



NT8-16412 NT8

CONTRAST SENSORS





Ordering information

Туре	Part no.
NT8-16412	1006007



Detailed technical data

Features

Dimensions (W x H x D)	76 mm x 30 mm x 58.8 mm
Sensing distance	9 mm ¹⁾
Sensing distance tolerance	± 2 mm
Housing design (light emission)	Rectangular
Light source	White
Light emission	Long and short side of housing, exchangeable
Light spot size	1.5 mm x 3.5 mm
Light spot direction	Vertical ²⁾
Supply voltage lamp	4,5 V ± 10%
Power consumption lamp	840 mA
Function	Light/dark switching

 $^{^{1)}}$ From front edge of lens.

Mechanics/electronics

Supply voltage	10 V DC 30 V DC
Ripple	≤ 5 V _{pp}
Power consumption	< 50 mA ¹⁾
Switching frequency	10 kHz ²⁾
Response time	> 50 µs ³⁾
Output current I _{max.}	200 mA
Connection type	2 m
Protection class	II ⁴⁾

¹⁾ Without load.

 $^{^{2)}\,\}mbox{In relation to long side of housing.}$

 $^{^{2)}}$ With light/dark ratio 1:1.

 $^{^{}m 3)}$ Signal transit time with resistive load.

 $^{^{4)}}$ Reference voltage DC 50 V.

Circuit protection	U _V connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression
Enclosure rating	IP67
Housing material	Metal, Zinc diecast

¹⁾ Without load.

Ambient data

Ambient operating temperature	0 °C +55 °C
Ambient storage temperature	-25 °C +85 °C
Shock load	According to IEC 60068

Classifications

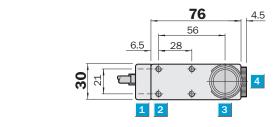
ECI@ss 5.0	27270906
ECI@ss 5.1.4	27270906
ECI@ss 6.0	27270906
ECI@ss 6.2	27270906
ECI@ss 7.0	27270906
ECI@ss 8.0	27270906
ECI@ss 8.1	27270906
ECI@ss 9.0	27270906
ETIM 5.0	EC001820
ETIM 6.0	EC001820
UNSPSC 16.0901	39121528

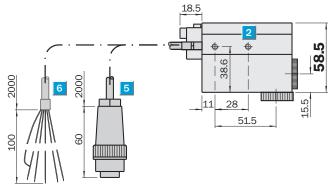
²⁾ With light/dark ratio 1:1.

³⁾ Signal transit time with resistive load.

⁴⁾ Reference voltage DC 50 V.

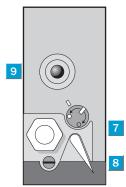
Dimensional drawing (Dimensions in mm (inch))





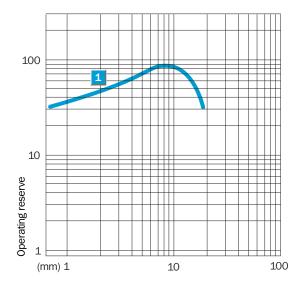
- ① Cover for adjuster
- ② M5 threaded mounting hole, 5.5 mm deep
- 3 Desiccant cartridge with inspection window, can be swapped with item 4
- 4 Lens (light transmission), can be exchanged for pos. 3
- ⑤ 2 m cable with male connector, 6-pin + PE
- 6 2 m cable
- Switching threshold adjustment
- ® Changeover switch "light/dark switching"
- 9 Function indicator

Adjustments



- Switching threshold adjustment
- ® Changeover switch "light/dark switching"
- Function indicator

Characteristic curve



SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

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