



Contrast sensors NT6, NT6

NT6-03012



Model Name > [NT6-03012](#)
Part No. > [1005821](#)



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⁾ :	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

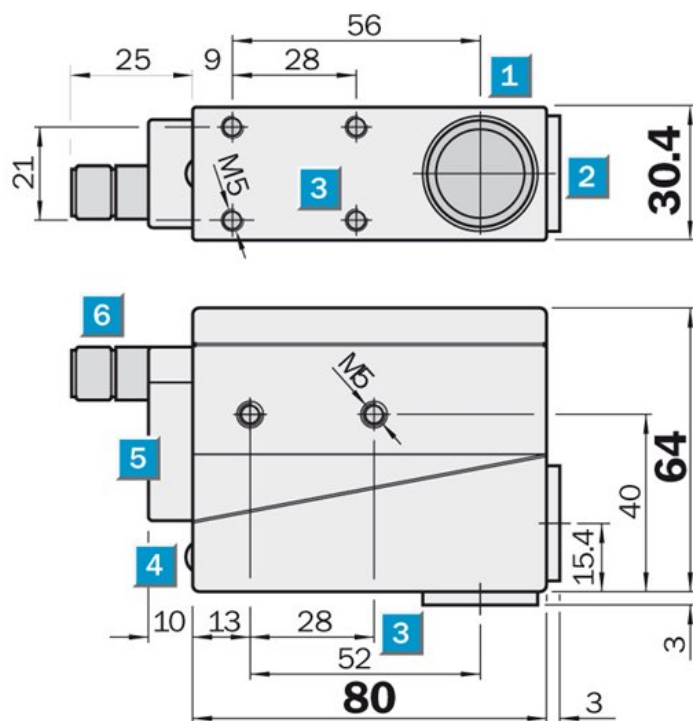
Power consumption ¹⁾ :	< 80 mA
Switching frequency ²⁾ :	10 kHz
Response time ³⁾ :	> 50 µs
Output type:	B: HIGH = $U_v - < 2 \text{ V}$ / LOW = $< 2 \text{ V}$
Analog output QA:	0.15 V ... 6 V
Connection type:	2 m cable ⁴⁾ , 4 x 0.34 mm, shielded, PVC, diameter 6 mm, with plug T3104/1
Circuit protection:	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) Do not bend below 0 °C

