



# WS/WE2000-R5100

W2000

PHOTOELECTRIC SENSORS

**SICK**  
Sensor Intelligence.



Illustration may differ



## Ordering information

Type	part no.
WS/WE2000-R5100	7025969

Other models and accessories → [www.sick.com/W2000](http://www.sick.com/W2000)

## Detailed technical data

### Features

<b>Functional principle</b>	Through-beam photoelectric sensor
<b>Dimensions (W x H x D)</b>	45 mm x 73.7 mm x 48.6 mm
<b>Housing design (light emission)</b>	Rectangular
<b>Sensing range max.</b>	0 m ... 50 m
<b>Sensing range</b>	0 m ... 50 m
<b>Focus</b>	1.3°
<b>Type of light</b>	Infrared light
<b>Light source</b>	LED <sup>1)</sup>
<b>Light spot size (distance)</b>	Ø 320 mm (14 m)
<b>Angle of dispersion</b>	1.3°
<b>Adjustment</b>	Potentiometer

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

### Mechanics/electronics

<b>Supply voltage</b>	24 V AC/DC ... 240 V AC/DC <sup>1)</sup>
<b>Power consumption</b>	≤ 6 W <sup>2)</sup>
<b>Switching output</b>	Relay, electrically isolated
<b>Output function</b>	Change-over contacts
<b>Switching mode</b>	Light/dark switching
<b>Switching mode selector</b>	Selectable via light/dark selector
<b>Switching current (switching voltage)</b>	3 A (265 V)
<b>Response time</b>	≤ 10 ms <sup>3)</sup>
<b>Switching frequency</b>	10 Hz <sup>4)</sup>
<b>Connection type</b>	Mini connector 7/8", 5-pin

<sup>1)</sup> Limit values.

<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> Reference voltage: 50 V DC.

<b>Protection class</b>	II <sup>5)</sup>
<b>Weight</b>	150 g
<b>Housing material</b>	Plastic, Glassfibre reinforced plastic
<b>Enclosure rating</b>	IP67
<b>Ambient operating temperature</b>	-25 °C ... +40 °C
<b>Ambient temperature, storage</b>	-40 °C ... +70 °C
<b>UL File No.</b>	242366 & cUL No. NRKH7.E147756

1) Limit values.

2) Without load.

3) Signal transit time with resistive load.

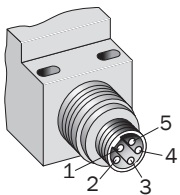
4) With light/dark ratio 1:1.

5) Reference voltage: 50 V DC.

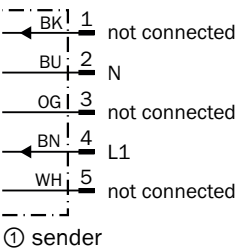
## Classifications

<b>ECLASS 5.0</b>	27270901
<b>ECLASS 5.1.4</b>	27270901
<b>ECLASS 6.0</b>	27270901
<b>ECLASS 6.2</b>	27270901
<b>ECLASS 7.0</b>	27270901
<b>ECLASS 8.0</b>	27270901
<b>ECLASS 8.1</b>	27270901
<b>ECLASS 9.0</b>	27270901
<b>ECLASS 10.0</b>	27270901
<b>ECLASS 11.0</b>	27270901
<b>ECLASS 12.0</b>	27270901
<b>ETIM 5.0</b>	EC002716
<b>ETIM 6.0</b>	EC002716
<b>ETIM 7.0</b>	EC002716
<b>ETIM 8.0</b>	EC002716
<b>UNSPSC 16.0901</b>	39121528

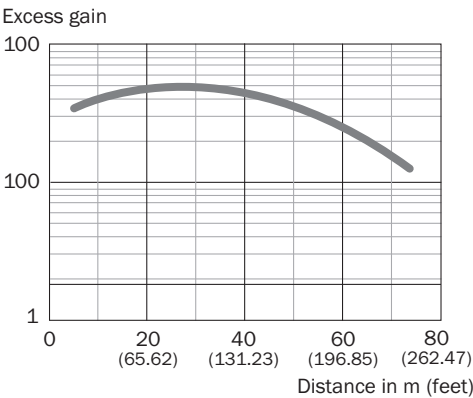
## Connection type



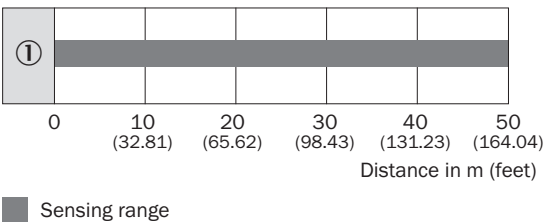
Connection diagram Cd-173



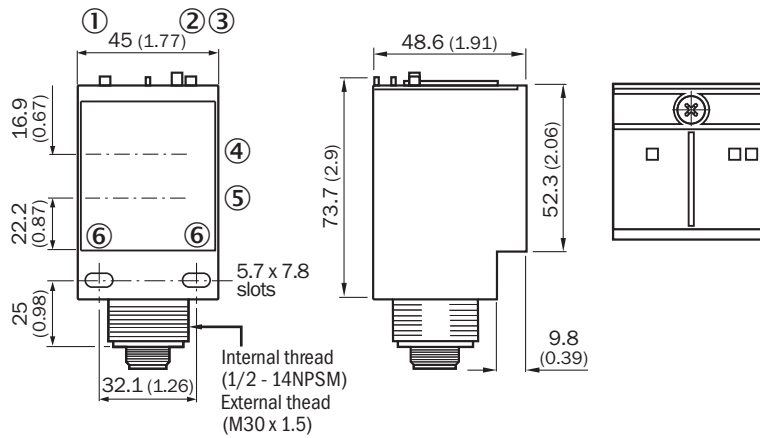
Characteristic curve WS/WE2000



Sensing range diagram WS/WE2000



## Dimensional drawing



## 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)