



WT45-R200S04

W45

PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	part no.
WT45-R200S04	1015317

Other models and accessories → 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 ... 1,000 mm ¹⁾
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Type of light	Visible red light
Light source	LED ²⁾
Light spot size (distance)	Ø 35 mm (1,000 mm)
Adjustment	Potentiometer
Special features	For the detection of hot objects with surface temperatures of > 800 °C Cable gland, for cross-section: 0,14 mm ² ... 2,5 mm ² , max. 16 A

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

²⁾ Average service life: 100,000 h at T_U = +25 °C.

Mechanics/electronics

Supply voltage U_B	20 V AC/DC ... 250 V AC/DC ¹⁾
Power consumption	≤ 3 VA

¹⁾ Limit values.

²⁾ Provide suitable spark suppression for inductive or capacitive loads.

³⁾ With light/dark ratio 1:1.

⁴⁾ A = V_S connections reverse-polarity protected.

⁵⁾ C = interference suppression.

⁶⁾ Up to 120 °C with cooling plates BEF-KP-W 45.

Switching output	Relay, electrically isolated ²⁾
Output function	Change-over contacts
Switching current (switching voltage)	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
Response time	≤ 20 ms
Switching frequency	10 Hz ³⁾
Connection type	Terminal connection with PG13,5, 6-pin
Circuit protection	A ⁴⁾ C ⁵⁾
Protection class	I
Weight	800 g
Special device	✓
Housing material	Metal
Enclosure rating	IP67
Items supplied	Cooling plate BEF-KP-W 45 and special protection hood OBS-W45-H not included in scope of delivery
Usage category	AC-15, DC-13 According to EN 60947-1
Ambient operating temperature	-25 °C ... +55 °C ⁶⁾
Ambient temperature, storage	-40 °C ... +70 °C
UL File No.	NRKH.E181493 & NRKH7.E181493

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Certificates

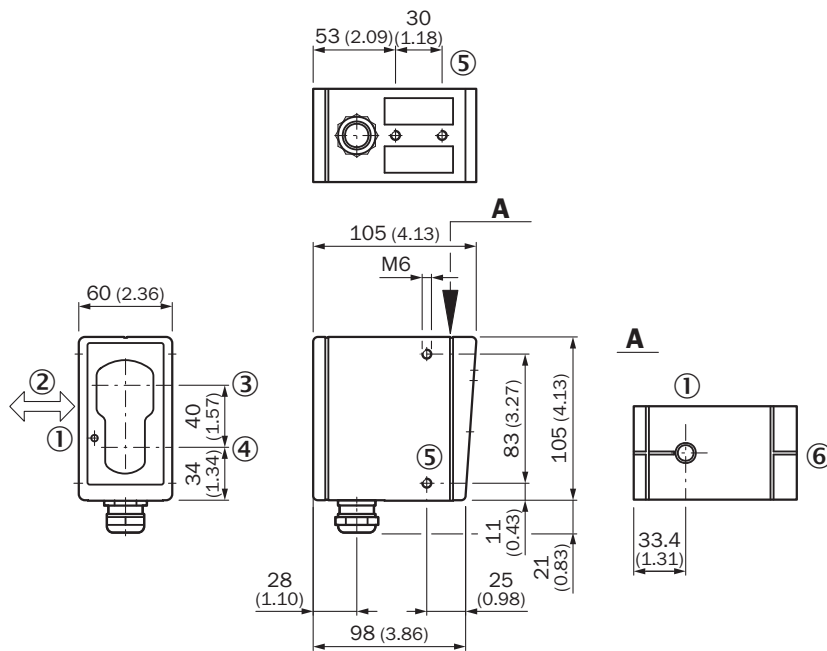
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China-RoHS	✓
CCC certificate	✓
cULus certificate	✓
Photobiological safety (DIN EN 62471) certificate	✓

Classifications

ECLASS 5.0	27270904
ECLASS 5.1.4	27270904
ECLASS 6.0	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

Dimensional drawing



Dimensions in mm (inch)

- ① LED signal strength indicator
- ② Standard direction of the material being detected
- ③ Center of optical axis, receiver
- ④ Center of transmitter's optical axis
- ⑤ M6 threaded mounting hole, 8 mm deep
- ⑥ Alignment sight

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