



NTL6-B12

NT6

CONTRAST SENSORS

SICK
Sensor Intelligence.



Illustration may differ

Ordering information

Type	part no.
NTL6-B12	1008616

Other models and accessories → www.sick.com/NT6

Detailed technical data

Features

Dimensions (W x H x D)	80 mm x 30.4 mm x 64 mm
Sensing distance	Dependent on the fiber-optic cable
Sensing distance tolerance	Dependent on the fiber-optic cable
Housing design	Rectangular
Light source	LED, Red ¹⁾ Infrared light
Wave length	660 nm, 880 nm
Light emission	Long and short side of housing, exchangeable
Pull-up/Pull-down resistor	22 k OHM
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
Switching output (voltage)	B: HIGH = U _v - < 2 V / LOW = < 2 V
Analog output	0.15 V ... 6 V ⁴⁾
Output current I_{max}	200 mA

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.

Time delay	None
Circuit protection	U _V connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression

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
Connection type	Cable with male connector, 2 m ¹⁾

¹⁾ Do not bend below 0 °C.

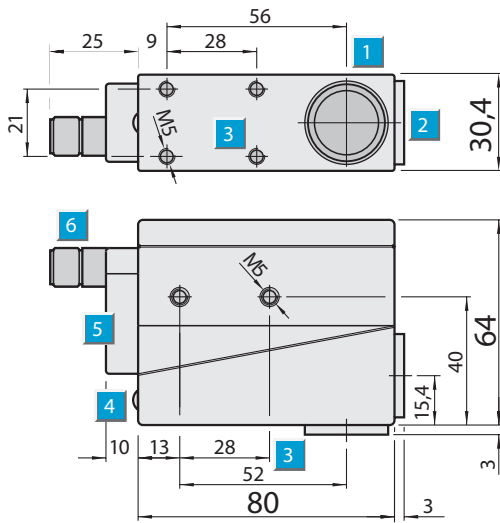
Ambient data

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

Classifications

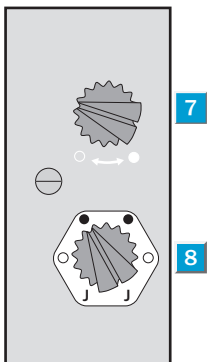
ECLASS 5.0	27270906
ECLASS 5.1.4	27270906
ECLASS 6.0	27270906
ECLASS 6.2	27270906
ECLASS 7.0	27270906
ECLASS 8.0	27270906
ECLASS 8.1	27270906
ECLASS 9.0	27270906
ECLASS 10.0	27270906
ECLASS 11.0	27270906
ECLASS 12.0	27270906
ETIM 5.0	EC001820
ETIM 6.0	EC001820
ETIM 7.0	EC001820
ETIM 8.0	EC001820
UNSPSC 16.0901	39121528

Dimensional drawing



Dimensions in mm (inch)

Adjustments



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

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.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com