Product data sheet

GSE2S-E1321S03

G2S

MINIATURE PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.

Illustration may differ

Ordering information

Type	Part no.
GSE2S-E1321S03	1092425

Other models and accessories ➜ www.sick.com/G2S

Detailed technical data

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 ... 3 m
Sensing range	0 m ... 2 m
Type of light	Infrared light
Light source	LED [1]
Light spot size (distance)	Ø 145 mm (1,500 mm)
Wave length	850 nm
Adjustment	None
Special features	TI (testinput) response time 1 ms Mounting hole Ø 2.5 mm threaded bushes

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

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC [1]
Ripple	≤ 5 V_{pp} [2]

[1] Limit values when operated in short-circuit protected network: max. 8 A.
[2] May not exceed or fall below U_V 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.

Current consumption	20 mA [3]
Switching output	NPN
Switching mode	Dark 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 material	PVC
Cable diameter	Ø 3 mm
Circuit protection	A [7] C [8] D [9]
Weight	72.2 g
Housing material	Plastic, ABS
Optics material	Plastic, PMMA
Enclosure rating	IP67
Special feature	For the sender side cable, the black wire will be cut so that only the power cables are left (brown and blue)
Ambient operating temperature	–25 °C ... +50 °C
Ambient storage temperature	–40 °C ... +75 °C
UL File No.	NRKH.E181493

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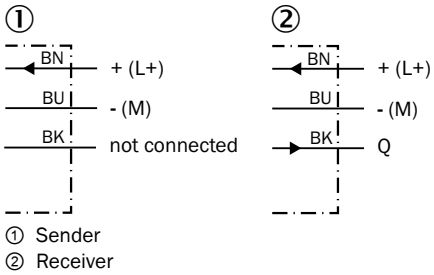
Classifications

ECl@ss 5.0	27270901
ECl@ss 5.1.4	27270901
ECl@ss 6.0	27270901
ECl@ss 6.2	27270901
ECl@ss 7.0	27270901
ECl@ss 8.0	27270901
ECl@ss 8.1	27270901
ECl@ss 9.0	27270901
ECl@ss 10.0	27270901
ECl@ss 11.0	27270901
ETIM 5.0	EC002716
ETIM 6.0	EC002716

ETIM 7.0	EC002716
UNSPSC 16.0901	39121528

Connection diagram

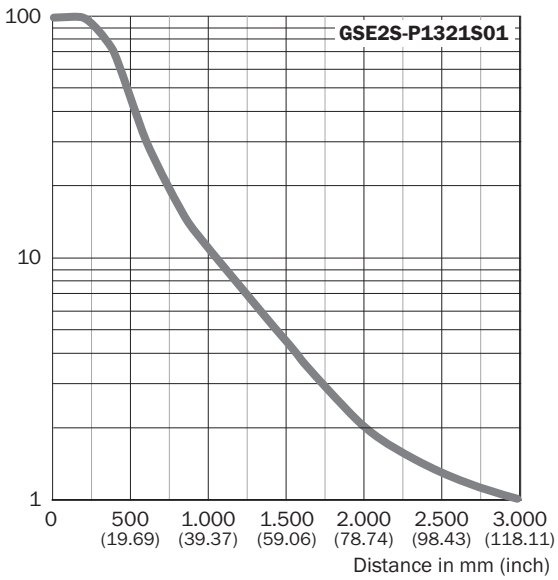
Cd-049



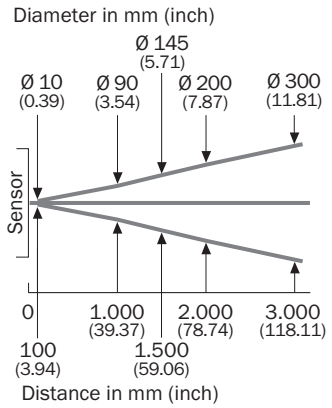
① Sender
② Receiver

Characteristic curve

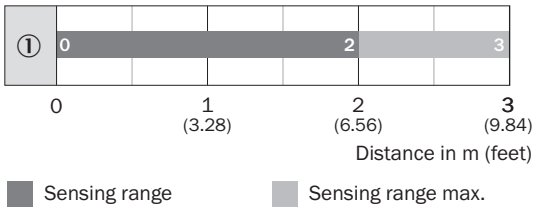
Operating reserve



Light spot size

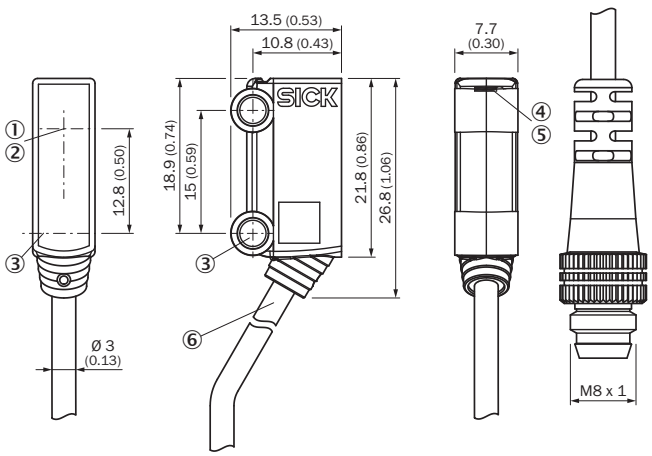


Sensing range diagram



① R = 6 %

Dimensional drawing (Dimensions in mm (inch))



① Optical axis, receiver
② Optical axis, sender
③ Mounting hole Ø 2.5 mm threaded bushes
④ LED indicator green: Supply voltage active
⑤ LED indicator yellow: Status of received light beam
⑥ Connection

Recommended accessories

Other models and accessories ➜ www.sick.com/G2S

	Brief description	Type	Part no.
Plug connectors and cables			
	Head A: male connector, M8, 3-pin, straight Head B: - Cable: unshielded	STE-0803-G	6037322

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SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com