



# GSE2FS-E1161

G2

MINIATURE PHOTOELECTRIC SENSORS

**SICK**  
Sensor Intelligence.



### Ordering information

Type	Part no.
GSE2FS-E1161	1121030

Other models and accessories → [www.sick.com/G2](http://www.sick.com/G2)

Illustration may differ



### Detailed technical data

#### Features

<b>Functional principle</b>	Through-beam photoelectric sensor
<b>Dimensions (W x H x D)</b>	4.5 mm x 21 mm x 11 mm
<b>Housing design (light emission)</b>	Rectangular
<b>Minimum detectable object (MDO)</b>	1.8 mm
<b>Sensing range max.</b>	0 mm ... 1,300 mm
<b>Sensing range</b>	0 mm ... 1,000 mm
<b>Type of light</b>	Visible red light
<b>Light source</b>	PinPoint LED <sup>1)</sup>
<b>Light spot size (distance)</b>	Ø 100 mm (1,000 mm)
<b>Wave length</b>	660 nm
<b>Adjustment</b>	None

<sup>1)</sup> Average service life: 100,000 h at T<sub>J</sub> = +25 °C.

#### Mechanics/electronics

<b>Supply voltage</b>	10 V DC ... 30 V DC
<b>Ripple</b>	< 5 V <sub>pp</sub> <sup>1)</sup>
<b>Current consumption</b>	20 mA <sup>2)</sup>

<sup>1)</sup> May not exceed or fall below U<sub>v</sub> tolerances.

<sup>2)</sup> Without load.

<sup>3)</sup> Signal transit time with resistive load.

<sup>4)</sup> With light/dark ratio 1:1.

<sup>5)</sup> Do not bend below 0 °C.

<sup>6)</sup> A = V<sub>S</sub> connections reverse-polarity protected.

<sup>7)</sup> C = interference suppression.

<sup>8)</sup> D = outputs overcurrent and short-circuit protected.

<b>Switching output</b>	NPN
<b>Switching mode</b>	Dark switching
<b>Output current I<sub>max.</sub></b>	≤ 50 mA
<b>Response time</b>	< 0.625 ms <sup>3)</sup>
<b>Switching frequency</b>	800 Hz <sup>4)</sup>
<b>Connection type</b>	Cable, 3-wire, 2 m <sup>5)</sup>
<b>Cable material</b>	PVC
<b>Cable diameter</b>	Ø 2.3 mm
<b>Circuit protection</b>	A <sup>6)</sup> C <sup>7)</sup> D <sup>8)</sup>
<b>Weight</b>	39.8 g
<b>Housing material</b>	Plastic, VISTAL®
<b>Optics material</b>	Plastic, MABS
<b>Enclosure rating</b>	IP67
<b>Ambient operating temperature</b>	-20 °C ... +50 °C
<b>Ambient temperature, storage</b>	-40 °C ... +70 °C
<b>UL File No.</b>	NRKH.E348498 & NRKH7.E348498
<b>Repeatability (T<sub>a</sub> not constant)</b>	0.1 mm

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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<sub>S</sub> connections reverse-polarity protected.

7) C = interference suppression.

8) D = outputs overcurrent and short-circuit protected.

## Classifications

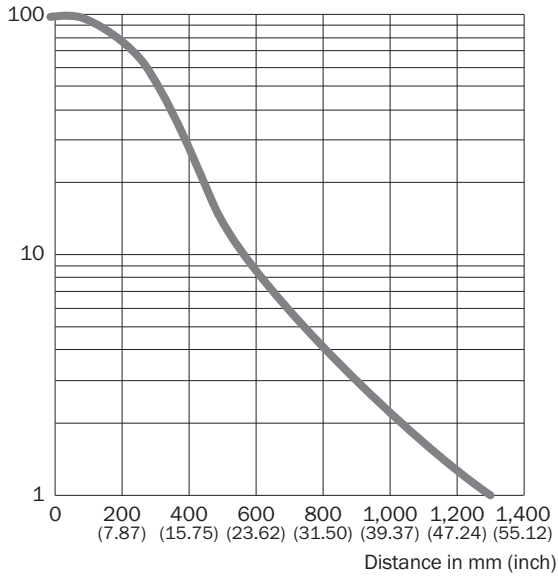
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<b>ETIM 5.0</b>	EC002716
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UNSPSC 16.0901

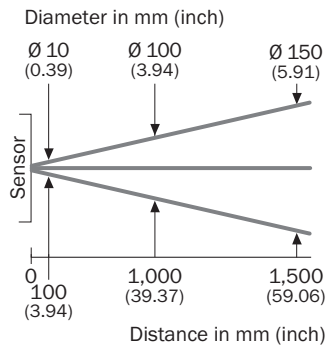
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Characteristic curve

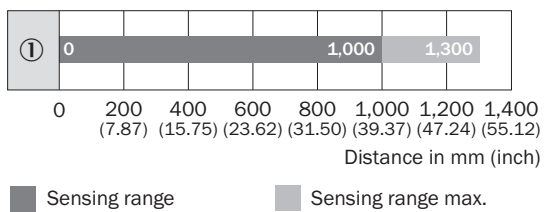
Operating reserve



Light spot size



Sensing range diagram





## SICK AT A GLANCE

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](http://www.sick.com)