



# WT260-P260

W260

COMPACT PHOTOELECTRIC SENSORS

**SICK**  
Sensor Intelligence.



### Ordering information

Type	Part no.
WT260-P260	6009471

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

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

Illustration may differ



### Detailed technical data

#### Features

<b>Device type</b>	Photoelectric sensors
<b>Sensor/ detection principle</b>	Photoelectric proximity sensor, Background suppression
<b>Dimensions (W x H x D)</b>	25 mm x 77.8 mm x 63 mm
<b>Housing design (light emission)</b>	Rectangular
<b>Sensing range max.</b>	0 mm ... 380 mm <sup>1)</sup>
<b>Sensing range</b>	0 mm ... 380 mm <sup>2)</sup> 75 mm ... 160 mm <sup>3)</sup>
<b>Focus</b>	Approx. 1.5°
<b>Type of light</b>	Infrared light
<b>Light source</b>	LED <sup>4)</sup>
<b>Light spot size (distance)</b>	Ø 17 mm (300 mm)
<b>Angle of dispersion</b>	Approx. 1.5°
<b>Adjustment</b>	Potentiometer, 270°

<sup>1)</sup> Object with 90 % reflectance (referred to standard white, DIN 5033).

<sup>2)</sup> Set sensing range at MAX.

<sup>3)</sup> Set sensing range at MIN.

<sup>4)</sup> Average service life: 100,000 h at T<sub>J</sub> = +25 °C.

## Mechanics/electronics

<b>Supply voltage</b>	10 V DC ... 30 V DC <sup>1)</sup>
<b>Ripple</b>	< 5 V <sub>pp</sub> <sup>2)</sup>
<b>Current consumption</b>	35 mA <sup>3)</sup>
<b>Switching output</b>	PNP
<b>Switching mode</b>	Light/dark switching
<b>Switching mode selector</b>	Selectable via light/dark selector
<b>Output current I<sub>max.</sub></b>	≤ 100 mA
<b>Response time</b>	≤ 2 ms <sup>4)</sup>
<b>Switching frequency</b>	250 Hz <sup>5)</sup>
<b>Connection type</b>	Cable gland
<b>Circuit protection</b>	A <sup>6)</sup> B <sup>7)</sup> C <sup>8)</sup> D <sup>9)</sup>
<b>Protection class</b>	II <sup>10)</sup>
<b>Weight</b>	120 g
<b>Alarm output</b>	100 mA, permanently <sup>11)</sup>
<b>Housing material</b>	Plastic, ABS
<b>Optics material</b>	Plastic, PC
<b>Enclosure rating</b>	IP66
<b>Items supplied</b>	Mounting bracket BEF-W260
<b>Test input sender off</b>	TE to V <sub>S</sub>
<b>Ambient operating temperature</b>	-25 °C ... +55 °C
<b>Ambient temperature, storage</b>	-40 °C ... +70 °C
<b>UL File No.</b>	NRNT2.E128350 & NRNT8.E128350

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

<sup>2)</sup> May not exceed or fall below U<sub>y</sub> 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<sub>S</sub> 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>10)</sup> Reference voltage: 50 V DC.

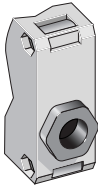
<sup>11)</sup> Operating reserve < 50 %.

## Classifications

<b>ECl@ss 5.0</b>	27270903
<b>ECl@ss 5.1.4</b>	27270903
<b>ECl@ss 6.0</b>	27270903
<b>ECl@ss 6.2</b>	27270903
<b>ECl@ss 7.0</b>	27270903

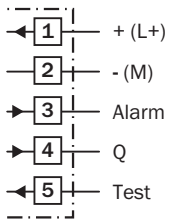
<b>ECl@ss 8.0</b>	27270903
<b>ECl@ss 8.1</b>	27270903
<b>ECl@ss 9.0</b>	27270903
<b>ECl@ss 10.0</b>	27270904
<b>ECl@ss 11.0</b>	27270904
<b>ETIM 5.0</b>	EC001821
<b>ETIM 6.0</b>	EC001821
<b>ETIM 7.0</b>	EC002719
<b>ETIM 8.0</b>	EC002719
<b>UNSPSC 16.0901</b>	39121528

