



## Contrast sensors NT6, NT6

NT6-08022



**Model Name** > [NT6-08022](#)  
**Part No.** > [1005830](#)



*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

**The product has been discontinued. Please contact your SICK sales representative for more information about a replacement product.**



#### 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             |
| Function:                            | Deactivation delay, 15 ms (± 5 %)            |

1) Average service life of 10,000 h at  $T_A = +25\text{ }^\circ\text{C}$  2) In relation to long side of housing

## Mechanics/electronics

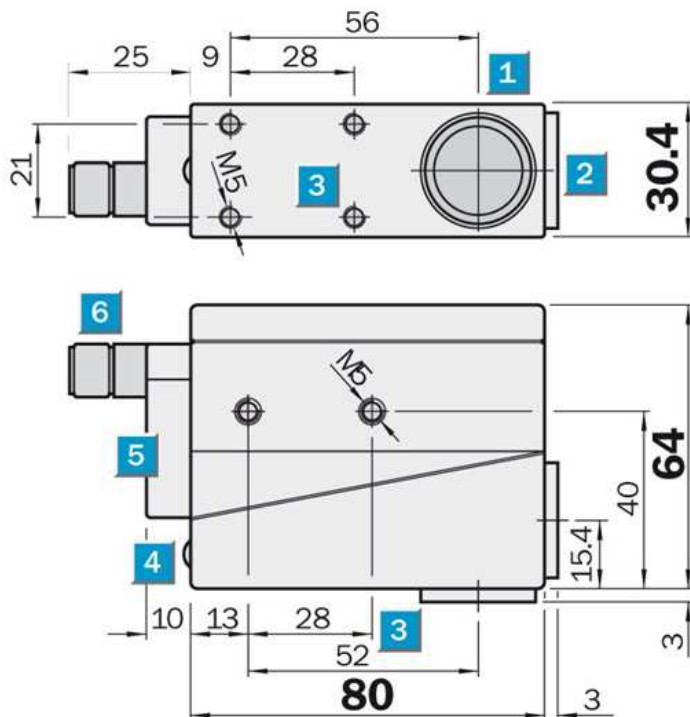
|                                     |   |
|-------------------------------------|---|
| Supply voltage Vs:                  | DC 10 V ... 30 V  |
| Ripple:                             | ≤ 5 Vpp   |
| Current consumption <sup>1)</sup> : | < 80 mA   |
| Switching frequency <sup>2)</sup> : | 10 kHz  |
| Response time <sup>3)</sup> :       | > 50 μs   |
| Output type:                        | PNP: HIGH = VS- ≤ 2 V / LOW approx. 0 V   |
| Analog output QA:                   | 0.15 V ... 6 V  |
| Connection type:                    | 2 m cable , 4 x 0.34 mm, shielded, PVC, diameter 6 mm <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  |

1) Without load    2) With light/dark ratio 1:1    3) Signal transit time with resistive load    4) Do not bend below 0 °C

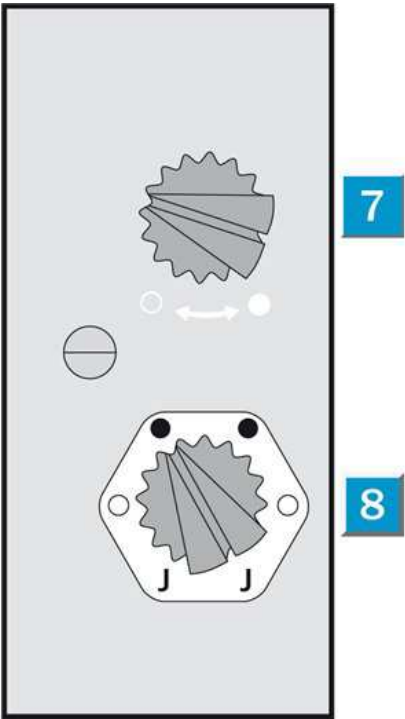
## Ambient data

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

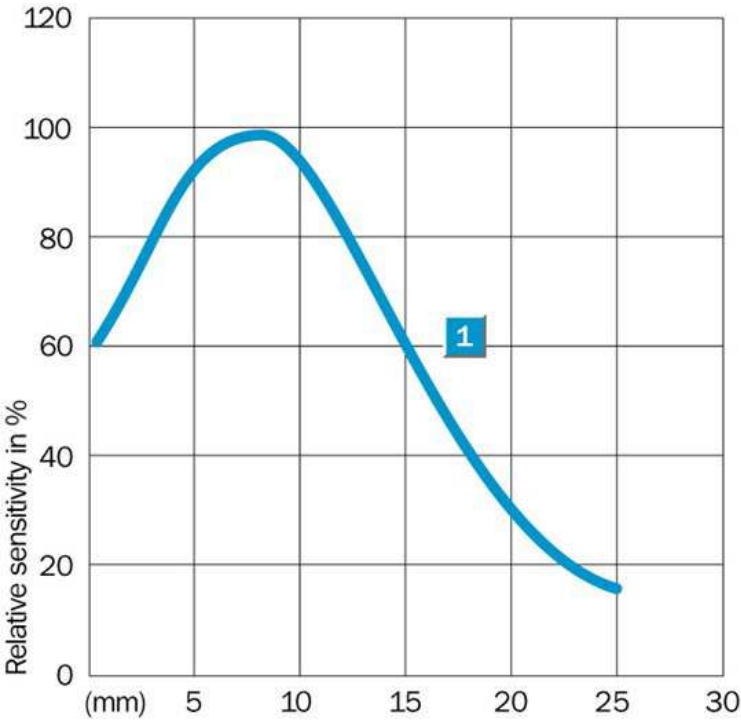
## Dimensional drawing



Adjustments



Characteristic curve



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