GSE2FS-P1111

G2F

MINIATURE PHOTOELECTRIC SENSORS

GSE2FS-P1111 | G2F

MINIATURE PHOTOELECTRIC SENSORS

Illustration may differ

Ordering information

Type	Part no.
GSE2FS-P1111	1095459

Other models and accessories ➜ www.sick.com/G2F

Detailed technical data

Features

Sensor/ detection principle	Through-beam photoelectric sensor
Dimensions (W x H x D)	11 mm x 21 mm x 4.5 mm
Housing design (light emission)	Rectangular
Minimum detectable object (MDO)	0.2 mm
Sensing range max.	0 mm ... 60 mm
Sensing range	0 mm ... 40 mm
Type of light	Visible red light
Light source	PinPoint LED [1]
Light spot size (distance)	Ø 4 mm (40 mm)
Wave length	660 nm
Adjustment	None

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

Mechanics/electronics

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

[1] May not exceed or fall below U_v tolerances.

[2] Without load.

[3] Signal transit time with resistive load.

[4] With light/dark ratio 1:1.

[5] Do not bend below 0 °C.

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

[7] C = interference suppression.

[8] D = outputs overcurrent and short-circuit protected.

Switching output	PNP
Switching mode	Light switching
Output current $I_{max.}$	< 50 mA
Response time	< 0.625 ms [3]
Switching frequency	800 Hz [4]
Connection type	Cable, 3-wire, 2 m [5]
Cable material	PVC
Cable diameter	Ø 3 mm
Circuit protection	A [6] C [7] D [8]
Weight	40 g
Housing material	Plastic, VISTAL®
Optics material	Plastic, MABS
Enclosure rating	IP67
Ambient operating temperature	−20 °C ... +50 °C
Ambient storage temperature	−40 °C ... +70 °C
Repeatability (T_a not constant)	0.1 mm

[1] May not exceed or fall below U_v tolerances.

[2] Without load.

[3] Signal transit time with resistive load.

[4] With light/dark ratio 1:1.

[5] Do not bend below 0 °C.

[6] A = V_S connections reverse-polarity protected.
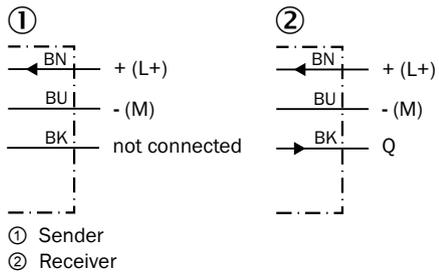
[7] C = interference suppression.

[8] D = outputs overcurrent and short-circuit protected.

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 BN ——— + (L+)
BU ——— - (M)
BK ——— not connected

② BN ——— + (L+)
BU ——— - (M)
BK ——— Q

① Sender
② Receiver

Characteristic curve

Operating reserve

Distance in mm (inch)
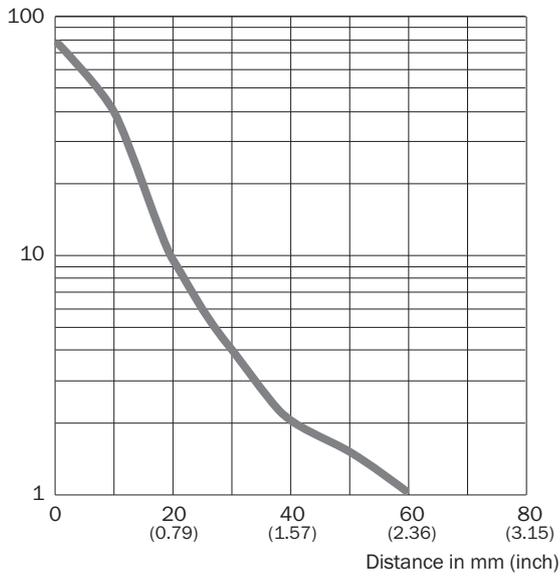
Light spot size

GSE2 Flat Side, 50 mm

Diameter in mm (inch)

Ø 2 (0.08)   Ø 3 (0.12)   Ø 4 (0.2)

Sensor

0   10 (0.39)   30 (1.18)   40 (1.57)

Distance in mm (inch)

Sensing range diagram

| | 0 | 40 | 60 | |

| 0 | 20 (0.79) | 40 (1.57) | 60 (2.36) | 80 (3.15) |

Distance in mm (inch)
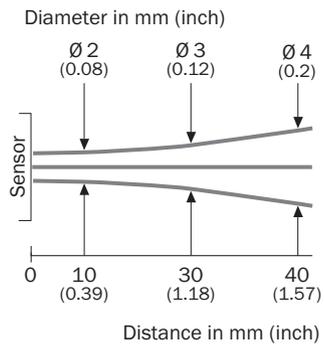
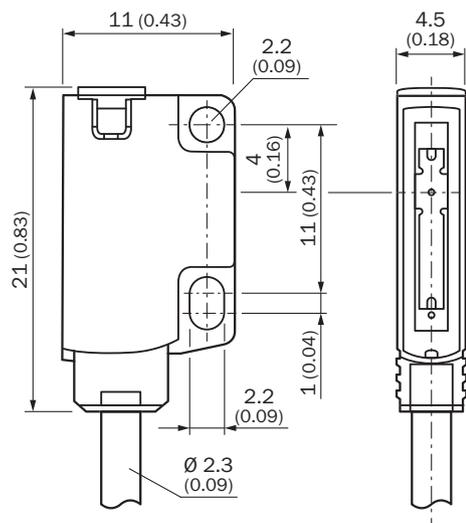■ Sensing range   ■ Sensing range max.
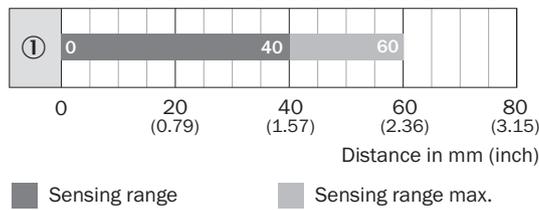
Dimensional drawing (Dimensions in mm (inch))

Recommended accessories

Other models and accessories ➜ www.sick.com/G2F

	Brief description	Type	Part no.
Mounting brackets and plates			
	10 pieces, Mounting plate for direct mounting, from the rear, on wall or machine, not adjustable. 10 Piece,Black ,Plastic, VISTAL®. Suitable for GTB2F and GSE2F	BEF-G2F-FLAT-SPACER-M2	2107263
Plug connectors and cables			
	Head A: male connector, M8, 3-pin, straight Head B: - Cable: unshielded	STE-0803-G	6037322

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