

WT260-E270 W260

**PHOTOELECTRIC SENSORS** 





Illustration may differ

## Ordering information

Туре	part no.
WT260-E270	6020981

Included in delivery: BEF-W260 (1)

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

#### Detailed technical data

#### **Features**

Functional principle	Photoelectric proximity sensor
Functional principle detail	Energetic
Dimensions (W x H x D)	25 mm x 78 mm x 63 mm
Housing design (light emission)	Rectangular
Sensing range max.	5 mm 1,500 mm <sup>1)</sup>
Sensing range	5 mm 1,000 mm
Focus	Approx. 2.5°
Type of light	Visible red light
Light source	LED <sup>2)</sup>
Light spot size (distance)	Ø 45 mm (1,000 mm)
Angle of dispersion	Approx. 2.5°
Adjustment	Potentiometer, 270°

 $<sup>^{1)}</sup>$  Object with 90% remission (based on standard white, DIN 5033).

## Mechanics/electronics

Supply voltage	10 V DC 30 V DC <sup>1)</sup>
Ripple	< 5 V <sub>pp</sub> <sup>2)</sup>
Current consumption	35 mA <sup>3)</sup>

 $<sup>^{1)}</sup>$  Limit values when operated in short-circuit protected network: max. 8 A.

 $<sup>^{2)}</sup>$  Average service life: 100,000 h at T<sub>U</sub> = +25 °C.

 $<sup>^{2)}\,\</sup>text{May}$  not exceed or fall below  $\text{U}_{\text{V}}$  tolerances.

<sup>3)</sup> Without load.

 $<sup>^{4)}</sup>$  Signal transit time with resistive load.

<sup>5)</sup> With light/dark ratio 1:1.

 $<sup>^{6)}</sup>$  A =  $V_S$  connections reverse-polarity protected.

 $<sup>^{7)}</sup>$  B = inputs and output reverse-polarity protected.

<sup>8)</sup> C = interference suppression.

 $<sup>^{9)}</sup>$  D = outputs overcurrent and short-circuit protected.

<sup>&</sup>lt;sup>10)</sup> Reference voltage: 50 V DC.

Switching output	NPN
Switching mode	Light/dark switching
Switching mode selector	Selectable via light/dark selector
Output current I <sub>max.</sub>	≤ 100 mA
Response time	$\leq$ 0.5 ms $^{4)}$
Switching frequency	1,000 Hz <sup>5)</sup>
Connection type	Cable gland
Circuit protection	A <sup>6)</sup> B <sup>7)</sup> C <sup>8)</sup> D <sup>9)</sup>
Protection class	II <sup>10)</sup>
Weight	120 g
Housing material	Plastic, ABS
Optics material	Plastic, PC
Enclosure rating	IP67
Items supplied	Mounting bracket BEF-W260
Test input sender off	TE to 0 V
Ambient operating temperature	-25 °C +55 °C
Ambient temperature, storage	-40 °C +70 °C
UL File No.	EN50081-1, 242356

<sup>1)</sup> Limit values when operated in short-circuit protected network: max. 8 A.

## Safety-related parameters

MTTF <sub>D</sub>	916 years
<b>DC</b> <sub>avg</sub>	0 %

#### Classifications

ECLASS 5.0	27270903
ECLASS 5.1.4	27270903
ECLASS 6.0	27270903
ECLASS 6.2	27270903
ECLASS 7.0	27270903
ECLASS 8.0	27270903
ECLASS 8.1	27270903
ECLASS 9.0	27270903

 $<sup>^{2)}</sup>$  May not exceed or fall below  $\mathrm{U}_{\mathrm{V}}$  tolerances.

<sup>&</sup>lt;sup>3)</sup> Without load.

<sup>&</sup>lt;sup>4)</sup> Signal transit time with resistive load.

<sup>5)</sup> With light/dark ratio 1:1.

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

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# WT260-E270 | W260

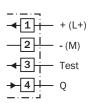
## PHOTOELECTRIC SENSORS

ECLASS 10.0	27270904
ECLASS 11.0	27270904
ECLASS 12.0	27270903
ETIM 5.0	EC001821
ETIM 6.0	EC001821
ETIM 7.0	EC002719
ETIM 8.0	EC002719
UNSPSC 16.0901	39121528

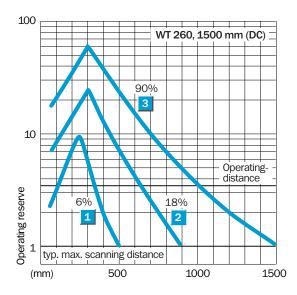
## Connection type



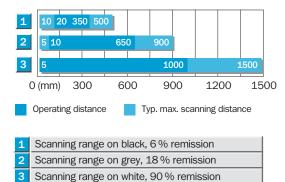
## Connection diagram Cd-123



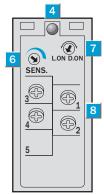
## Characteristic curve



## Sensing range diagram

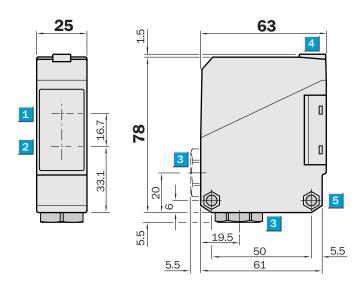


## Adjustments



- ④ Status indicator LED, yellow: Output active
- **6** Adjustment of sensing range
- ① Light/ dark rotary switch: L = light switching, D = dark switching
- ® Terminals

#### **Dimensional drawing**



Dimensions in mm (inch)

## Recommended accessories

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

	Brief description	Туре	part no.
Mounting sys	stems		
	<ul> <li>Description: Mounting bracket</li> <li>Material: Steel</li> <li>Details: Steel, zinc coated</li> <li>Items supplied: Without mounting hardware</li> </ul>	BEF-W260	5304819

## 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

