



WL170-P430

**SICK**  
Sensor Intelligence.



Illustration may differ



## Ordering information

Type	Part no.
WL170-P430	6010190

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

## Detailed technical data

### Features

<b>Functional principle</b>	Photoelectric retro-reflective 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>	0.01 m ... 4 m <sup>1)</sup>
<b>Sensing range</b>	0.01 m ... 3 m <sup>2)</sup>
<b>Type of light</b>	Visible red light
<b>Light source</b>	LED

<sup>1)</sup> Reflector PL80A.

<sup>2)</sup> Reflector P250.

### 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>	≤ 0.7 ms <sup>2)</sup>
<b>Connection type</b>	Male connector M8, 4-pin
<b>Optics material</b>	Plastic, PMMA
<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.

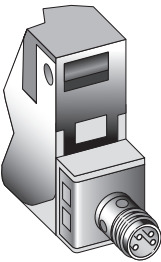
Safety-related parameters

MTTF <sub>D</sub>	1,524 years
DC <sub>avg</sub>	0 %

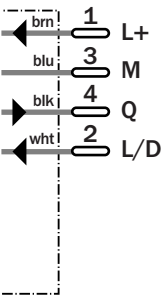
Classifications

eCl@ss 5.0	27270902
eCl@ss 5.1.4	27270902
eCl@ss 6.0	27270902
eCl@ss 6.2	27270902
eCl@ss 7.0	27270902
eCl@ss 8.0	27270902
eCl@ss 8.1	27270902
eCl@ss 9.0	27270902
eCl@ss 10.0	27270902
eCl@ss 11.0	27270902
ETIM 5.0	EC002717
ETIM 6.0	EC002717
ETIM 7.0	EC002717
UNSPSC 16.0901	39121528

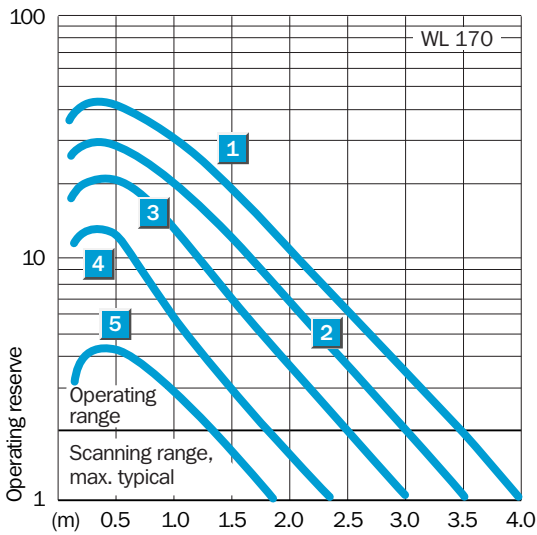
Connection type



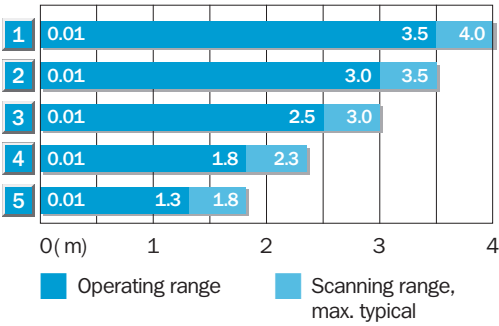
Connection diagram



Characteristic curve



Sensing range diagram

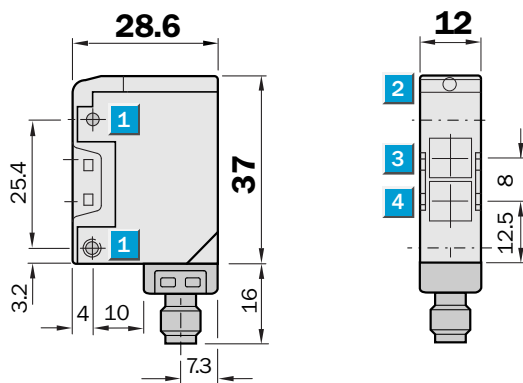


Reflector type		Operating range
1	PL 80 A	0.01 – 3.5 m
2	PL 50 A	0.01 – 3.0 m
	PL 40 A	0.01 – 3.0 m
3	P 250	0.01 – 2.5 m
	PL 30 A	0.01 – 2.5 m
	PL 31	0.01 – 2.5 m
4	PL 20	0.01 – 1.8 m
5	Reflective tape	0.01 – 1.3 m
	«Diamond Grade» 90x90 mm	

## Adjustments



## 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 Optical axis, receiver
- ④ 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](http://www.sick.com)