



Contrast sensors
NT6, NT6

NT6-03022



Model Name > [NT6-03022](#)
Part No. > [1005822](#)



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 ¹⁾ : | 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 ²⁾ : | Vertical |
| Adjustment: | Manual adjustment, potentiometer |

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

Mechanics/electronics

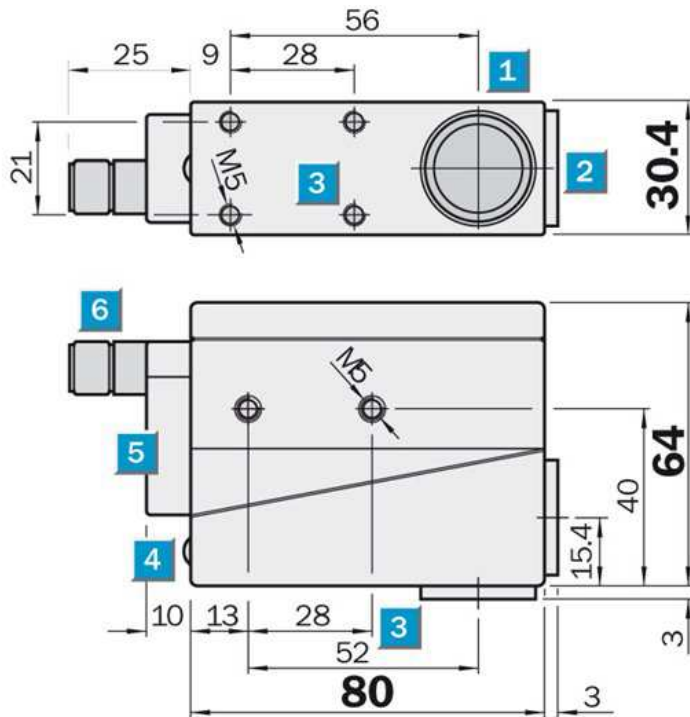
| | |
|-------------------------------------|---|
| Supply voltage Vs: | DC 10 V ... 30 V |
| Ripple: | ≤ 5 Vpp |
| Current consumption ¹⁾ : | < 80 mA |
| Switching frequency ²⁾ : | 10 kHz |
| Response time ³⁾ : | > 50 μ s |
| Output type: | B: HIGH = $U_v - < 2$ V / LOW = < 2 V |
| Analog output QA: | 0.15 V ... 6 V |
| Connection type: | 2 m cable , 4 x 0.34 mm, shielded, PVC, diameter 6 mm ⁴⁾ |
| 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 _{max} .: | 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

