



# WT45-R260

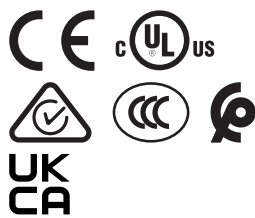
W45

PHOTOELECTRIC SENSORS

**SICK**  
Sensor Intelligence.



Illustration may differ



Ordering information

Type	part no.
WT45-R260	1009107

Other models and accessories → [www.sick.com/W45](http://www.sick.com/W45)

Detailed technical data

Features

Functional principle	Photoelectric proximity sensor
Functional principle detail	Background suppression
Dimensions (W x H x D)	60 mm x 105 mm x 105 mm
Housing design (light emission)	Rectangular
Sensing range max.	200 mm ... 2,000 mm <sup>1)</sup>
Sensing range	200 mm ... 2,000 mm
Type of light	Infrared light
Light source	LED <sup>2)</sup>
Light spot size (distance)	Ø 35 mm (2,000 mm)
Adjustment	Potentiometer
Special features	Cable gland, for cross-section: 0,14 mm <sup>2</sup> ... 2,5 mm <sup>2</sup> , max. 16 A

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

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

Mechanics/electronics

Supply voltage U <sub>B</sub>	20 V AC/DC ... 250 V AC/DC <sup>1)</sup>
Power consumption	≤ 3 VA

<sup>1)</sup> Limit values.

<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> Up to 140 °C with cooling plates (see accessories).

<b>Switching output</b>	Relay, electrically isolated <sup>2)</sup>
<b>Output function</b>	Change-over contacts
<b>Switching mode</b>	Light/dark switching <sup>2)</sup>
<b>Switching mode selector</b>	Selectable via time delay selector switch
<b>Switching current (switching voltage)</b>	4 A @ 250 V AC, 4 A @ 24 V DC, 0.125 A @ 120 V DC UL: 4 A @ 250 V AC, general purpose / 2 A @ 250 V AC, pilot duty
<b>Response time</b>	≤ 20 ms
<b>Switching frequency</b>	10 Hz <sup>3)</sup>
<b>Time functions</b>	Switch-on delay Off delay ON and OFF delay
<b>Delay time</b>	Adjustable via time delay selector switch, 0.5 s ... 12 s
<b>Connection type</b>	Terminal connection with PG13,5, 6-pin
<b>Circuit protection</b>	A <sup>4)</sup> C <sup>5)</sup>
<b>Protection class</b>	I
<b>Weight</b>	800 g
<b>Housing material</b>	Metal
<b>Enclosure rating</b>	IP67
<b>Usage category</b>	AC-15, DC-13 According to EN 60947-1
<b>Ambient operating temperature</b>	-25 °C ... +55 °C <sup>6)</sup>
<b>Ambient temperature, storage</b>	-40 °C ... +70 °C
<b>UL File No.</b>	NRKH.E181493 & NRKH7.E181493

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## Certificates

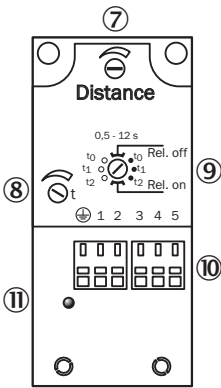
<b>EU declaration of conformity</b>	✓
<b>UK declaration of conformity</b>	✓
<b>ACMA declaration of conformity</b>	✓
<b>Moroccan declaration of conformity</b>	✓
<b>China RoHS</b>	✓
<b>CCC certificate</b>	✓
<b>cULus certificate</b>	✓
<b>Photobiological safety (DIN EN 62471) certificate</b>	✓

## Classifications

<b>ECLASS 5.0</b>	27270904
<b>ECLASS 5.1.4</b>	27270904
<b>ECLASS 6.0</b>	27270904

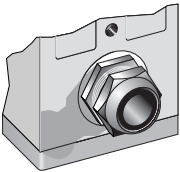
ECLASS 6.2	27270904
ECLASS 7.0	27270904
ECLASS 8.0	27270904
ECLASS 8.1	27270904
ECLASS 9.0	27270904
ECLASS 10.0	27270904
ECLASS 11.0	27270904
ECLASS 12.0	27270903
ETIM 5.0	EC002719
ETIM 6.0	EC002719
ETIM 7.0	EC002719
ETIM 8.0	EC002719
UNSPSC 16.0901	39121528

