

# WT260-R280

W260

**COMPACT PHOTOELECTRIC SENSORS**

**SICK**  
Sensor Intelligence.



Illustration may differ



### Ordering information

Type	Part no.
WT260-R280	6020772

Included in delivery: BEF-W260 (1)



### Detailed technical data

#### Features

<b>Sensor/ detection principle</b>	Photoelectric proximity sensor, Energetic
<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>	10 mm ... 3,500 mm <sup>1)</sup>
<b>Sensing range</b>	20 mm ... 3,000 mm
<b>Type of light</b>	Infrared light
<b>Light source</b>	LED <sup>2)</sup>
<b>Light spot size (distance)</b>	Ø 95 mm (3,000 mm)
<b>Angle of dispersion</b>	Approx. 1.7°
<b>Adjustment</b>	Potentiometer, 270°
<b>Time type</b>	On delay Off delay
<b>Delay time</b>	Adjustable via time delay selector switch, 0.1 s, 10 s Adjustable via time control

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

<sup>2)</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>
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<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>Power consumption</b>	≤ 5 VA
<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>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>Interference emission</b>	Level EN 61000-6-3 Residential and commercial areas
<b>Housing material</b>	Plastic, ABS
<b>Optics material</b>	Plastic, PC
<b>Enclosure rating</b>	IP67
<b>Items supplied</b>	Mounting bracket BEF-W260
<b>Usage category</b>	AC-15, DC-13, according to EN 60947-1
<b>Ambient operating temperature</b>	-25 °C ... +55 °C
<b>Ambient storage temperature</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.

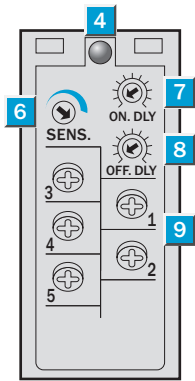
<sup>5)</sup> C = interference suppression.

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

## Classifications

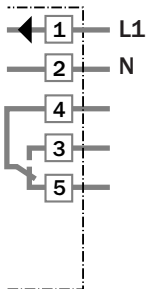
<b>ECI@ss 5.0</b>	27270904
<b>ECI@ss 5.1.4</b>	27270904
<b>ECI@ss 6.0</b>	27270904
<b>ECI@ss 6.2</b>	27270904
<b>ECI@ss 7.0</b>	27270904
<b>ECI@ss 8.0</b>	27270904
<b>ECI@ss 8.1</b>	27270904
<b>ECI@ss 9.0</b>	27270904
<b>ETIM 5.0</b>	EC002719
<b>ETIM 6.0</b>	EC002719
<b>UNSPSC 16.0901</b>	39121528

### Adjustments possible

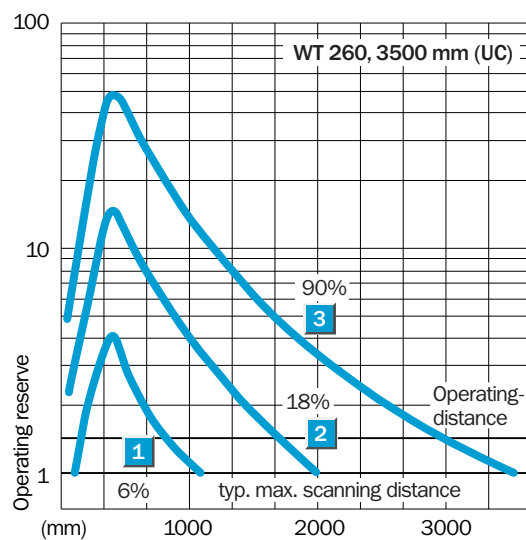


- ④ LED signal strength indicator, red
- ⑥ Sensitivity control
- ⑦ Time control ON delay  $t_{ON}$
- ⑧ Time control OFF delay  $t_{OFF}$
- ⑨ Terminals

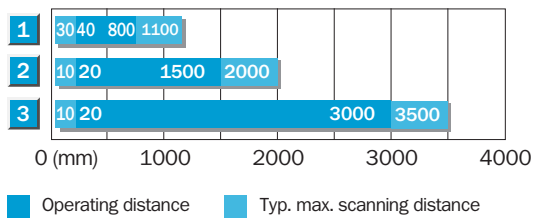
### Connection diagram



### Characteristic curve

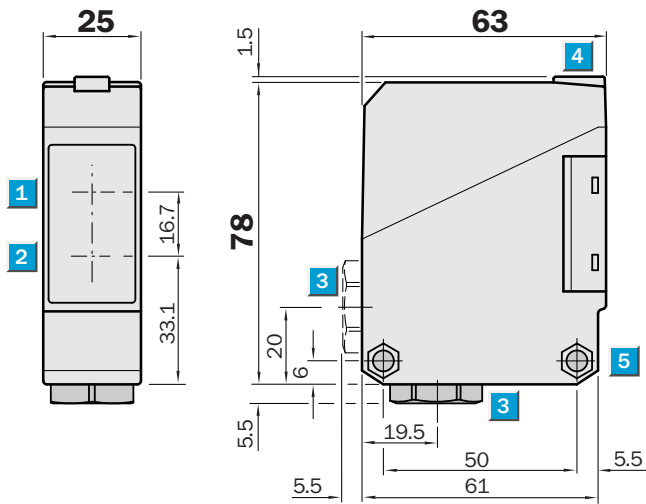


## Sensing range diagram



- |   |   |
|---|---|
| 1 | Scanning range on black, 6 % remission  |
| 2 | Scanning range on grey, 18 % remission  |
| 3 | Scanning range on white, 90 % remission |

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



## 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."**

**SICK**  
Sensor Intelligence.