

# WL260-S270S01

W260

PHOTOELECTRIC SENSORS

**SICK**  
Sensor Intelligence.

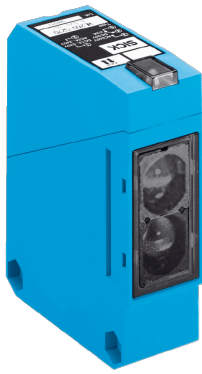


Illustration may differ

### Ordering information

Type	part no.
WL260-S270S01	6025172

**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>Functional principle</b>	Photoelectric retro-reflective sensor
<b>Functional principle detail</b>	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>U</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
<b>Switching output</b>	Relay, electrically isolated <sup>2)</sup>
<b>Output function</b>	Change-over contacts

<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 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>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>Special device</b>	✓
<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>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

<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

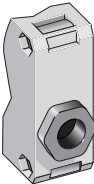
<b>MTTF<sub>D</sub></b>	588 years
<b>DC<sub>avg</sub></b>	0 %

## Classifications

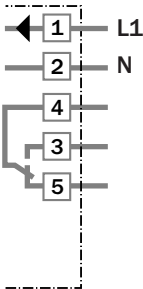
<b>ECLASS 5.0</b>	27270902
<b>ECLASS 5.1.4</b>	27270902
<b>ECLASS 6.0</b>	27270902
<b>ECLASS 6.2</b>	27270902
<b>ECLASS 7.0</b>	27270902
<b>ECLASS 8.0</b>	27270902
<b>ECLASS 8.1</b>	27270902
<b>ECLASS 9.0</b>	27270902
<b>ECLASS 10.0</b>	27270902
<b>ECLASS 11.0</b>	27270902
<b>ECLASS 12.0</b>	27270902

ETIM 5.0	EC002717
ETIM 6.0	EC002717
ETIM 7.0	EC002717
ETIM 8.0	EC002717
UNSPSC 16.0901	39121528

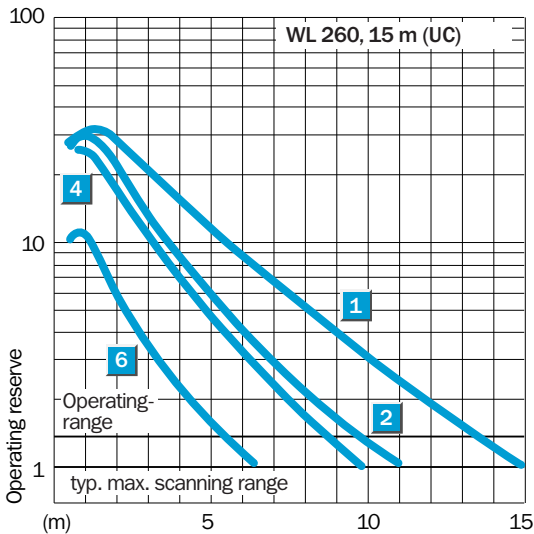
Connection type



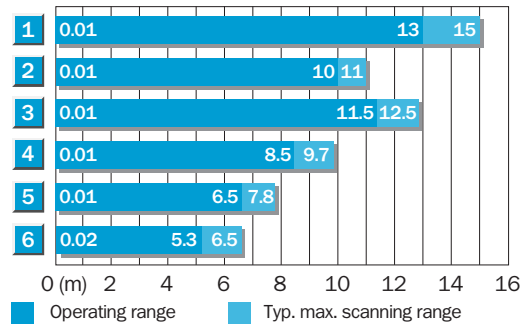
Connection diagram



Characteristic curve

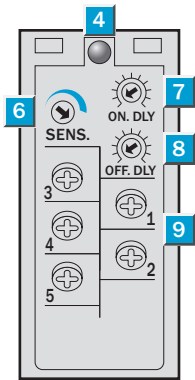


Sensing range diagram



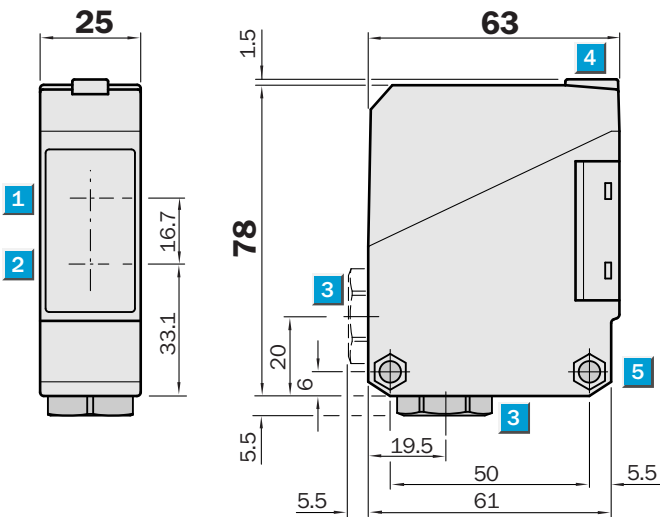
	Reflector type	Operating range
1	PL 80 A	0.01 ... 13.0 m
2	P 250	0.01 ... 10.0 m
3	PL 50 A or PL 40 A	0.01 ... 11.5 m
4	PL 30 A or PL 31 A	0.01 ... 8.5 m
5	PL 20 A	0.01 ... 6.5 m
6	Reflective tape Diamond Grade	0.02 ... 5.3 m

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 systems			
	<ul style="list-style-type: none"><li>• <b>Description:</b> Mounting bracket</li><li>• <b>Material:</b> Steel</li><li>• <b>Details:</b> Steel, zinc coated</li><li>• <b>Items supplied:</b> Without mounting hardware</li></ul>	BEF-W260	5304819
	<ul style="list-style-type: none"><li>• <b>Description:</b> Universal mounting bracket for reflectors</li><li>• <b>Dimensions (W x H x L):</b> 85 mm x 90 mm x 35 mm</li><li>• <b>Material:</b> Steel</li><li>• <b>Details:</b> Steel, zinc coated</li><li>• <b>Suitable for:</b> C110A, P250, PL20, PL30A, PL40A, PL80A</li></ul>	BEF-WN-REFX	2064574
reflectors and optics			
	<ul style="list-style-type: none"><li>• <b>Description:</b> Rectangular, screw connection</li><li>• <b>Dimensions:</b> 51 mm 61 mm</li><li>• <b>Ambient operating temperature:</b> -30 °C ... +65 °C</li></ul>	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)