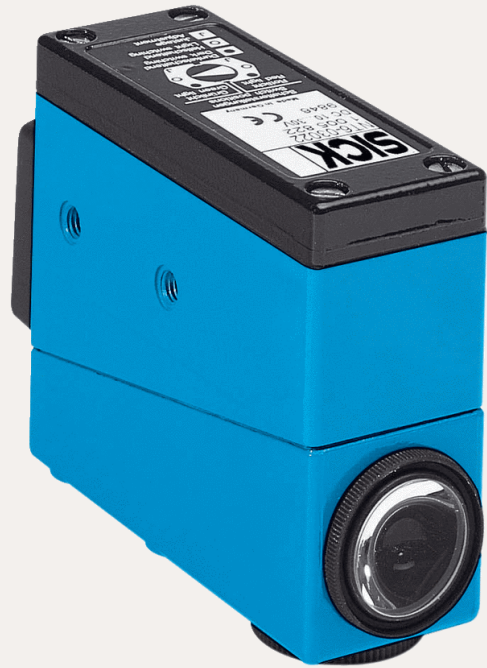




DATA SHEET

NTL6-B12

NT6
Contrast sensors

SICK

Sensor Intelligence



Illustration may differ

CONTRAST SENSORS

NTL6-B12

ORDERING INFORMATION

Type	part no.
NTL6-B12	1008616

Further device versions and accessories at www.sick.com/NT6

DETAILED TECHNICAL DATA

FEATURES

Housing design	Middle
Dimensions (W x H x D)	80 mm x 30.4 mm x 64 mm
Light source	LED, visible red light ¹⁾ Infrared light
Light emission	Long and short side of housing, exchangeable
Wave length	660 nm, 880 nm
Pull-up/Pull-down resistor	22 k OHM
Sensing distance	Dependent on the fiber-optic cable
Sensing distance tolerance	Dependent on the fiber-optic cable
Adjustment	Potentiometer
Function	Light/dark switching

¹⁾ Average service life of 10,000 h at T_A = +25 °C.

ELECTRONICS

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 5 V _{pp} ¹⁾
Current consumption	< 80 mA ²⁾
Switching frequency	10 kHz ³⁾
Response time	> 50 μs
Switching output	Push-pull: PNP/NPN

¹⁾ May not fall below or exceed U_I tolerances.

²⁾ Without load.

³⁾ With light/dark ratio 1:1.

⁴⁾ Internal resistor 10 k OHM.

Switching output (voltage)	B: HIGH = $U_v - < 2\text{ V}$ / LOW = $< 2\text{ V}$
Analog output	$0.15\text{ V} \dots 6\text{ V}$ ⁴⁾
Output current I_{max}	200 mA
Time delay	None
Circuit protection	U_v connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression
Connection type	Cable with male connector, 2 m

¹⁾ May not fall below or exceed U_v tolerances.

²⁾ Without load.

³⁾ With light/dark ratio 1:1.

⁴⁾ Internal resistor 10 k OHM.

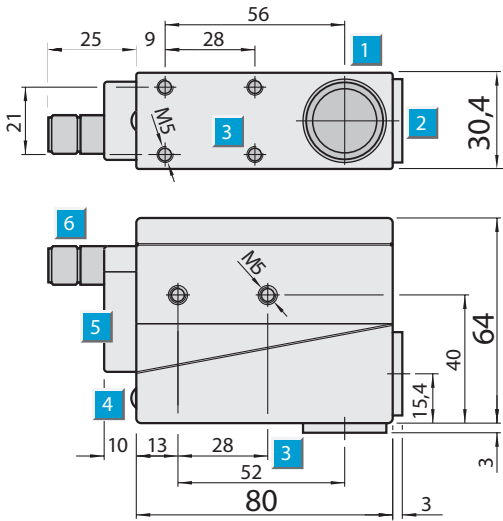
MECHANICS

Housing material	Zinc diecast
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AMBIENT DATA

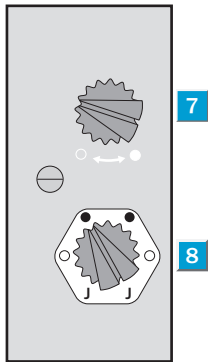
Ambient operating temperature	0 °C ... +50 °C
Ambient temperature, storage	-25 °C ... +75 °C
Enclosure rating	IP67

DIMENSIONAL DRAWING



Dimensions in mm (inch)

ADJUSTMENTS



- ⑦ adjusters for switching threshold
- ⑧ adjusters for operating modes

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/1008616



SICK AG
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SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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