



WS/WE170-N132

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	Part no.
WS/WE170-N132	6010183

Other models and accessories → www.sick.com/

Detailed technical data

Features

Sensor/ detection principle	Through-beam photoelectric sensor
Dimensions (W x H x D)	12 mm x 37 mm x 28.6 mm
Housing design (light emission)	Rectangular
Sensing range max.	≥ 0 m
Sensing range	0 m ... 7 m
Type of light	Visible red light
Light source	LED

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	≤ 1 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
Ambient operating temperature	-25 °C ... +55 °C

¹⁾ Without load.

²⁾ Signal transit time with resistive load.

³⁾ Do not bend below 0 °C.

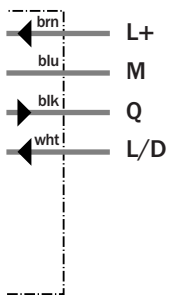
Ambient storage temperature	-40 °C ... +70 °C
UL File No.	NRNT2.E128350 & NRNT8.E128350

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

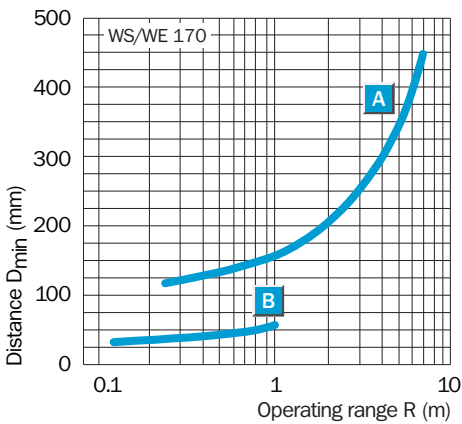
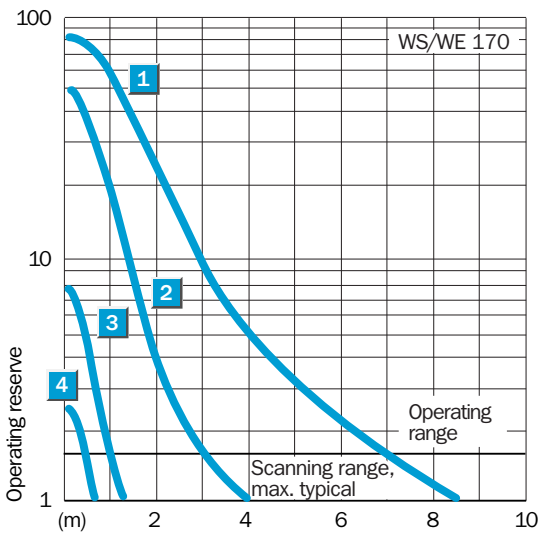
Classifications

ECI@ss 5.0	27270901
ECI@ss 5.1.4	27270901
ECI@ss 6.0	27270901
ECI@ss 6.2	27270901
ECI@ss 7.0	27270901
ECI@ss 8.0	27270901
ECI@ss 8.1	27270901
ECI@ss 9.0	27270901
ETIM 5.0	EC002716
ETIM 6.0	EC002716
UNSPSC 16.0901	39121528

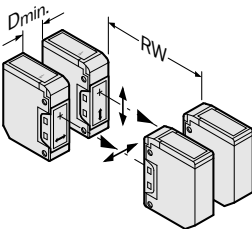
Connection diagram



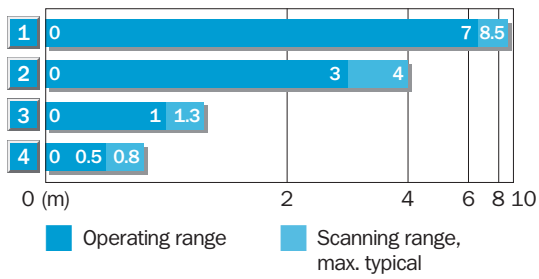
Characteristic curve



Functional principle

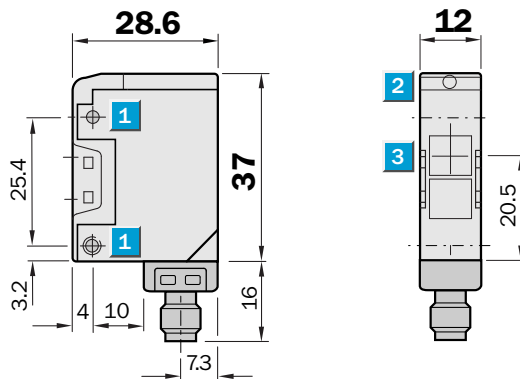


Sensing range diagram



1	Without attachments
2	With polarising filter attachment
3	With slotted mask, 1 mm
4	With polarising filter and slotted mask, 1 mm

Dimensional drawing (Dimensions in mm (inch))



- ① Mounting hole, Ø 3 mm with integrated M3 thread
- ② LED signal strength indicator, red: Light received \geq switching threshold
- ③ Center of optical axis, sender (WS) and receiver (WE)

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