



WS/WE170-P430

**SICK**  
Sensor Intelligence.



Illustration may differ



## Ordering information

Type	Part no.
WS/WE170-P430	6010182

Other models and accessories → [www.sick.com/](http://www.sick.com/)

## Detailed technical data

### Features

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

### Mechanics/electronics

<b>Supply voltage</b>	10 V DC ... 30 V DC
<b>Ripple</b>	± 10 %
<b>Current consumption</b>	30 mA <sup>1)</sup>
<b>Switching output</b>	PNP
<b>Switching mode</b>	Light/dark switching
<b>Switching mode selector</b>	Selectable via L/D control cable
<b>Response time</b>	≤ 1 ms <sup>2)</sup>
<b>Connection type</b>	Male connector M8, 4-pin
<b>Housing material</b>	Stainless steel, Stainless steel/ABS
<b>Optics material</b>	Plastic, PC
<b>Enclosure rating</b>	IP67
<b>Ambient operating temperature</b>	-25 °C ... +55 °C
<b>Ambient temperature, storage</b>	-40 °C ... +70 °C
<b>UL File No.</b>	NRNT2.E128350 & NRNT8.E128350

<sup>1)</sup> Without load.

<sup>2)</sup> Signal transit time with resistive load.

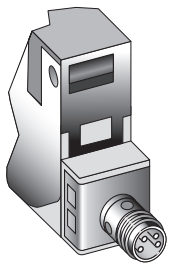
Safety-related parameters

<b>MTTF<sub>D</sub></b>	1,330 years
<b>DC<sub>avg</sub></b>	0 %

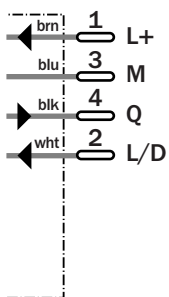
Classifications

<b>eCl@ss 5.0</b>	27270901
<b>eCl@ss 5.1.4</b>	27270901
<b>eCl@ss 6.0</b>	27270901
<b>eCl@ss 6.2</b>	27270901
<b>eCl@ss 7.0</b>	27270901
<b>eCl@ss 8.0</b>	27270901
<b>eCl@ss 8.1</b>	27270901
<b>eCl@ss 9.0</b>	27270901
<b>eCl@ss 10.0</b>	27270901
<b>eCl@ss 11.0</b>	27270901
<b>ETIM 5.0</b>	EC002716
<b>ETIM 6.0</b>	EC002716
<b>ETIM 7.0</b>	EC002716
<b>UNSPSC 16.0901</b>	39121528

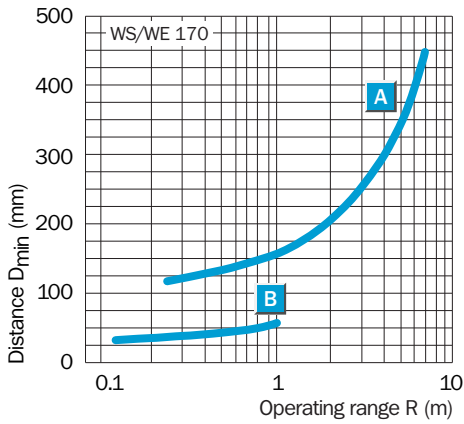
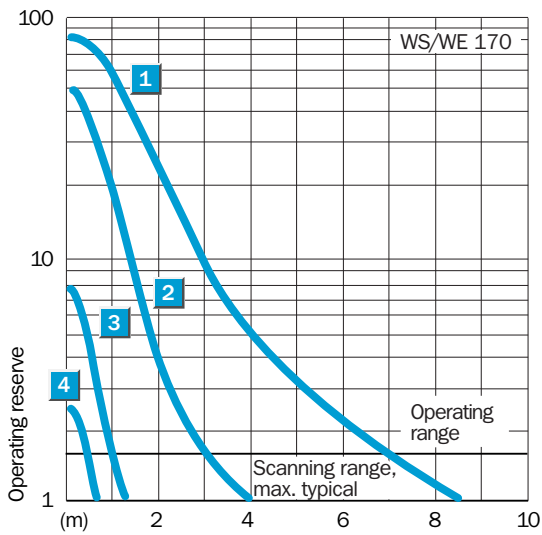
Connection type



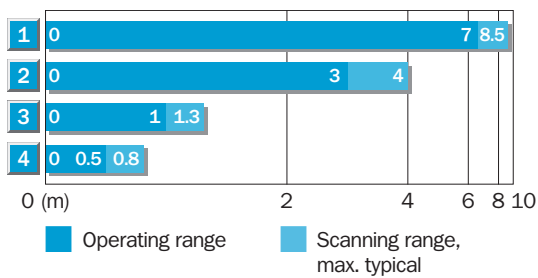
Connection diagram



Characteristic curve

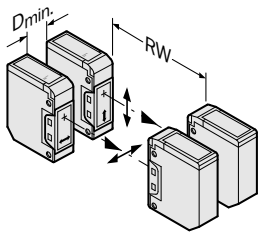


Sensing range diagram

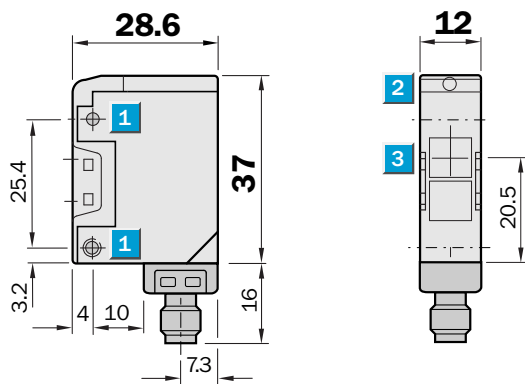


1	Without attachments
2	With polarising filter attachment
3	With slotted mask, 1 mm
4	With polarising filter and slotted mask, 1 mm

Functional principle



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, 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](http://www.sick.com)