



Contrast sensors NT6, NT6

NT6-P111



Model Name > [NT6-P111](#)
Part No. > [1010396](#)



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

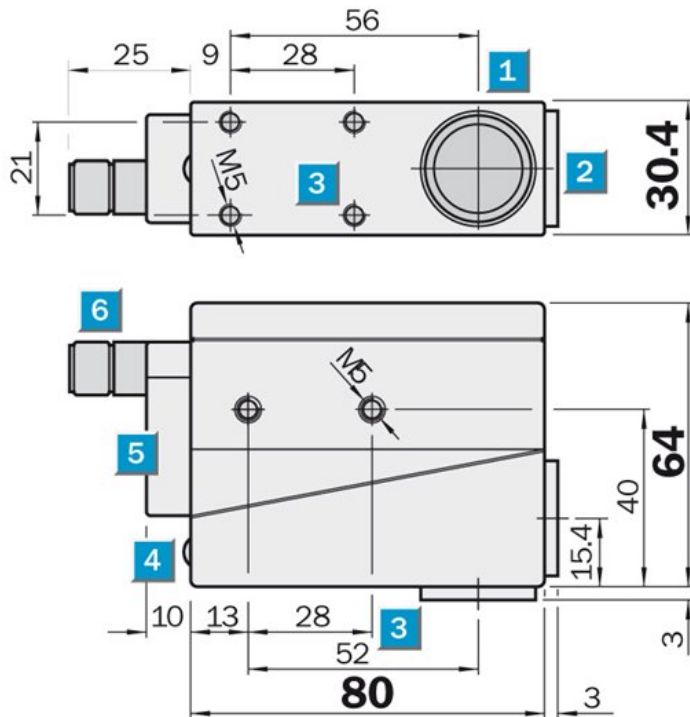
Supply voltage V_s :	DC 10 V ... 30 V
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Ripple:	≤ 5 Vpp
Power consumption ¹⁾ :	< 80 mA
Switching frequency ²⁾ :	5 kHz
Response time ³⁾ :	> 100 μs
Output type:	PNP: HIGH = VS- ≤ 2 V/LOW approx. 0 V
Switching mode:	PNP
Analog output QA:	0.15 V ... 6 V 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	