Adjustments

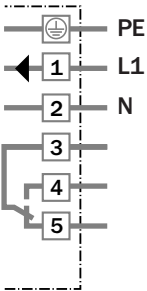


- ⑦ Adjustment of sensing range
- ⑧ Time control
- ⑨ time delay selector switch
- ⑩ terminal strip
- ⑪ Status indicator

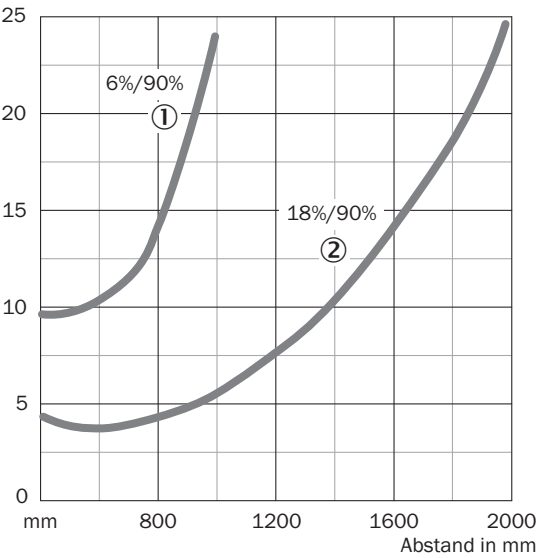
Connection type



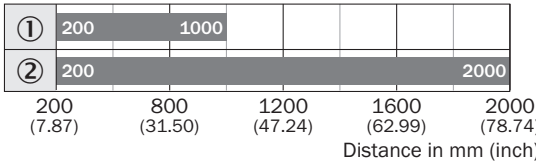
Connection diagram



Characteristic curve



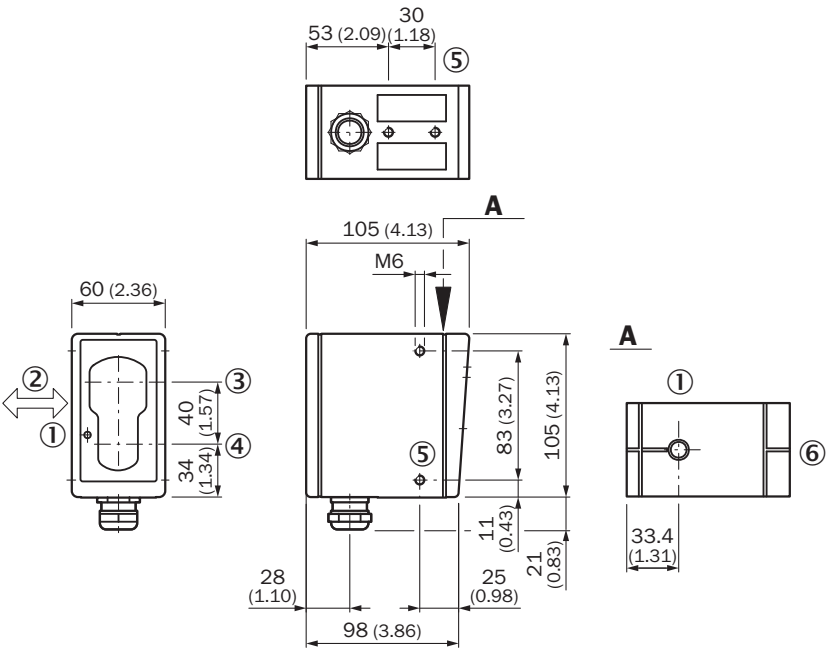
Sensing range diagram



■ Sensing range


- ① Sensing range on black, 6 % remission
- ② Sensing range on gray, 18 % remission

Dimensional drawing



Recommended accessories

Other models and accessories → [www.sick.com/W45](http://www.sick.com/W45)

	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> Mounting hardware included</li></ul>	BEF-WN-W45	2011480

## 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)