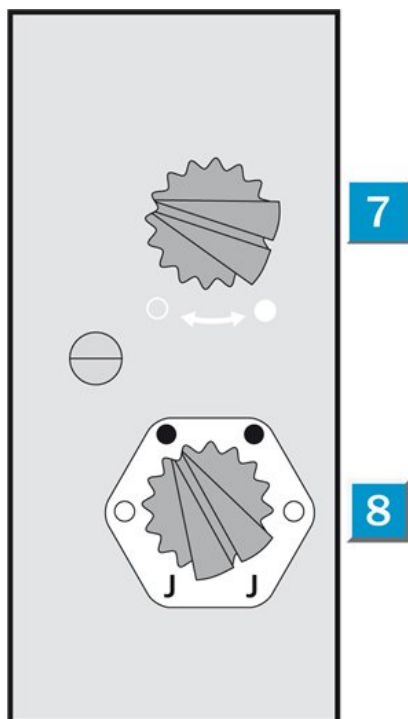
Ambient data

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

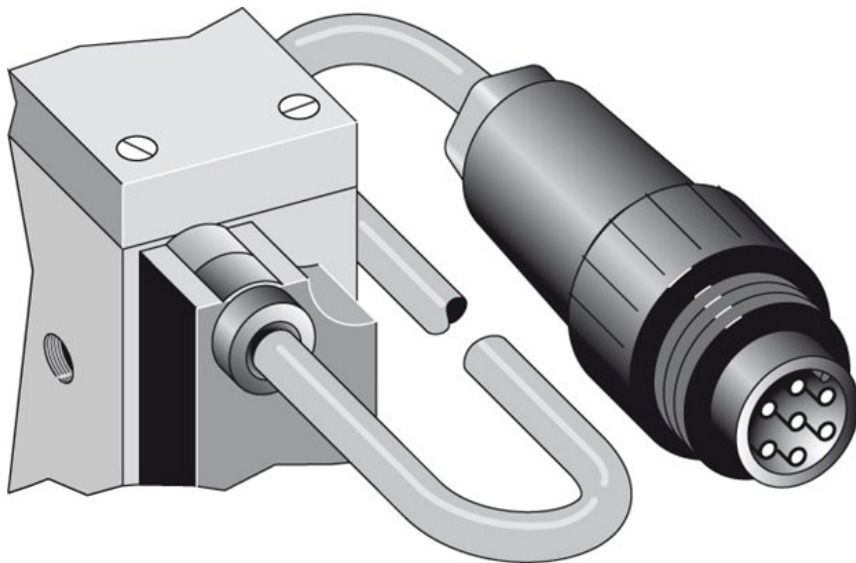
Dimensional drawing



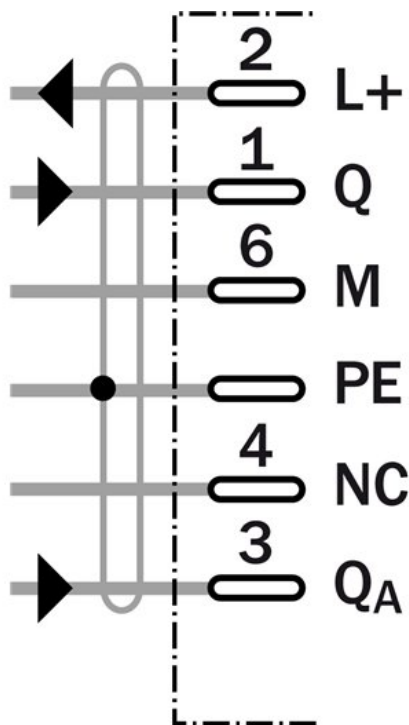
Adjustments



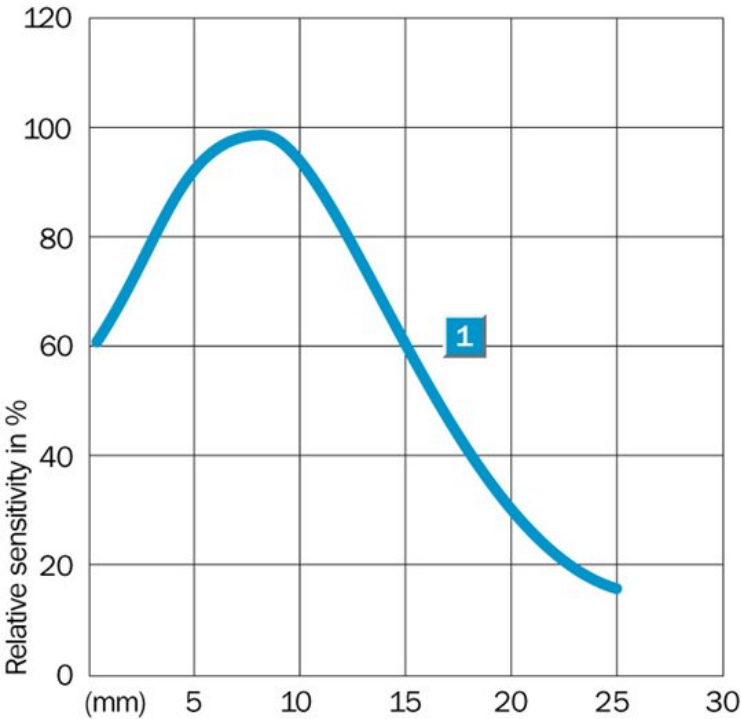
Connection type



Connection diagram



Characteristic curve



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