



# WL24-X2301

PRODUCT PORTFOLIO

**SICK**  
Sensor Intelligence.



Illustration may differ



## Ordering information

Type	Part no.
WL24-X2301	1011972

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

## Detailed technical data

### Features

<b>Sensor/ detection principle</b>	Photoelectric retro-reflective sensor
<b>Dimensions (W x H x D)</b>	27 mm x 87.5 mm x 65 mm
<b>Housing design (light emission)</b>	Rectangular
<b>Sensing range max.</b>	0 m ... 15 m <sup>1)</sup>
<b>Sensing range</b>	0 m ... 8 m <sup>1)</sup>
<b>Type of light</b>	Visible red light
<b>Light source</b>	LED
<b>Adjustment</b>	Potentiometer Potentiometer

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

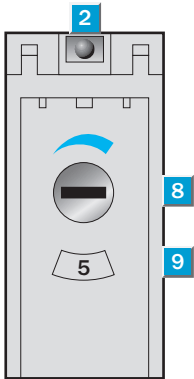
### Mechanics/electronics

<b>Supply voltage</b>	5 V DC ... 13.5 V DC
<b>Power consumption</b>	≤ 50 mA <sup>1)</sup>
<b>Switching mode</b>	Light switching
<b>Response time</b>	≤ 10 ms <sup>2)</sup>
<b>Connection type</b>	Terminal, PG9
<b>Housing material</b>	Metal, Zinc diecast
<b>Optics material</b>	Plastic, PMMA
<b>Enclosure rating</b>	IP67
<b>Ambient operating temperature</b>	-20 °C ... +50 °C
<b>Ambient storage temperature</b>	-25 °C ... +70 °C
<b>UL File No.</b>	Ex II 2G EEx ia IIC T4, ATEX Nr. PTB03 ATEX 2104

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

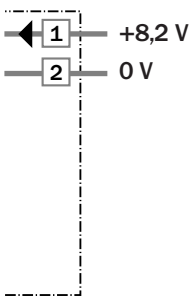
<sup>2)</sup> Signal transit time with resistive load.

### Adjustments possible

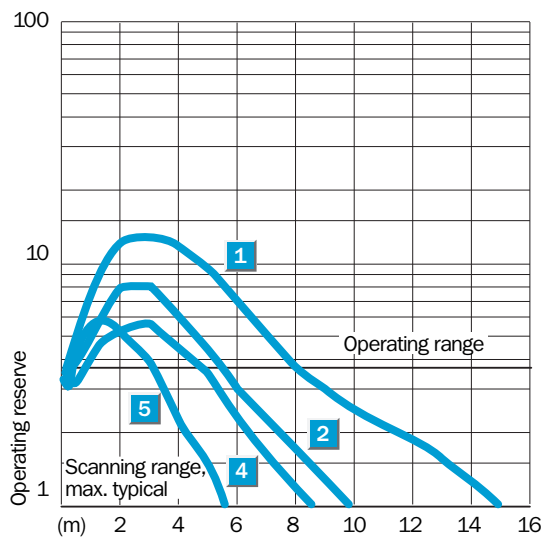


- ② LED signal strength indicator
- ⑧ Sensitivity control
- ⑨ Light/dark selector

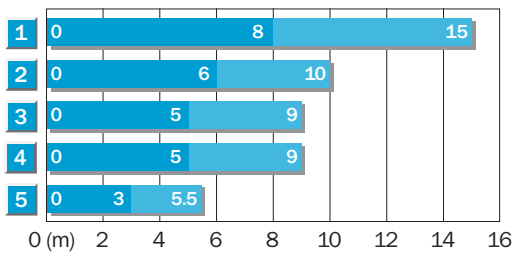
### Connection diagram



### Characteristic curve



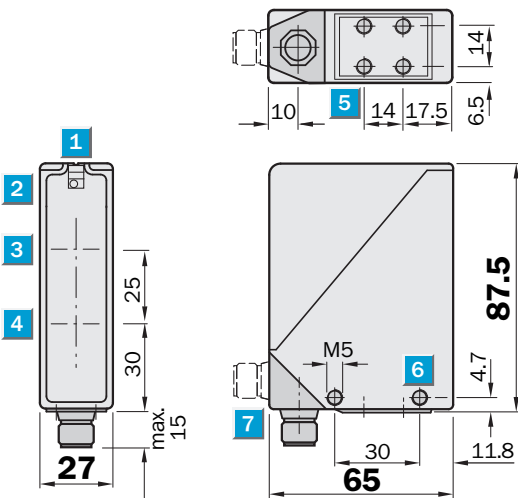
Sensing range diagram



■ Operating range    ■ Scanning range, max. typical

Reflector type	Operating range
1 PL 80 A	0 ... 8 m
2 PL 50 A	0 ... 6 m
3 PL 40 A	0 ... 5 m
4 PL 30 A	0 ... 5 m
5 PL 20 A	0 ... 3 m

Dimensional drawing (Dimensions in mm (inch))



- ① Alignment sight
- ② LED signal strength indicator
- ③ Center of optical axis, sender
- ④ Center of optical axis, receiver
- ⑤ M5 threaded mounting hole, 6 mm deep
- ⑥ M16 screw fixing and plug rotatable by 90°
- ⑦ Sensitivity control

## 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)