



## Contrast sensors NT6, NT6

NT6-04018



**Model Name** > [NT6-04018](#)  
**Part No.** > [1007478](#)



*Illustration may differ*

**At a glance**

- RGB, white LEDs and red lasers
- Bar graph display visually indicates contrast performance (KT5, KT10)
- High switching frequency
- Various teach-in and manual potentiometer versions to meet individual requirements
- Automatic gloss adjustment for highly reflective materials
- A range of sensing distances and light spots for numerous applications
- Tough, compact metal housing

**Your benefits**

- Able to process all packaging materials (yellow mark/white background), resulting in high machine throughput
- Reliable operation, even with jittering webs and high-gloss materials
- High positioning accuracy improves packaging quality
- Simple teach-in and highly visible light spot ensure easy setup
- Simple to integrate into machines due to compact design
- Interchangeable lenses for maximum mounting flexibility
- A range of sensing distances, light spot directions and a 90° rotatable plug enables optimal integration
- Application-specific teach-in processes provide maximum flexibility



**Features**

Dimensions (L x W x H):	64 mm x 80 mm x 30.4 mm
Sensing distance:	9 mm
Sensing distance tolerance:	± 2 mm
Light source <sup>1)</sup> :	LED red, green
Light emission:	Long and short side of housing, exchangeable
Light spot size:	1.5 mm x 4 mm (red), 1.5 mm x 5 mm (green)
Light spot direction <sup>2)</sup> :	Vertical
Adjustment:	Manual adjustment, 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

**Mechanics/electronics**

Supply voltage V <sub>s</sub> :	DC 10 V ... 30 V
Ripple:	≤ 5 V <sub>pp</sub>

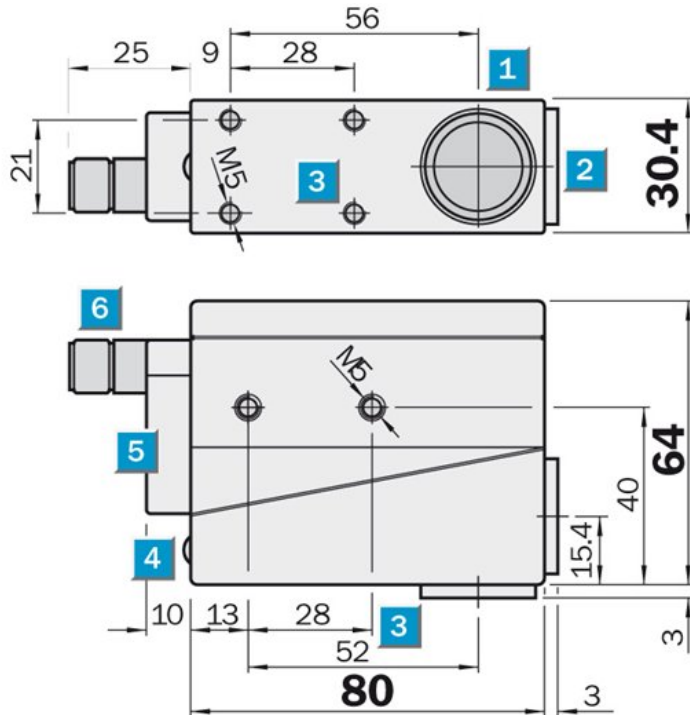
Power consumption <sup>1)</sup> :	< 80 mA
Switching frequency <sup>2)</sup> :	10 kHz
Response time <sup>3)</sup> :	> 50 $\mu$ s
Output type:	PNP: HIGH = VS- $\leq$ 2 V / LOW approx. 0 V
Analog output QA:	0.15 V ... 6 V
Connection type:	Connector M12, 4-pin <sup>4)</sup>
Circuit protection:	Output Q short-circuit protected, Interference suppression, VS connections reverse-polarity protected
Enclosure rating:	IP 67
Weight:	Approx. 540 g (with cable)
Housing material:	Die-cast zinc
Output current I <sub>max.</sub> :	200 mA

<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> Do not bend below 0 °C

### Ambient data

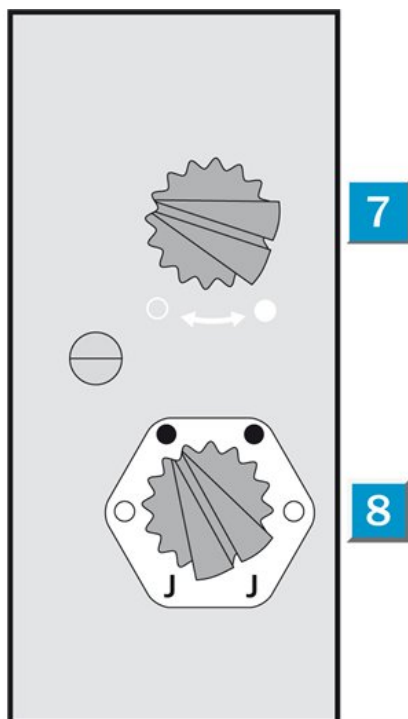
Ambient temperature:	Operation: 0 ... 50 °C, Storage: -25 ... 75 °C
Shock load:	According to IEC 60068

