



WT12L-2B500S41

PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	part no.
WT12L-2B500S41	1023013

Other models and accessories → www.sick.com/

Detailed technical data

Features

Functional principle	Photoelectric proximity sensor
Functional principle detail	Background suppression
Dimensions (W x H x D)	15 mm x 49 mm x 41.5 mm
Housing design (light emission)	Rectangular
Sensing range max.	30 mm ... 60 mm ¹⁾
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Type of light	Visible red light
Light source	Laser
Wave length	650 nm
Adjustment	Potentiometer

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

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	< 5 V _{pp}
Current consumption	55 mA ¹⁾
Switching output	PNP NPN
Switching mode	Light/dark switching
Response time	≤ 200 μs ²⁾
Connection type	Male connector M12, 5-pin
Housing material	Metal, zinc diecast

¹⁾ Without load.

²⁾ Signal transit time with resistive load.

Optics material	Plastic, PMMA
Enclosure rating	IP67
Ambient operating temperature	-10 °C ... +50 °C
Ambient temperature, storage	-25 °C ... +75 °C
UL File No.	NRKH.E181493 & NRKH7.E181493

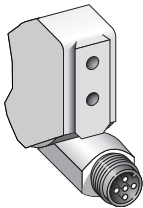
¹⁾ Without load.

²⁾ Signal transit time with resistive load.

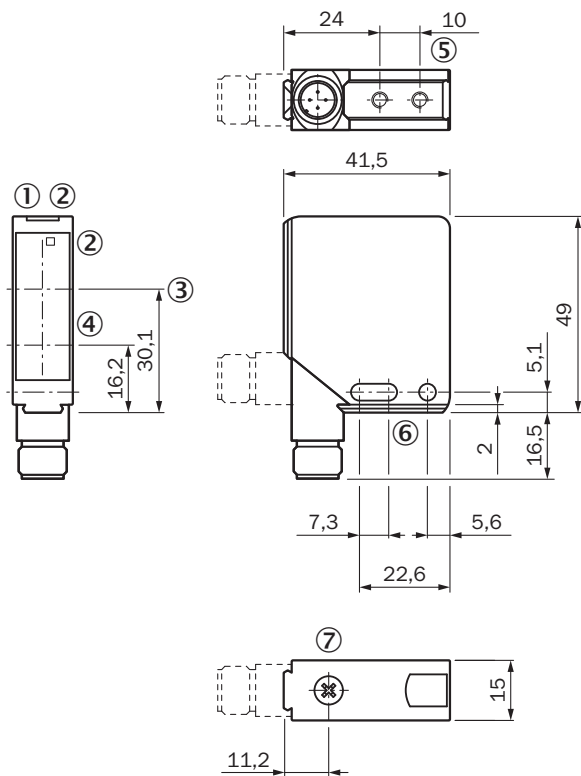
Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
cULus certificate	✓
Laser safety (IEC 60825-1) certificate	✓

Connection type



Dimensional drawing WT12L-2



Dimensions in mm (inch)

- ① Operating indicator, green
- ② LED reception indicator, yellow
- ③ Optical axis, receiver
- ④ Optical axis, sender
- ⑤ M4 threaded mounting hole – 4 mm depth
- ⑥ Mounting hole, Ø 4.2 mm
- ⑦ Adjustment of sensing range

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