### Connection type

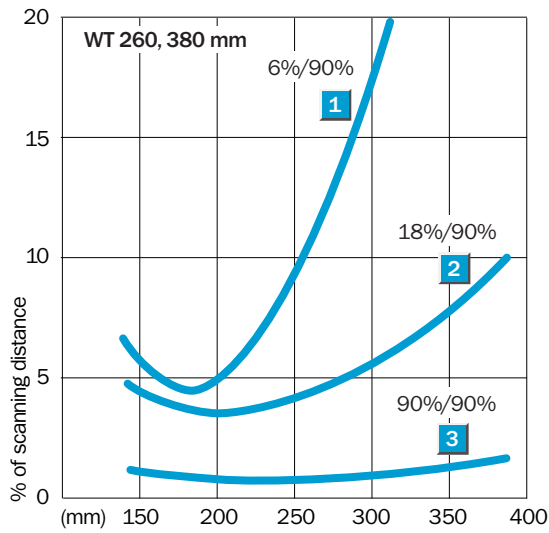


### Connection diagram

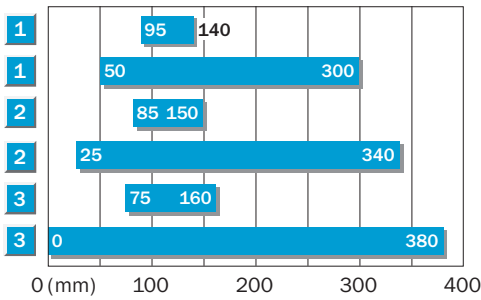
Cd-153



Characteristic curve

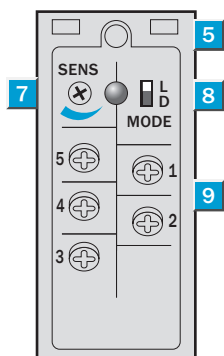


Sensing range diagram



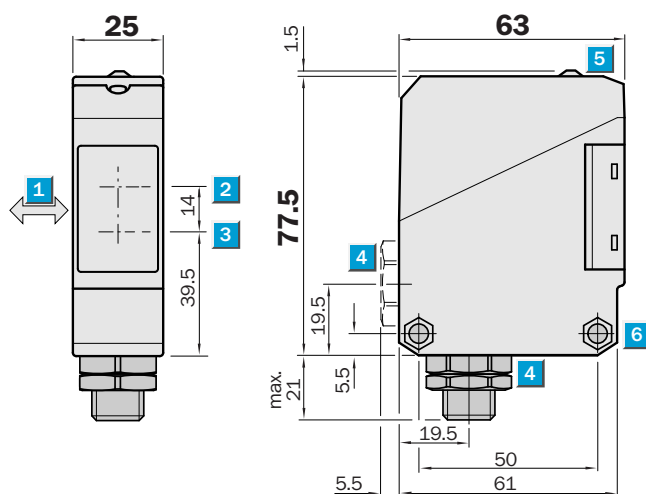
1	Scanning range on black, 6 % remission
2	Scanning range on grey, 18 % remission
3	Scanning range on white, 90 % remission
A	Scanning distance control set to MIN
B	Scanning distance control set to MAX

## Adjustments



- ⑤ LED signal strength indicator, red
- ⑦ Adjustment of sensing range
- ⑧ Light/ dark rotary switch: L = light switching, D = dark switching
- ⑨ Terminals


## Dimensional drawing (Dimensions in mm (inch))



- ① Standard direction of the material being detected
- ② Center of optical axis, receiver
- ③ Center of optical axis, sender
- ④ Cable entry gland 1/2" PF for cable diameter 6 to 10 mm optionally at bottom or rear
- ⑤ LED reception indicator, red
- ⑥ Mounting hole  $\varnothing$  5.2 mm, for M5 hexagon nuts on both sides

## 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

## 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)