



# WT9-2P441

PRODUCT PORTFOLIO

**SICK**  
Sensor Intelligence.



Illustration may differ



## Ordering information

Type	Part no.
WT9-2P441	1018303

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

## Detailed technical data

### Features

<b>Sensor/ detection principle</b>	Photoelectric proximity sensor, Background suppression
<b>Dimensions (W x H x D)</b>	12 mm x 40 mm x 22 mm
<b>Housing design (light emission)</b>	Rectangular
<b>Sensing range max.</b>	10 mm ... 20 mm <sup>1)</sup>
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<b>Type of light</b>	Visible red light
<b>Light source</b>	LED

<sup>1)</sup> Object with 90 % reflectance (referred to standard white, DIN 5033).

### Mechanics/electronics

<b>Supply voltage</b>	10 V DC ... 30 V DC
<b>Ripple</b>	≤ 5 V <sub>pp</sub>
<b>Power consumption</b>	≤ 30 mA <sup>1)</sup>
<b>Switching output</b>	PNP
<b>Switching mode</b>	Light/dark switching
<b>Response time</b>	≤ 625 μs <sup>2)</sup>
<b>Connection type</b>	Male connector M12, 4-pin
<b>Housing material</b>	Plastic, ABS
<b>Optics material</b>	Plastic, PMMA
<b>Enclosure rating</b>	IP69K
<b>Ambient operating temperature</b>	-40 °C ... +60 °C

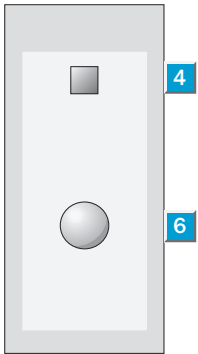
<sup>1)</sup> Without load.

<sup>2)</sup> Signal transit time with resistive load.

<b>Ambient storage temperature</b>	-40 °C ... +75 °C
<b>UL File No.</b>	NRKH.E181493 & NRKH7.E181493

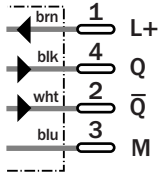
- 1) Without load.
- 2) Signal transit time with resistive load.

### Adjustments possible

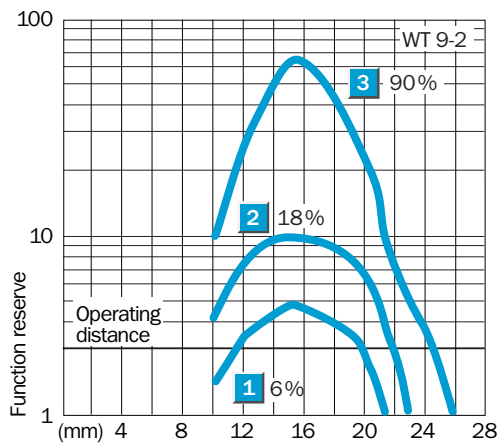


- ④ LED reception indicator, yellow
- ⓐ Teach-in button

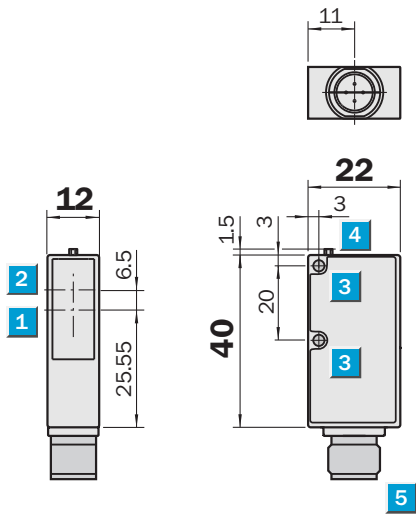
### Connection diagram



### Characteristic curve



Dimensional drawing (Dimensions in mm (inch))



- ① Center of optical axis, receiver
- ② Center of optical axis, sender
- ③ Mounting hole  $\varnothing$  3.2 mm
- ④ LED signal strength indicator
- ⑤ Connector M12, 4-pin, 2m connection cable or 120mm cable with connector M12, 4-pin
- ⑥ Teach-in button

## 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)