### Dimensional drawing



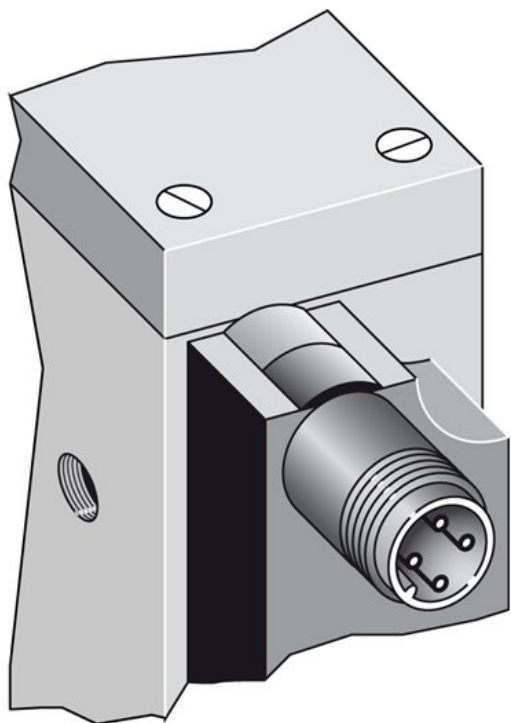
## Adjustments

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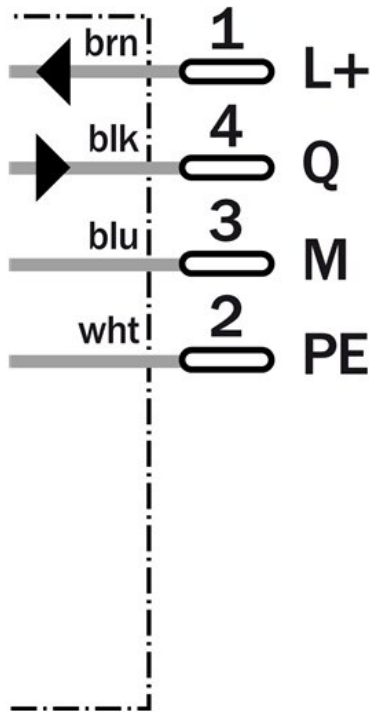


## Connection type

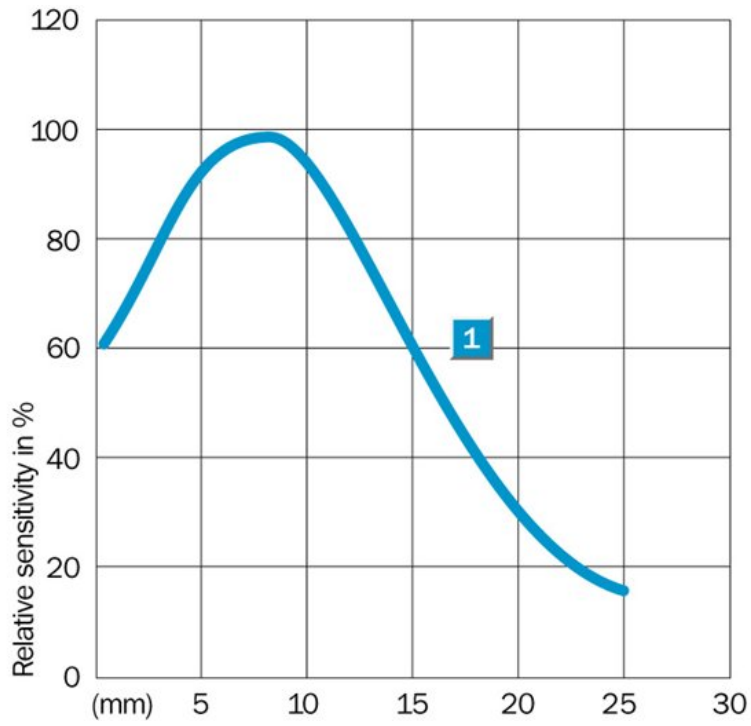
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Connection diagram



Characteristic curve



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