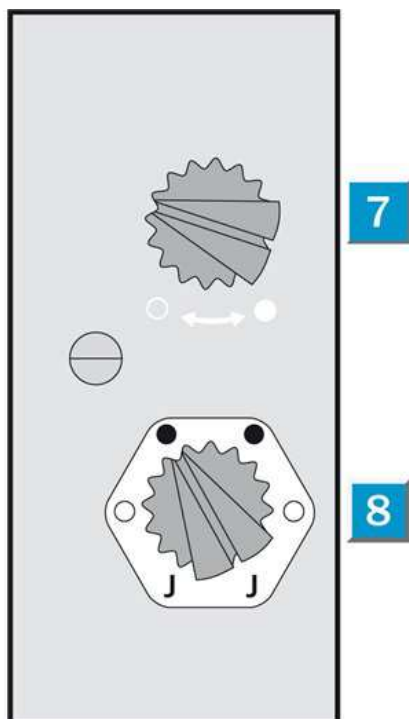
Ambient data

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

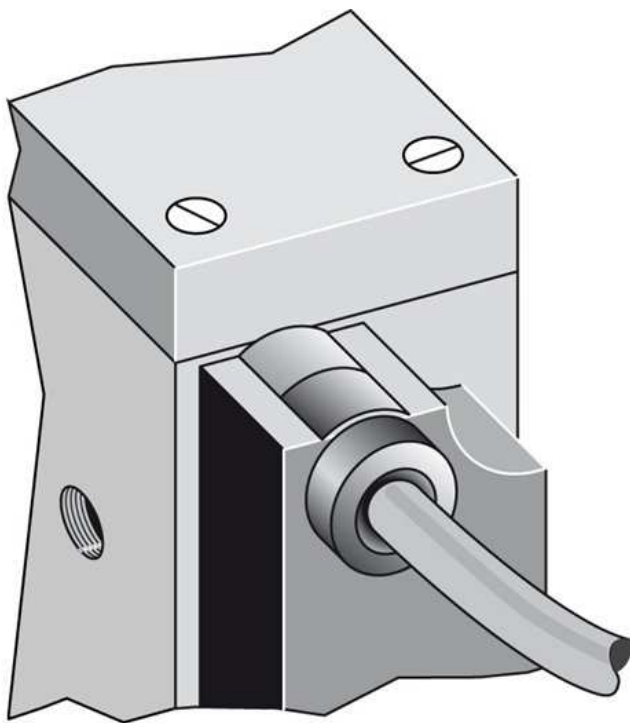
Dimensional drawing



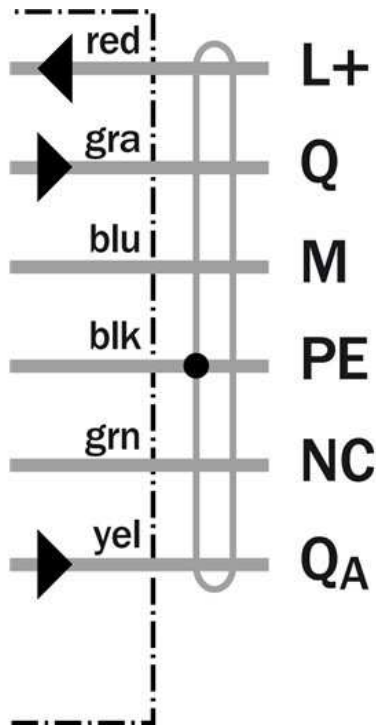
Adjustments



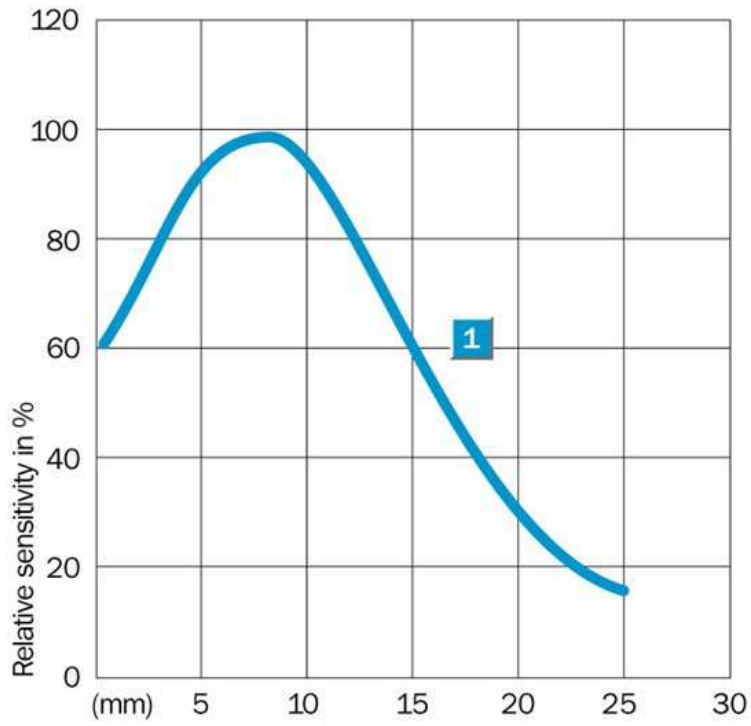
Connection type



Connection diagram



Characteristic curve



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