



Contrast sensors NT6, NT6

NT6-N111



Model Name > [NT6-N111](#)
Part No. > [1010394](#)



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 ¹⁾ , ²⁾ :	LED green
Light emission:	Long and short side of housing, exchangeable
Light spot size:	Ø 2.5 mm
Light spot direction ³⁾ :	Round
Adjustment:	Manual adjustment, potentiometer
Pull-up/Pull-down resistor:	22 k OHM ⁴⁾

¹⁾ Average service life of 10,000 h at $T_A = +25\text{ °C}$ ²⁾ Wave length: 560 nm ³⁾ In relation to long side of housing ⁴⁾ With light/dark ratio 1:1

Mechanics/electronics

Supply voltage Vs:	DC 10 V ... 30 V
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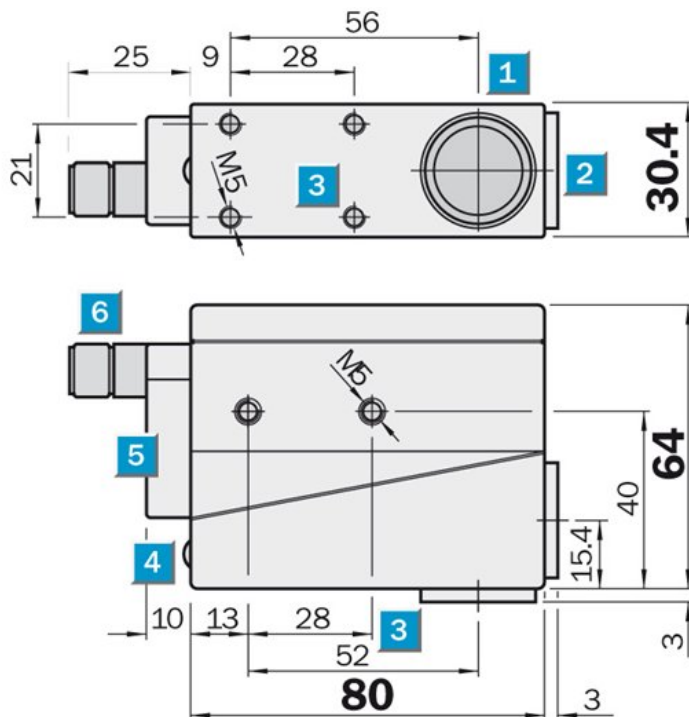
Ripple:	≤ 5 Vpp
Power consumption ¹⁾ :	< 80 mA
Switching frequency ²⁾ :	5 kHz
Response time ³⁾ :	> 100 μs
Output type:	NPN: HIGH = approx. VS / LOW ≤ 2 V
Switching mode:	NPN
Analog output QA:	0.15 V ... 6 V ⁴⁾
Connection type:	2 m cable ⁵⁾ , 4 x 0.34 mm, shielded, PVC, diameter 6 mm, with plug T3104/1
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

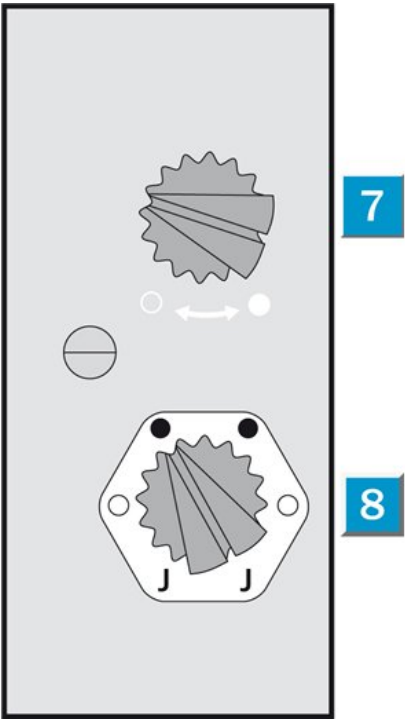
¹⁾ Without load ²⁾ With light/dark ratio 1:1 ³⁾ Signal transit time with resistive load ⁴⁾ RL= 10 k OHM, values from black to high gloss ⁵⁾ Do not bend below 0 °C

Ambient data

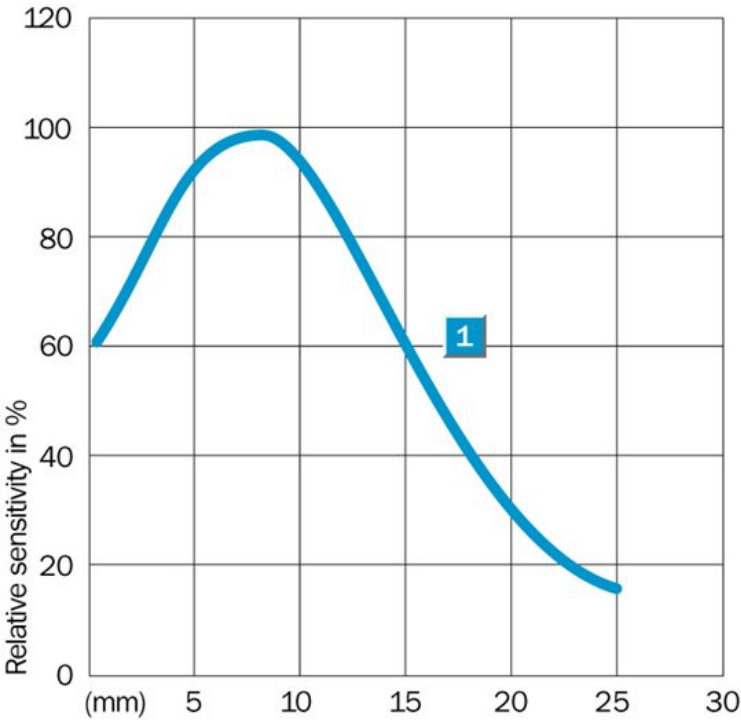
Ambient temperature:	Operation: 0 ... 50 °C, Storage: -25 ... 75 °C
Shock load:	According to IEC 60068

Dimensional drawing





Characteristic curve



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