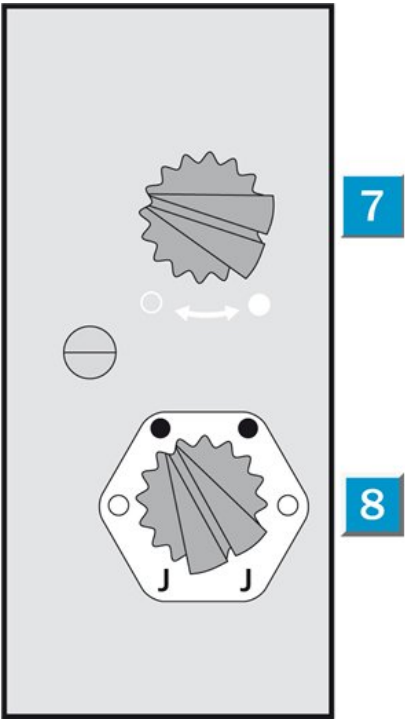
Ambient data

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

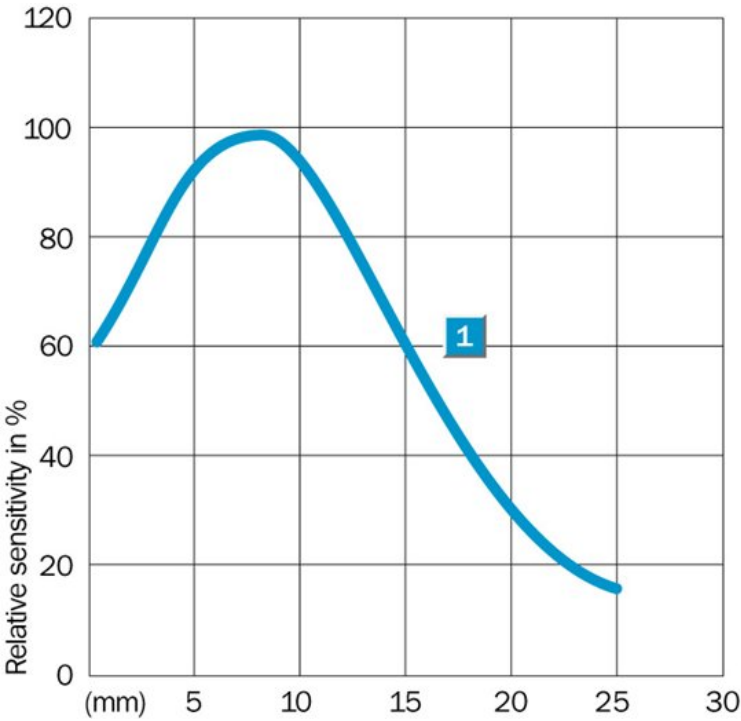
Dimensional drawing



Adjustments



Characteristic curve



Australia

Phone +61 3 9457 0600
1800 334 802 – tollfree
E-Mail sales@sick.com.au

Belgium/Luxembourg

Phone +32 (0)2 466 55 66
E-Mail info@sick.be

Brasil

Phone +55 11 3215-4900
E-Mail sac@sick.com.br

Canada

Phone +1 905 771 14 44
E-Mail information@sick.com

Ceská Republika

Phone +420 2 57 91 18 50
E-Mail sick@sick.cz

China

Phone +86 4000 121 000
E-Mail info.china@sick.net.cn
Phone +852-2153 6300
E-Mail ghk@sick.com.hk

Danmark

Phone +45 45 82 64 00
E-Mail sick@sick.dk

Deutschland

Phone +49 211 5301-301
E-Mail kundenservice@sick.de

España

Phone +34 93 480 31 00
E-Mail info@sick.es

France

Phone +33 1 64 62 35 00
E-Mail info@sick.fr

Great Britain

Phone +44 (0)1727 831121
E-Mail info@sick.co.uk

India

Phone +91-22-4033 8333
E-Mail info@sick-india.com

Israel

Phone +972-4-6801000
E-Mail info@sick-sensors.com

Italia

Phone +39 02 27 43 41
E-Mail info@sick.it

Japan

Phone +81 (0)3 3358 1341
E-Mail support@sick.jp

Magyarország

Phone +36 1 371 2680
E-Mail office@sick.hu

Nederlands

Phone +31 (0)30 229 25 44
E-Mail info@sick.nl

Norge

Phone +47 67 81 50 00
E-Mail austefjord@sick.no

Österreich

Phone +43 (0)22 36 62 28 8-0
E-Mail office@sick.at

Polska

Phone +48 22 837 40 50
E-Mail info@sick.pl

România

Phone +40 356 171 120
E-Mail office@sick.ro

Russia

Phone +7-495-775-05-30
E-Mail info@sick.ru

Schweiz

Phone +41 41 619 29 39
E-Mail contact@sick.ch

Singapore

Phone +65 6744 3732
E-Mail admin@sicksgp.com.sg

Slovenija

Phone +386 (0)1-47 69 990
E-Mail office@sick.si

South Africa

Phone +27 11 472 3733
E-Mail info@sickautomation.co.za

South Korea

Phone +82 2 786 6321/4
E-Mail info@sickkorea.net

Suomi

Phone +358-9-25 15 800
E-Mail sick@sick.fi

Sverige

Phone +46 10 110 10 00
E-Mail info@sick.se

Taiwan

Phone +886-2-2375-6288
E-Mail sales@sick.com.tw

Türkiye

Phone +90 (216) 528 50 00
E-Mail info@sick.com.tr

United Arab Emirates

Phone +971 (0) 4 8865 878
E-Mail info@sick.ae

USA/México

Phone +1(952) 941-6780
1 800-325-7425 – tollfree
E-Mail info@sickusa.com

More representatives and agencies
at www.sick.com