

# NT6-N112

NT6

CONTRAST SENSORS

**SICK**  
Sensor Intelligence.



Illustration may differ



## Ordering information

Type	Part no.
NT6-N112	1010395

Other models and accessories → [www.sick.com/NT6](http://www.sick.com/NT6)

## Detailed technical data

### Features

<b>Dimensions (W x H x D)</b>	80 mm x 30.4 mm x 64 mm
<b>Sensing distance</b>	9 mm
<b>Sensing distance tolerance</b>	± 2 mm
<b>Housing design (light emission)</b>	Rectangular
<b>Light source</b>	LED, Red, green <sup>1)</sup>
<b>Wave length</b>	560 nm
<b>Light emission</b>	Long and short side of housing, exchangeable
<b>Light spot size</b>	Ø 2.5 mm
<b>Light spot direction</b>	Round <sup>2)</sup>
<b>Pull-up/Pull-down resistor</b>	22 k OHM <sup>3)</sup>
<b>Adjustment</b>	Potentiometer

<sup>1)</sup> Average service life of 10,000 h at T<sub>A</sub> = +25 °C.

<sup>2)</sup> In relation to long side of housing.

<sup>3)</sup> With light/dark ratio 1:1.

### Mechanics/electronics

<b>Supply voltage</b>	10 V DC ... 30 V DC
<b>Ripple</b>	≤ 5 V <sub>pp</sub>
<b>Power consumption</b>	< 80 mA <sup>1)</sup>
<b>Switching frequency</b>	5 kHz <sup>2)</sup>
<b>Response time</b>	> 100 µs <sup>3)</sup>
<b>Switching output</b>	NPN

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

<sup>2)</sup> With light/dark ratio 1:1.

<sup>3)</sup> Signal transit time with resistive load.

<sup>4)</sup> R<sub>L</sub> = 10 k OHM, values from black to high gloss.

<sup>5)</sup> Do not bend below 0 °C.

<b>Switching output (voltage)</b>	NPN: HIGH = approx. $V_S$ / LOW $\leq 2$ V
<b>Analog output</b>	0.15 V ... 6 V <sup>4)</sup>
<b>Output current <math>I_{max}</math>.</b>	200 mA
<b>Connection type</b>	Cable with male connector, 2 m <sup>5)</sup>
<b>Circuit protection</b>	$U_V$ connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression
<b>Enclosure rating</b>	IP67
<b>Housing material</b>	Metal, Zinc diecast

1) Without load.

2) With light/dark ratio 1:1.

3) Signal transit time with resistive load.

4)  $R_L = 10$  k OHM, values from black to high gloss.

5) Do not bend below 0 °C.

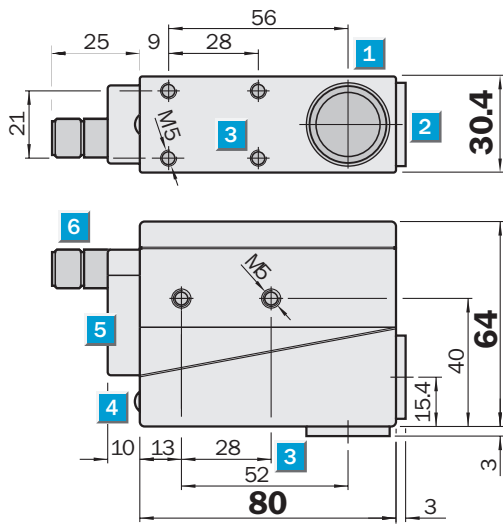
### Ambient data

<b>Ambient operating temperature</b>	0 °C ... +50 °C
<b>Ambient storage temperature</b>	-25 °C ... +75 °C
<b>Shock load</b>	According to IEC 60068

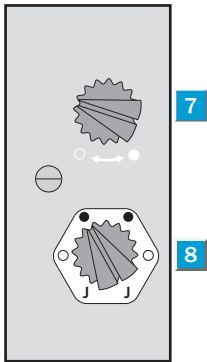
### Classifications

<b>ECl@ss 5.0</b>	27270906
<b>ECl@ss 5.1.4</b>	27270906
<b>ECl@ss 6.0</b>	27270906
<b>ECl@ss 6.2</b>	27270906
<b>ECl@ss 7.0</b>	27270906
<b>ECl@ss 8.0</b>	27270906
<b>ECl@ss 8.1</b>	27270906
<b>ECl@ss 9.0</b>	27270906
<b>ETIM 5.0</b>	EC001820
<b>ETIM 6.0</b>	EC001820
<b>UNSPSC 16.0901</b>	39121528

Dimensional drawing (Dimensions in mm (inch))



Adjustments



- ⑦ Adjusters for switching threshold
- ⑧ Adjusters for operating modes

## 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)