

WT2000-R1122

COMPACT PHOTOELECTRIC SENSORS



WT2000-R1122 | W2000

COMPACT PHOTOELECTRIC SENSORS



Ordering information

Туре	Part no.
WT2000-R1122	7023064

Other models and accessories ->

Illustration may differ



Detailed technical data

Features

Sensor/ detection 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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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 % reflectance (referred to standard white, DIN 5033).

Mechanics/electronics

Supply voltage	24 V AC/DC 240 V AC/DC ¹⁾
Power consumption	\leq 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)

¹⁾ Limit values.

 $^{^{2)}}$ Average service life: 100,000 h at $\rm T_U$ = +25 °C.

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 $^{\circ}\text{C}.$

⁸⁾ Reference voltage: 50 V DC.

Response time	\leq 10 ms $^{3)}$
Switching frequency	10 Hz ⁴⁾
Time functions	Off delay ⁵⁾ On delay ⁶⁾
Delay time	≤0s ≤1s ≤5s ≤10s ≤14s
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 storage temperature	-40 °C +70 °C
UL File No.	242366 & cUL No. NRKH7.E147756

¹⁾ Limit values.

Classifications

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

²⁾ Without load.

³⁾ Signal transit time with resistive load.

⁴⁾ With light/dark ratio 1:1.

⁵⁾ Adjustable via Off delay selector switch.

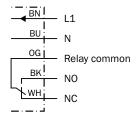
⁶⁾ Adjustable via On delay selector switch.

⁷⁾ Do not bend below 0 °C.

⁸⁾ Reference voltage: 50 V DC.

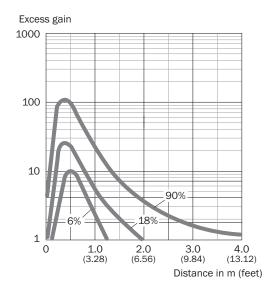
Connection diagram

Cd-165



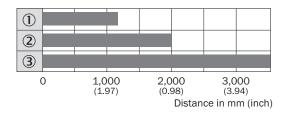
Characteristic curve

WT2000



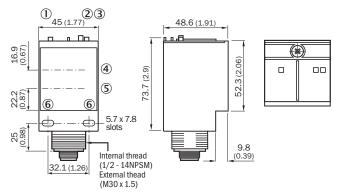
Sensing range diagram

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 ø 0.2 mm x 0.8 mm

Recommended accessories

Other models and accessories ->

	Brief description	Туре	Part no.
Plug connectors and cables			
	Head A: male connector, M12, 5-pin, straight Cable: unshielded 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."

