



Contrast sensors NT6, NTL6

NTL6-P12



Model Name > [NTL6-P12](#)
Part No. > [1011520](#)



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:	Dependent on the fiber-optic cablethe fiber-optic cable
Sensing distance tolerance:	Dependent on the fiber-optic cablethe fiber-optic cable
Light source ^{1), 2)} :	LED red, infrared
Light emission:	Long and short side of housing, exchangeable
Light spot size:	Dependent on the fiber-optic cable
Adjustment:	Manual adjustment, potentiometer
Function:	Light/dark switching
Pull-up/Pull-down resistor:	22 k OHM

¹⁾ Average service life of 10,000 h at $T_A = +25\text{ °C}$ ²⁾ Wave length: 660 nm, 880 nm

Mechanics/electronics

Supply voltage Vs:	DC 10 V ... 30 V
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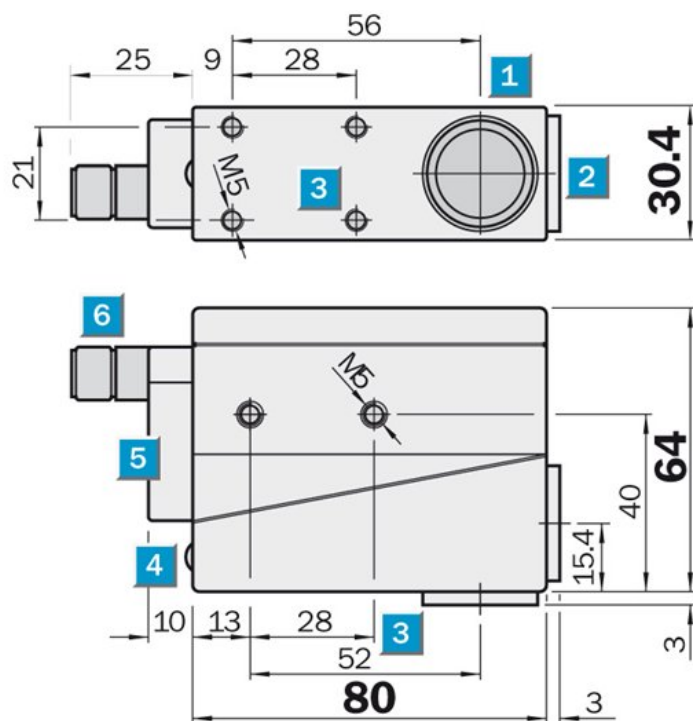
Ripple ¹⁾ :	≤ 5 Vpp
Power consumption ²⁾ :	< 80 mA
Switching frequency:	10 kHz
Response time:	> 50 μs
Output type:	B: HIGH = Uv - < 2 V / LOW = < 2 V
Switching mode:	PNP NPN
Analog output QA:	0.15 V ... 6 V ³⁾
Connection type:	2 m cable with connector T 3104/1
Circuit protection:	Output Q short-circuit protected, Interference suppression, VS connections reverse-polarity protected
Enclosure rating:	IP 67
Weight:	Approx. 540 g (with cable)
Output current I _{max} ..:	200 mA

¹⁾ May not exceed or fall short of V_S tolerances ²⁾ Without load ³⁾ Internal resistor 10 k OHM

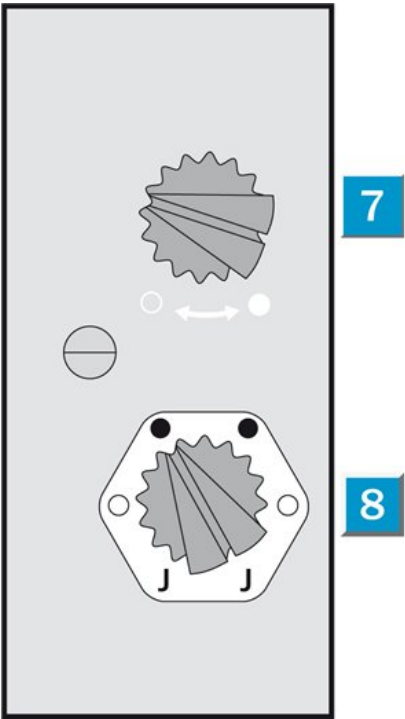
Ambient data

Ambient temperature: Operation: 0 ... 50 °C, Storage: -25 ... 75 °C

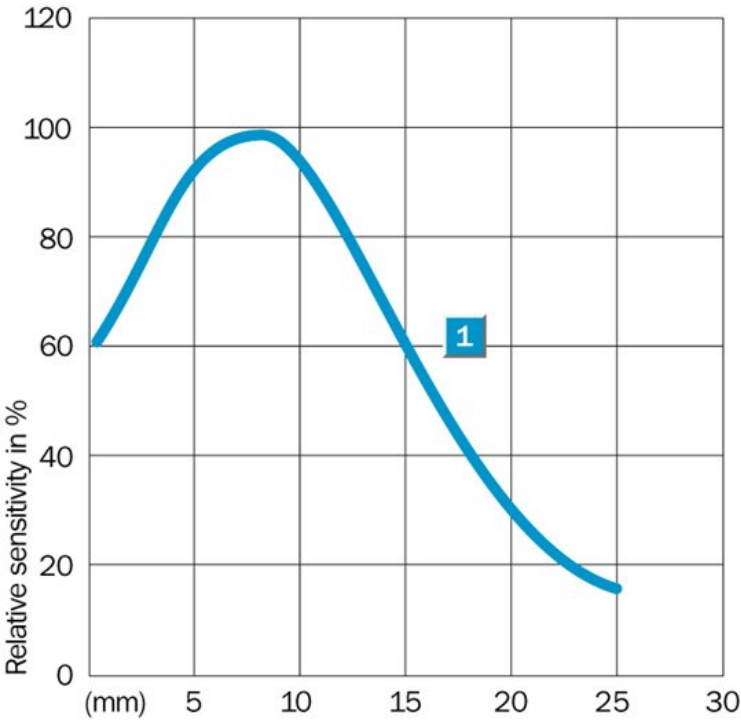
Dimensional drawing



Adjustments



Characteristic curve



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