



WT170-N112

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	Part no.
WT170-N112	6010195

Other models and accessories → www.sick.com/

Detailed technical data

Features

Sensor/ detection principle	Background suppression
Dimensions (W x H x D)	12 mm x 37 mm x 28.6 mm
Housing design (light emission)	Rectangular
Sensing range max.	10 mm ... 100 mm ¹⁾
Sensing range	10 mm ... 90 mm ¹⁾
Type of light	Visible red light
Light source	LED

¹⁾ Object with 90 % reflectance (referred to standard white, DIN 5033).

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	± 10 %
Power consumption	30 mA ¹⁾
Switching output	NPN
Switching mode	Light/dark switching
Switching mode selector	Selectable via L/D control cable
Response time	≤ 0.7 ms ²⁾
Connection type	Cable, 2 m ³⁾
Cable material	PVC
Conductor cross-section	0.18 mm ²
Housing material	Stainless steel, Stainless steel/ABS
Optics material	Plastic, PC
Enclosure rating	IP67

¹⁾ Without load.

²⁾ Signal transit time with resistive load.

³⁾ Do not bend below 0 °C.

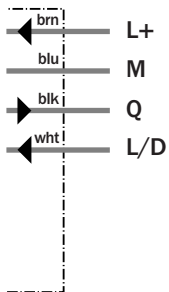
Ambient operating temperature	-25 °C ... +55 °C
Ambient storage temperature	-40 °C ... +70 °C
UL File No.	NRNT2.E128350 & NRNT8.E128350

- 1) Without load.
 2) Signal transit time with resistive load.
 3) Do not bend below 0 °C.

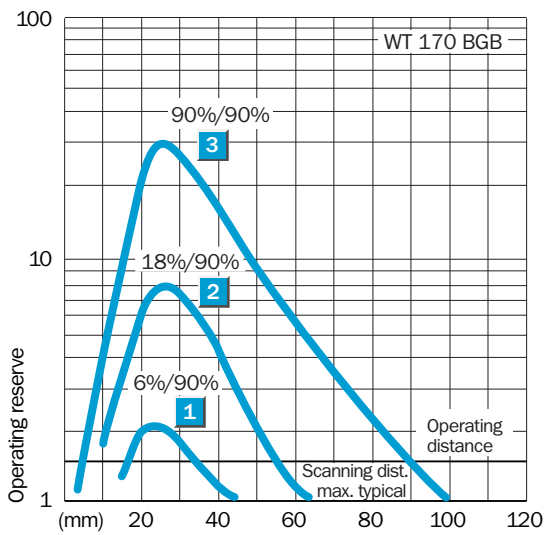
Classifications

ECl@ss 5.0	27270904
ECl@ss 5.1.4	27270904
ECl@ss 6.0	27270904
ECl@ss 6.2	27270904
ECl@ss 7.0	27270904
ECl@ss 8.0	27270904
ECl@ss 8.1	27270904
ECl@ss 9.0	27270904
ETIM 5.0	EC002719
ETIM 6.0	EC002719
UNSPSC 16.0901	39121528

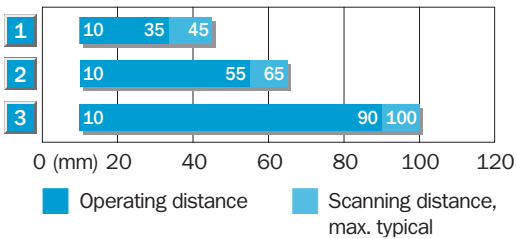
Connection diagram



Characteristic curve

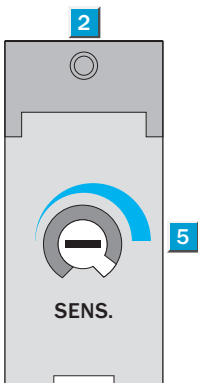


Sensing range diagram



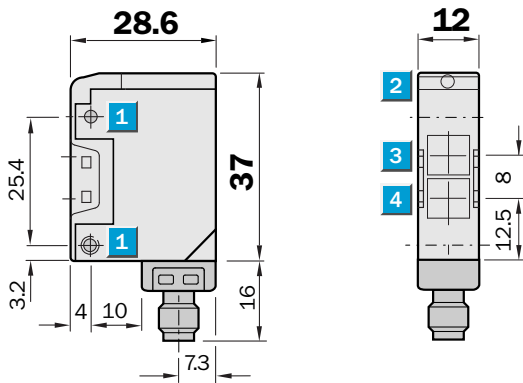
1	Scanning distance on black, 6 % remission
2	Scanning distance on grey, 18 % remission
3	Scanning distance on white, 90 % remission

Adjustments possible



- ② Mounting hole, \varnothing 3 mm with integrated M3 thread
- ⑤ Sensitivity control (potentiometer, 270°)

Dimensional drawing (Dimensions in mm (inch))



- ① Mounting hole, \varnothing 3 mm with integrated M3 thread
- ② LED signal strength indicator, red: Light received \geq switching threshold
- ③ Center of optical axis, receiver
- ④ Center of optical axis, sender

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