



NT6-13012

NT6

CONTRAST SENSORS

**SICK**  
Sensor Intelligence.



Illustration may differ

## Ordering information

Type	part no.
NT6-13012	1005823

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

## Detailed technical data

### Features

<b>Housing design</b>	Middle
<b>Dimensions (W x H x D)</b>	80 mm x 30.4 mm x 64 mm
<b>Light source</b>	LED, visible red light <sup>1)</sup> Green
<b>Light emission</b>	Long and short side of housing, exchangeable
<b>Light spot size</b>	1.5 mm x 5 mm <sup>2)</sup>
<b>Light spot direction</b>	Horizontal <sup>3)</sup>
<b>Wave length</b>	560 nm
<b>Sensing distance</b>	≤ 9 mm
<b>Sensing distance tolerance</b>	± 2 mm
<b>Adjustment</b>	Potentiometer

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

<sup>2)</sup> With green light. 1.5 mm x 4 mm with red light.

<sup>3)</sup> In relation to long side of housing.

### Electronics

<b>Supply voltage</b>	10 V DC ... 30 V DC
<b>Ripple</b>	≤ 5 V <sub>pp</sub>
<b>Current consumption</b>	< 80 mA <sup>1)</sup>
<b>Switching frequency</b>	10 kHz <sup>2)</sup>
<b>Response time</b>	> 50 μs
<b>Switching output (voltage)</b>	B: HIGH = U <sub>v</sub> - < 2 V / LOW = < 2 V
<b>Analog output</b>	0.15 V ... 6 V
<b>Output current I<sub>max.</sub></b>	200 mA
<b>Time delay</b>	None

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

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

<b>Circuit protection</b>	U <sub>V</sub> connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression
<b>Connection type</b>	Cable with male connector, 2 m

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

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

## Mechanics

<b>Housing material</b>	Zinc diecast
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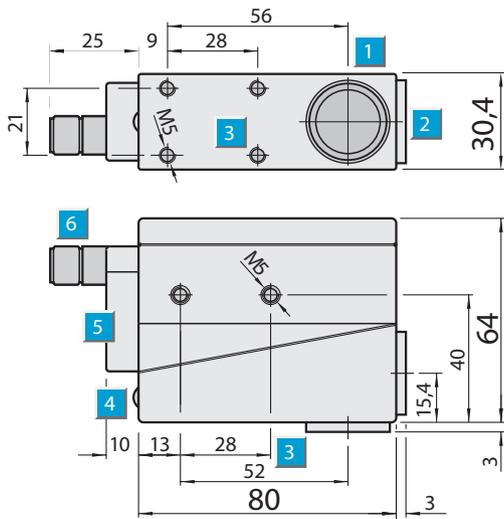
## Ambient data

<b>Ambient operating temperature</b>	0 °C ... +50 °C
<b>Ambient temperature, storage</b>	-25 °C ... +75 °C
<b>Shock load</b>	According to IEC 60068
<b>Enclosure rating</b>	IP67

## Classifications

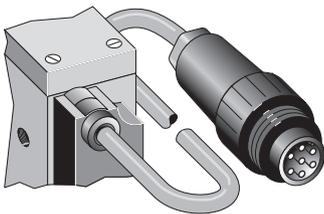
<b>ECLASS 5.0</b>	27270906
<b>ECLASS 5.1.4</b>	27270906
<b>ECLASS 6.0</b>	27270906
<b>ECLASS 6.2</b>	27270906
<b>ECLASS 7.0</b>	27270906
<b>ECLASS 8.0</b>	27270906
<b>ECLASS 8.1</b>	27270906
<b>ECLASS 9.0</b>	27270906
<b>ECLASS 10.0</b>	27270906
<b>ECLASS 11.0</b>	27270906
<b>ECLASS 12.0</b>	27270906
<b>ETIM 5.0</b>	EC001820
<b>ETIM 6.0</b>	EC001820
<b>ETIM 7.0</b>	EC001820
<b>ETIM 8.0</b>	EC001820
<b>UNSPSC 16.0901</b>	39121528

Dimensional drawing

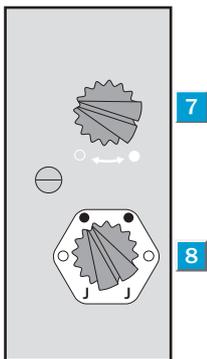


Dimensions in mm (inch)

Pinouts

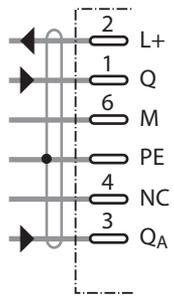


Adjustments



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

Connection diagram



## 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)