

# WL260-R270

W260

COMPACT PHOTOELECTRIC SENSORS

**SICK**  
Sensor Intelligence.

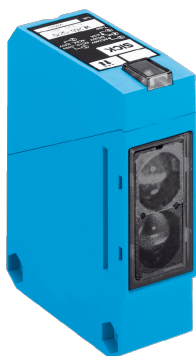


Illustration may differ



### Ordering information

Type	Part no.
WL260-R270	6020768

**Included in delivery:** P250 (1), BEF-W260 (1)

Other models and accessories → [www.sick.com/W260](http://www.sick.com/W260)

### Detailed technical data

#### Features

<b>Device type</b>	Photoelectric sensors
<b>Sensor/ detection principle</b>	Photoelectric retro-reflective sensor, Dual lens
<b>Dimensions (W x H x D)</b>	25 mm x 78 mm x 63 mm
<b>Housing design (light emission)</b>	Rectangular
<b>Sensing range max.</b>	0.01 m ... 15 m <sup>1)</sup>
<b>Sensing range</b>	0.01 m ... 10 m <sup>2)</sup> 0.01 m ... 13 m <sup>1)</sup>
<b>Focus</b>	Approx. 1.7°
<b>Type of light</b>	Visible red light
<b>Light source</b>	LED <sup>3)</sup>
<b>Light spot size (distance)</b>	Ø 300 mm (10 m)
<b>Angle of dispersion</b>	Approx. 1.7°
<b>Adjustment</b>	Potentiometer, 270°

<sup>1)</sup> Reflector PL80A.

<sup>2)</sup> Reflector P250.

<sup>3)</sup> Average service life: 100,000 h at T<sub>J</sub> = +25 °C.

#### Mechanics/electronics

<b>Supply voltage</b>	12 V DC ... 240 V DC <sup>1)</sup> 24 V AC ... 240 V AC <sup>1)</sup>
<b>Power consumption</b>	≤ 5 VA

<sup>1)</sup> ± 10%.

<sup>2)</sup> Provide suitable spark suppression for inductive or capacitive loads.

<sup>3)</sup> With light/dark ratio 1:1.

<sup>4)</sup> A = V<sub>S</sub> connections reverse-polarity protected.

<sup>5)</sup> C = interference suppression.

<sup>6)</sup> Rated voltage: 250 V AC/DC.

<b>Switching output</b>	Relay, electrically isolated <sup>2)</sup>
<b>Output function</b>	Change-over contacts
<b>Switching mode</b>	Light switching <sup>2)</sup>
<b>Switching current (switching voltage)</b>	3 A (240 V AC) 3 A (30 V DC)
<b>Response time</b>	≤ 20 ms
<b>Switching frequency</b>	25 Hz <sup>3)</sup>
<b>Time functions</b>	On delay Off delay
<b>Delay time</b>	Adjustable via time delay selector switch, 0.1 s ... 10 s Adjustable via time control,
<b>Connection type</b>	Cable gland
<b>Circuit protection</b>	A <sup>4)</sup> C <sup>5)</sup>
<b>Protection class</b>	II <sup>6)</sup>
<b>Weight</b>	120 g
<b>Polarisation filter</b>	✓
<b>Interference emission</b>	Level EN 61000-6-3 Residential and commercial areas
<b>Housing material</b>	Plastic, ABS
<b>Optics material</b>	Plastic, PMMA
<b>Enclosure rating</b>	IP67
<b>Items supplied</b>	Reflector P250, mounting bracket BEF-W260
<b>Usage category</b>	AC-15, DC-13, according to EN 60947-1
<b>Electromagnetic compatibility (EMC)</b>	Level EN 61000-6-3 Residential and commercial areas
<b>Ambient operating temperature</b>	-25 °C ... +55 °C
<b>Ambient temperature, storage</b>	-40 °C ... +70 °C
<b>UL File No.</b>	EN50081-1, 242356

<sup>1)</sup> +/- 10%.

<sup>2)</sup> Provide suitable spark suppression for inductive or capacitive loads.

<sup>3)</sup> With light/dark ratio 1:1.

<sup>4)</sup> A = V<sub>S</sub> connections reverse-polarity protected.

<sup>5)</sup> C = interference suppression.

<sup>6)</sup> Rated voltage: 250 V AC/DC.

