

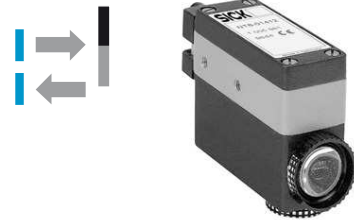


## Contrast sensors NT8

NT8-01412



**Model Name** > [NT8-01412](#)  
**Part No.** > [1005981](#)



- White light source
- Light- or dark-switching selectable
- Rapid response times
- Adjustable switching threshold



### Features

Dimensions (L x W x H):	58.8 mm x 76 mm x 30 mm
Sensing distance <sup>1)</sup> :	9 mm
Sensing distance tolerance:	± 2 mm
Light source <sup>2)</sup> :	Incandescent lamp white
Light emission:	Long and short side of housing, exchangeable
Light spot size:	1.5 mm x 3.5 mm
Light spot direction <sup>3)</sup> :	Vertical
Supply voltage lamp:	4,5 V ± 10%
Power consumption lamp:	840 mA
Adjustment:	Manual adjustment, potentiometer
Function:	Light/dark switching

<sup>1)</sup> From front edge of lens   <sup>2)</sup> Average service life of 10,000 h at T<sub>A</sub> = + 25 °C   <sup>3)</sup> In relation to long side of housing

### Mechanics/electronics

Supply voltage V <sub>s</sub> :	DC 10 V ... 30 V
Ripple:	≤ 5 V <sub>pp</sub>
Current consumption <sup>1)</sup> :	< 50 mA
Switching frequency <sup>2)</sup> :	10 kHz
Response time <sup>3)</sup> :	> 50 μs
Output type:	NPN: HIGH = approx. V <sub>S</sub> / LOW ≤ 2 V
Switching mode:	NPN
Connection type:	2 m cable with plug, 6-pin + PE <sup>4)</sup>
Protection class <sup>5)</sup> :	II
Circuit protection:	Output Q short-circuit protected, Interference suppression, V <sub>S</sub> connections reverse-polarity protected
Enclosure rating:	IP 67
Weight:	Ca. 300 g
Housing material:	Die-cast zinc
Output current I <sub>max.</sub> :	200 mA

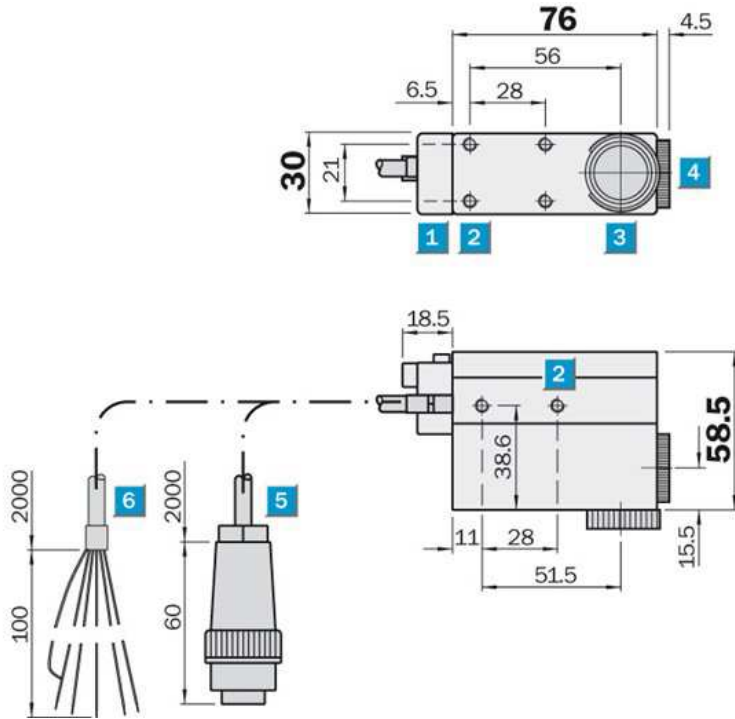
1) Without load 2) With light/dark ratio 1:1 3) Signal transit time with resistive load 4) Below 0 °C no deformation of cable 5) Reference voltage 50 V DC

