



WT2000-R1122

W2000

PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.



Illustration may differ

Ordering information

Type	part no.
WT2000-R1122	7023064

Other models and accessories → www.sick.com/W2000

Detailed technical data

Features

Functional principle	Photoelectric proximity sensor
Dimensions (W x H x D)	45 mm x 73.7 mm x 48.6 mm
Housing design (light emission)	Rectangular
Sensing range max.	0 m ... 3.5 m ¹⁾
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Focus	Approx. 1.3°
Type of light	Infrared light
Light source	LED ²⁾
Light spot size (distance)	Ø 55 mm (2.5 m)
Angle of dispersion	Approx. 1.3°
Wave length	880 nm
Adjustment	Potentiometer adjustable via sensitivity adjustment

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	24 V AC/DC ... 240 V AC/DC ¹⁾
Power consumption	≤ 6 W ²⁾
Switching output	Relay, electrically isolated
Output function	Change-over contacts
Switching mode	Light/dark switching
Switching mode selector	Selectable via light/dark selector
Switching current (switching voltage)	3 A (265 V)
Response time	≤ 10 ms ³⁾

¹⁾ Limit values.

²⁾ Without load.

³⁾ Signal transit time with resistive load.

⁴⁾ With light/dark ratio 1:1.

⁵⁾ Adjustable via Off delay selector switch.

⁶⁾ Adjustable via On delay selector switch.

⁷⁾ Do not bend below 0 °C.

⁸⁾ Reference voltage: 50 V DC.

Switching frequency	10 Hz ⁴⁾
Time functions	Off delay ⁵⁾ On delay ⁶⁾
Delay time	≤ 0 s ≤ 1 s ≤ 5 s ≤ 10 s ≤ 14 s
Connection type	Cable, 5-wire, 2 m ⁷⁾
Cable material	PVC
Protection class	II ⁸⁾
Weight	150 g
Housing material	Plastic, Glassfibre reinforced plastic
Enclosure rating	IP67
Ambient operating temperature	-25 °C ... +40 °C
Ambient temperature, storage	-40 °C ... +70 °C
UL File No.	242366 & cUL No. NRKH7.E147756

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³⁾ Signal transit time with resistive load.

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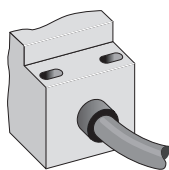
⁷⁾ Do not bend below 0 °C.

⁸⁾ Reference voltage: 50 V DC.

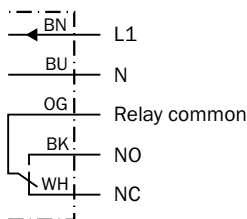
Classifications

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

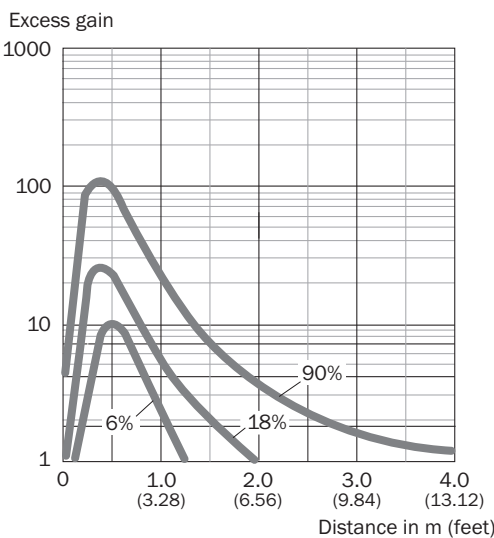
Connection type



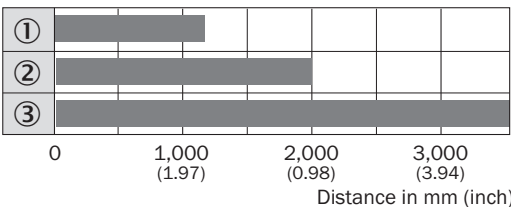
Connection diagram Cd-165



Characteristic curve WT2000



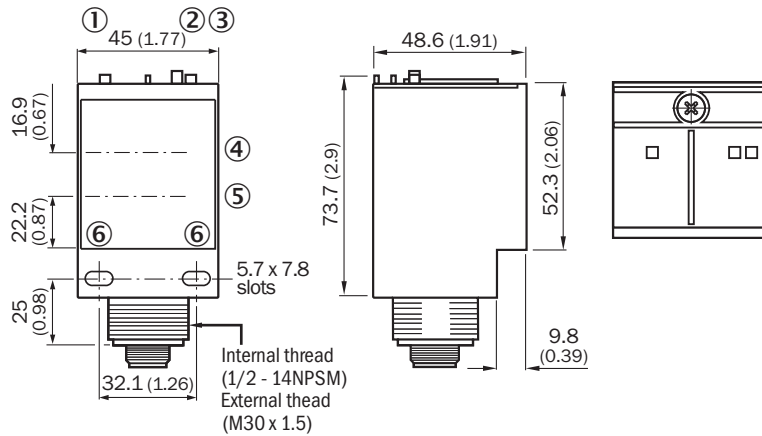
Sensing range diagram WT2000



■ Sensing range
① sensing range on black, 6% remission

- ② Sensing range on gray, 18 % remission
- ③ sensing range on white, 90% remission

Dimensional drawing




Dimensions in mm (inch)

- ① LED indicator green: Supply voltage active
- ② Status indicator LED red: signal strength
- ③ Status indicator LED, yellow: Output active
- ④ Center of emitter optical axis
- ⑤ Center of receiver optical axis
- ⑥ Mounting hole \varnothing 0.2 mm x 0.8 mm

Recommended accessories

Other models and accessories → www.sick.com/W2000

	Brief description	Type	part no.
connectors and cables			
	<ul style="list-style-type: none"> Connection type head A: Male connector, M12, 5-pin, straight, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: $\leq 0.75 \text{ mm}^2$ Note: For field bus technology 	STE-1205-G	6022083

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:

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