### Safety-related parameters

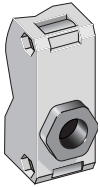
<b>MTTF<sub>D</sub></b>	482 years
<b>DC<sub>avg</sub></b>	0 %

### Classifications

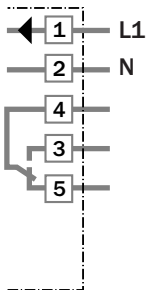
<b>ECl@ss 5.0</b>	27270902
<b>ECl@ss 5.1.4</b>	27270902
<b>ECl@ss 6.0</b>	27270902
<b>ECl@ss 6.2</b>	27270902
<b>ECl@ss 7.0</b>	27270902

<b>ECl@ss 8.0</b>	27270902
<b>ECl@ss 8.1</b>	27270902
<b>ECl@ss 9.0</b>	27270902
<b>ECl@ss 10.0</b>	27270902
<b>ECl@ss 11.0</b>	27270902
<b>ETIM 5.0</b>	EC002717
<b>ETIM 6.0</b>	EC002717
<b>ETIM 7.0</b>	EC002717
<b>ETIM 8.0</b>	EC002717
<b>UNSPSC 16.0901</b>	39121528

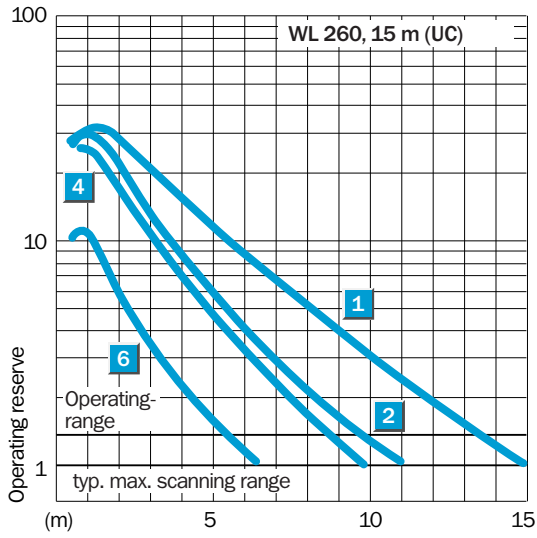
### Connection type



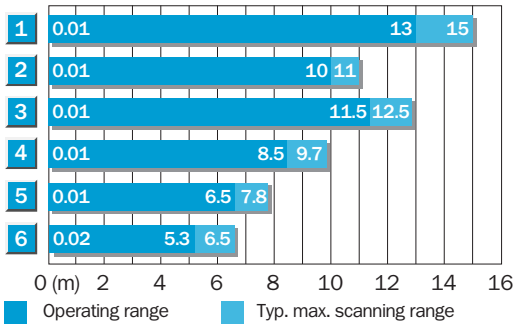
### Connection diagram



Characteristic curve

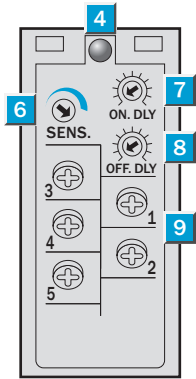


Sensing range diagram



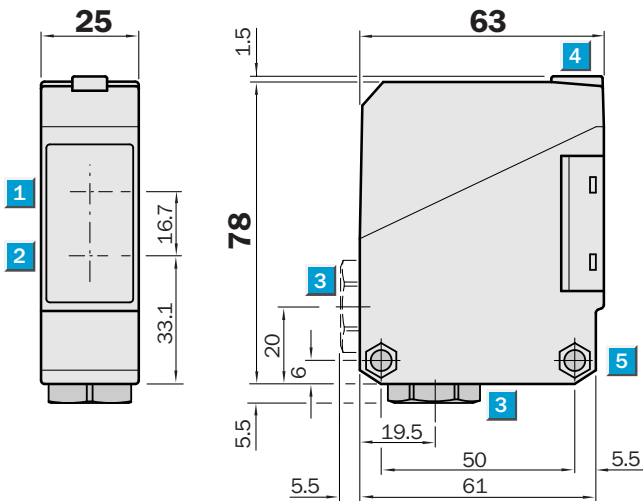
Reflector type	Operating range
1 PL 80 A	0.01 ... 13.0 m
2 P 250	0.01 ... 10.0 m
3 PL 50 A or PL 40 A	0.01 ... 11.5 m
4 PL 30 A or PL 31 A	0.01 ... 8.5 m
5 PL 20 A	0.01 ... 6.5 m
6 Reflective tape Diamond Grade	0.02 ... 5.3 m

Adjustments




- ④ LED signal strength indicator, red
- ⑥ Sensitivity control
- ⑦ Time control ON delay  $t_{ON}$
- ⑧ Time control OFF delay  $t_{OFF}$
- ⑨ Terminals



Dimensional drawing (Dimensions in mm (inch))



Recommended accessories

Other models and accessories → [www.sick.com/W260](http://www.sick.com/W260)

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting bracket, steel, zinc coated, without mounting hardware	BEF-W260	5304819

	<b>Brief description</b>	<b>Type</b>	<b>Part no.</b>
	Universal mounting bracket for reflectors, steel, zinc coated	BEF-WN-REFX	2064574
<b>Reflectors</b>			
	Rectangular, screw connection, 51 mm x 61 mm, PMMA/ABS, Screw-on, 2 hole mounting	P250	5304812

## 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)