric sensor (sender only)

[1] Average service life: 100,000 h at T_U = +25 °C.

MECHANICS/ELECTRONICS

Supply voltage U_B	10 V DC ... 30 V DC [1]
Ripple	< 5 V_{pp} [2]
Current consumption	20 mA [3]

[1] Limit values when operated in short-circuit protected network: max. 8 A.

[2] May not fall below or exceed U_V tolerances.

[3] Without load.

[4] Do not bend below 0 °C.

[5] A = V_S connections reverse-polarity protected.

[6] C = interference suppression.

Connection type	Cable, 3-wire, 2 m [4]
Cable material	Plastic, PVC
Cable diameter	Ø 3 mm
Circuit protection	A [5] C [6]
Weight	72.2 g
Housing material	Plastic, ABS
Optics material	Plastic, PMMA
Enclosure rating	IP67
Ambient operating temperature	–25 °C ... +50 °C
Ambient temperature, storage	–40 °C ... +75 °C
UL File No.	NRKH.E181493

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[5] A = V_S connections reverse-polarity protected.

[6] C = interference suppression.

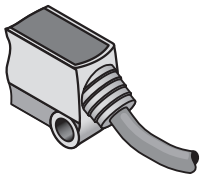
SAFETY-RELATED PARAMETERS

$MTTF_D$	2,595 years
DC_{avg}	0 %

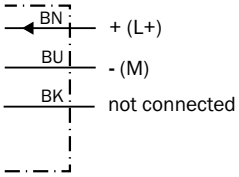
CERTIFICATES

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
China Compulsory Product Certification (CCC) exempt	✓
cULus certificate	✓
Photobiological safety (DIN EN 62471) certificate	✓

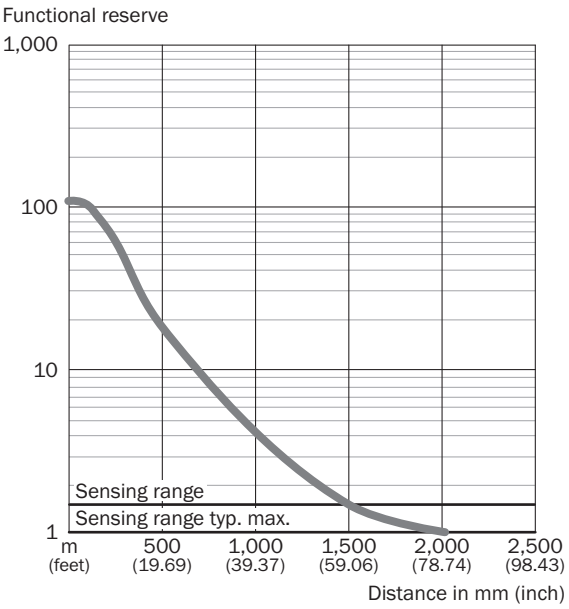
CONNECTION TYPE



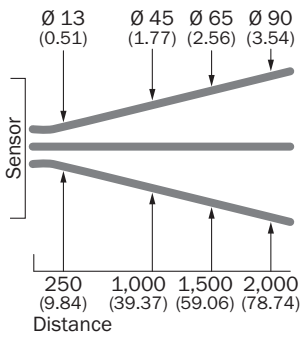
CONNECTION DIAGRAM CD-590



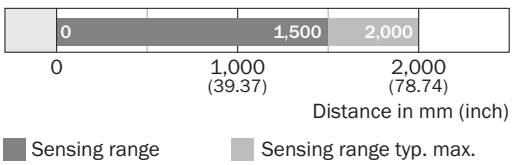
CHARACTERISTIC CURVE



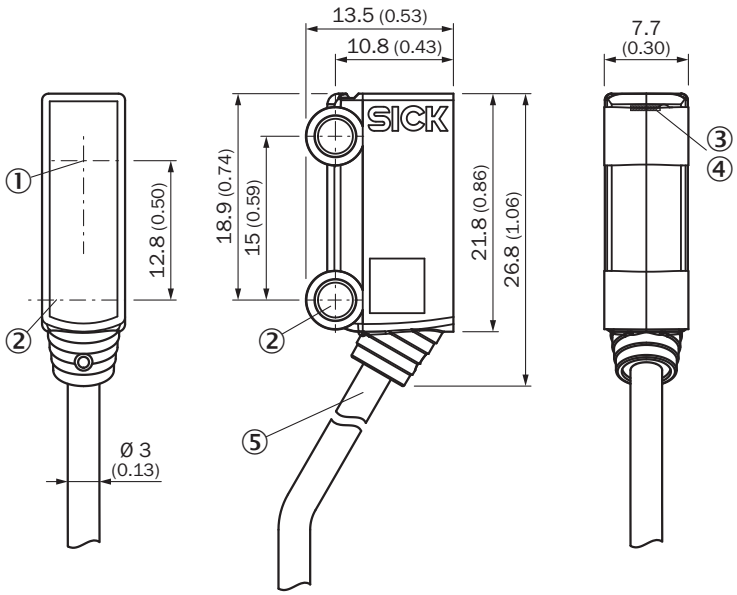
LIGHT SPOT SIZE



SENSING RANGE DIAGRAM



DIMENSIONAL DRAWING



Dimensions in mm (inch)
① optical axis, sender
② Mounting hole, Ø 3.2 mm
③ LED indicator green: Supply voltage active
④ LED indicator yellow: Status of received light beam
⑤ Connection

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/2068762

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SICK AT A GLANCE

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SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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