



WLL12-P4181

**SICK**  
Sensor Intelligence.



Illustration may differ



Ordering information

Type	Part no.
WLL12-P4181	1012721

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

Detailed technical data

Features

Dimensions (W x H x D)	15 mm x 49 mm x 53 mm
Housing design (light emission)	Rectangular
Sensing range max.	0 mm ... 280 mm <sup>1)</sup>
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Type of light	Visible red light
Light source	LED
Adjustment	Potentiometer

<sup>1)</sup> Object with 90% remission (based on standard white, DIN 5033).

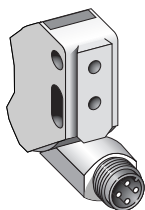
Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	< 5 V <sub>pp</sub>
Current consumption	35 mA <sup>1)</sup>
Switching output	PNP
Switching mode	Light/dark switching
Response time	≤ 360 μs <sup>2)</sup>
Connection type	Male connector M12, 4-pin
Housing material	Metal, zinc diecast Metal, zinc diecast
Optics material	Plastic, PMMA
Enclosure rating	IP67
Ambient operating temperature	-25 °C ... +60 °C
Ambient temperature, storage	-25 °C ... +70 °C

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

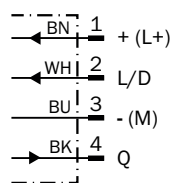
<sup>2)</sup> Signal transit time with resistive load.

## Connection type

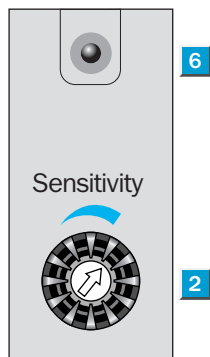


## Connection diagram

Cd-087

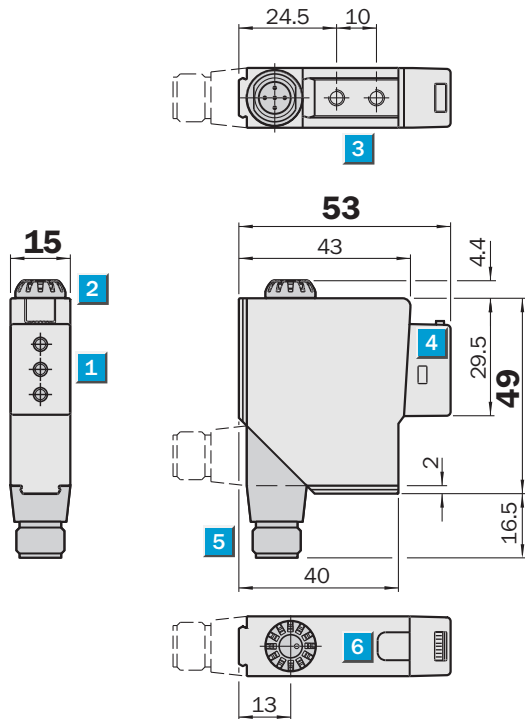


## Adjustments

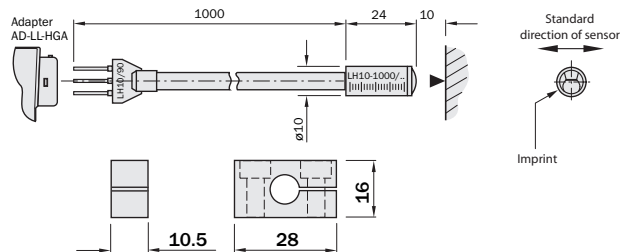


- ② Sensitivity control
- ⑥ LED signal strength indicator

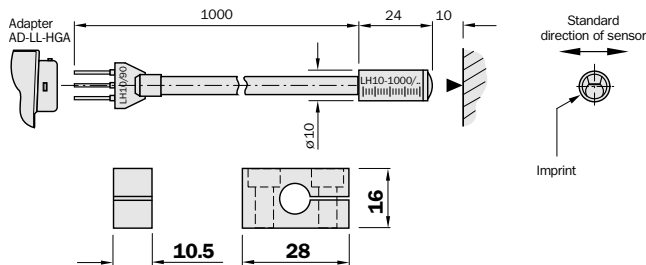
## Dimensional drawing (Dimensions in mm (inch))



- ① Connector for fibre-optic cable
- ② Sensitivity control
- ③ M4 threaded mounting hole – 4 mm depth
- ④ ADR
- ⑤ Connector not rotatable. Connector facing backwards on request
- ⑥ LED signal strength indicator



Scanning distance:	10 mm (+ 1 mm), fixed
Light spot diameter:	approx. 2.5 x 3.5 mm
Switching hysteresis:	≤ 0.3 mm, based on standard white 90 % to standard black 6 %



## 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)