



# WT12-2N410

PRODUCT PORTFOLIO

**SICK**  
Sensor Intelligence.



Illustration may differ



### Ordering information

Type	Part no.
WT12-2N410	1016124

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>	15 mm x 49 mm x 41.5 mm
<b>Housing design (light emission)</b>	Rectangular
<b>Sensing range max.</b>	20 mm ... 250 mm <sup>1)</sup>
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<b>Type of light</b>	Infrared light
<b>Light source</b>	LED
<b>Adjustment</b>	Potentiometer

<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>	≤ 50 mA <sup>1)</sup>
<b>Switching output</b>	NPN
<b>Switching mode</b>	Light/dark switching
<b>Response time</b>	≤ 330 μs <sup>2)</sup>
<b>Connection type</b>	Male connector M12, 4-pin
<b>Housing material</b>	Metal, Zinc diecast Metal, Zinc diecast
<b>Optics material</b>	Plastic, PMMA
<b>Enclosure rating</b>	IP69K

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

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

<b>Ambient operating temperature</b>	-40 °C ... +60 °C
<b>Ambient storage temperature</b>	-40 °C ... +75 °C
<b>UL File No.</b>	NRKH.E181493 & NRKH7.E181493

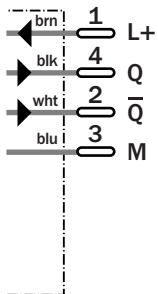
- 1) Without load.
- 2) Signal transit time with resistive load.

### Adjustments possible

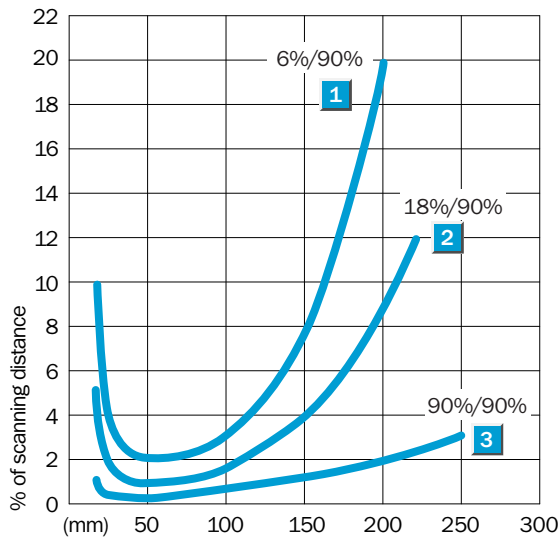


- ② LED signal strength indicator
- ⑦ Adjustment of sensing range

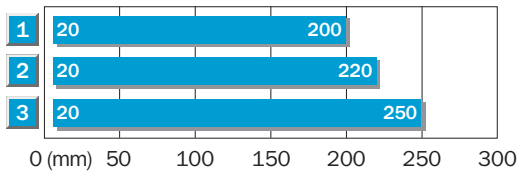
### Connection diagram



Characteristic curve

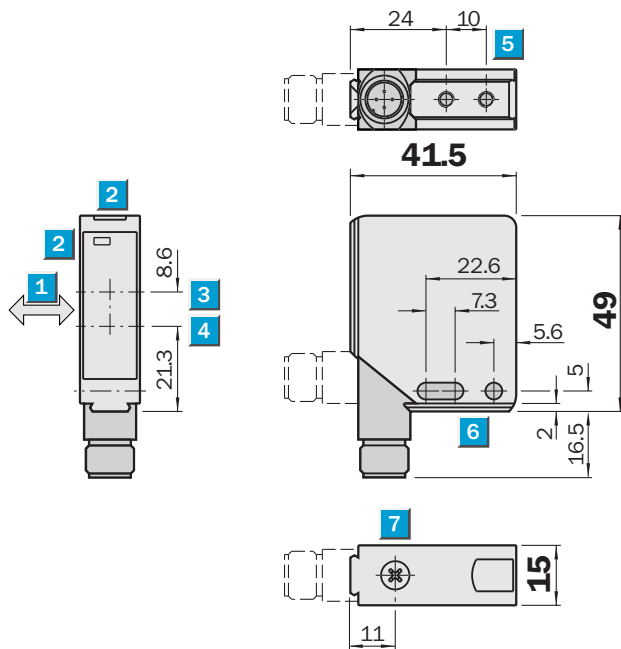


Sensing range diagram



- 1 Scanning distance on black, 6 % remission
- 2 Scanning distance on grey, 18 % remission
- 3 Scanning distance on white, 90 % remission

**Dimensional drawing** (Dimensions in mm (inch))



- ① Standard direction of the material being detected
- ② LED signal strength indicator
- ③ Optical axis, receiver
- ④ Optical axis, sender
- ⑤ M4 threaded mounting hole - 4 mm deep
- 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](http://www.sick.com)