

WL260-R270 W260

**COMPACT PHOTOELECTRIC SENSORS** 





# Ordering information

Туре	Part no.
WL260-R270	6020768

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

Other models and accessories → www.sick.com/W260

Illustration may differ



#### Detailed technical data

#### **Features**

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

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

# Mechanics/electronics

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

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

<sup>&</sup>lt;sup>2)</sup> Reflector P250.

 $<sup>^{3)}</sup>$  Average service life: 100,000 h at  $T_U$  = +25 °C.

 $<sup>^{2)}\,\</sup>mbox{Provide}$  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>&</sup>lt;sup>5)</sup> C = interference suppression.

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

Switching output	Relay, electrically isolated <sup>2)</sup>
Output function	Change-over contacts
Switching mode	Light switching <sup>2)</sup>
Switching current (switching voltage)	3 A (240 V AC) 3 A (30 V DC)
Response time	≤ 20 ms
Switching frequency	25 Hz <sup>3)</sup>
Time functions	On delay Off delay
Delay time	Adjustable via time delay selector switch, $0.1\mathrm{s}\dots10\mathrm{s}$ Adjustable via time control,
Connection type	Cable gland
Circuit protection	A <sup>4)</sup> C <sup>5)</sup>
Protection class	и <sup>6)</sup>
Weight	120 g
Polarisation filter	✓
Interference emission	Level EN 61000-6-3 Residential and commercial areas
Housing material	Plastic, ABS
Optics material	Plastic, PMMA
Enclosure rating	IP67
Items supplied	Reflector P250, mounting bracket BEF-W260
Electromagnetic compatibility (EMC)	Level EN 61000-6-3 Residential and commercial areas
Ambient operating temperature	-25 °C +55 °C
Ambient temperature, storage	-40 °C +70 °C
UL File No.	EN50081-1, 242356

<sup>&</sup>lt;sup>1)</sup> +- 10%

# Safety-related parameters

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

# Classifications

eCl@ss 5.0	27270902
eCl@ss 5.1.4	27270902
eCl@ss 6.0	27270902
eCl@ss 6.2	27270902
eCl@ss 7.0	27270902
eCl@ss 8.0	27270902

<sup>&</sup>lt;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>&</sup>lt;sup>5)</sup> C = interference suppression.

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

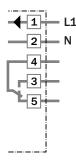
# WL260-R270 | W260 COMPACT PHOTOELECTRIC SENSORS

eCl@ss 8.1	27270902
eCl@ss 9.0	27270902
eCl@ss 10.0	27270902
eCl@ss 11.0	27270902
eCl@ss 12.0	27270902
ETIM 5.0	EC002717
ETIM 6.0	EC002717
ETIM 7.0	EC002717
ETIM 8.0	EC002717
UNSPSC 16.0901	39121528

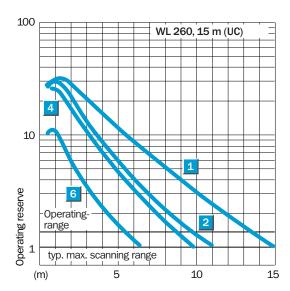
# Connection type



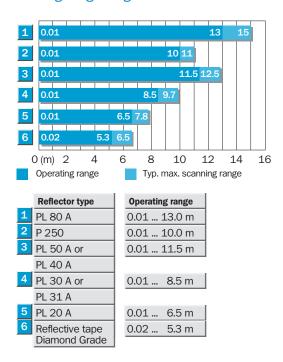
# Connection diagram



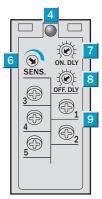
#### Characteristic curve



# Sensing range diagram

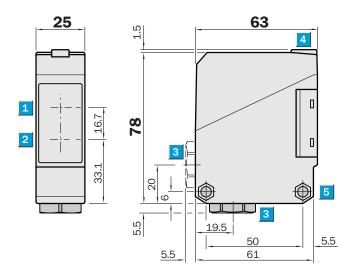


# Adjustments



- ④ LED signal strength indicator, red
- 6 Sensitivity control
- $\ \ \,$  Time control ON delay  $t_{ON}$
- $\ensuremath{\$}$  Time control OFF delay  $t_{\ensuremath{\mathsf{OFF}}}$
- Terminals

# Dimensional drawing (Dimensions in mm (inch))



#### Recommended accessories

Other models and accessories → www.sick.com/W260

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

	Brief description	Туре	Part no.
	Universal mounting bracket for reflectors, steel, zinc coated	BEF-WN-REFX	2064574
Reflectors			
	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:**

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