### Ambient data

Ambient temperature: Operation: 0 ... 55 °C  
Storage: -25 ... 85 °C

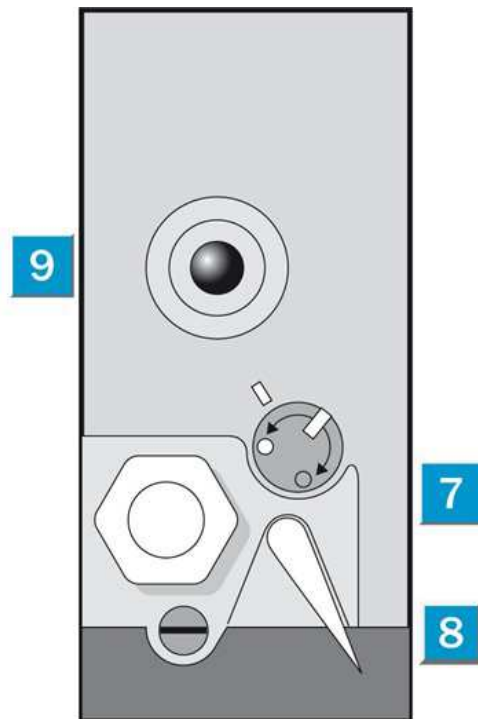
Shock load: According to IEC 60068

### Dimensional drawing



- [1]
- [2] M5 threaded mounting hole, 5.5 mm deep
- [3]
- [4] Lens (light transmission), can be exchanged for pos. 3
- [5]
- [6]
- [7] Switching threshold adjustment
- [8]
- [9] Function signal indicator

## Adjustments

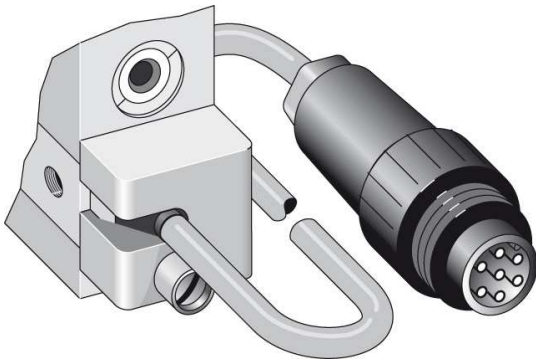


|7| Switching threshold adjustment

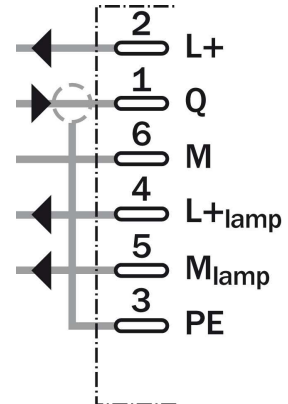
|8|

|9| Function signal indicator

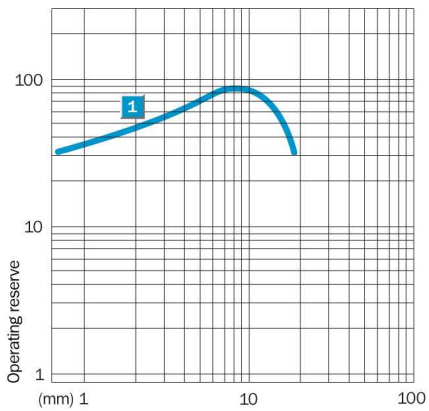
## Connection type



## Connection diagram



## Operating reserve



**Australia**

Phone +61 3 9457 0600  
1800 33 48 02 – 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 marketing@sick.com.br

**Canada**

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

**Česká 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 info@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 +972-4-6881000  
E-Mail info@sick-sensors.com

**Italia**

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

**Japan**

Phone +81 (0)3 5309 2112  
E-Mail support@sick.jp

**Magyarország**

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

**Nederland**

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

**Norge**

Phone +47 67 81 50 00  
E-Mail sick@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 sales.gsg@sick.com

**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 88 65 878  
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](http://www.sick.com)