



DATA SHEET

WLL12-B5181

Photoelectric sensors



Illustration may differ

PHOTOELECTRIC SENSORS

WLL12-B5181

ORDERING INFORMATION

Type	part no.
WLL12-B5181	1011677

Further device versions and accessories at 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 ¹⁾
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Type of light	Visible red light
Light source	LED
Adjustment	Potentiometer

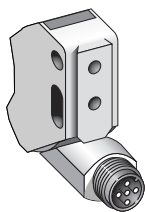
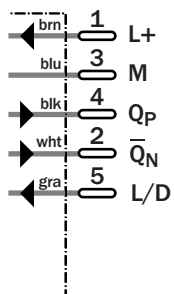
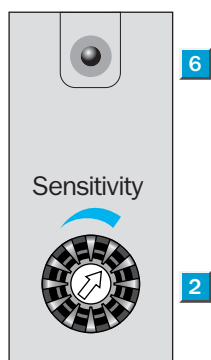
¹⁾ Object with 90% remission (based on standard white, DIN 5033).

MECHANICS/ELECTRONICS

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

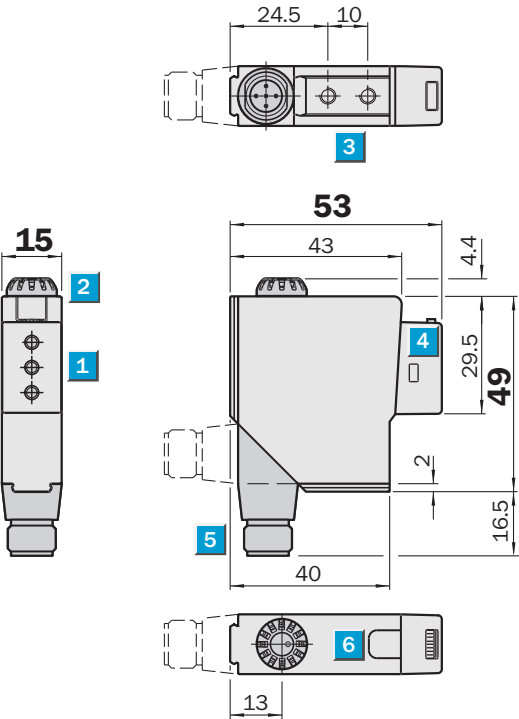
¹⁾ Without load.

²⁾ Signal transit time with resistive load.

CONNECTION TYPE**CONNECTION DIAGRAM****ADJUSTMENTS**

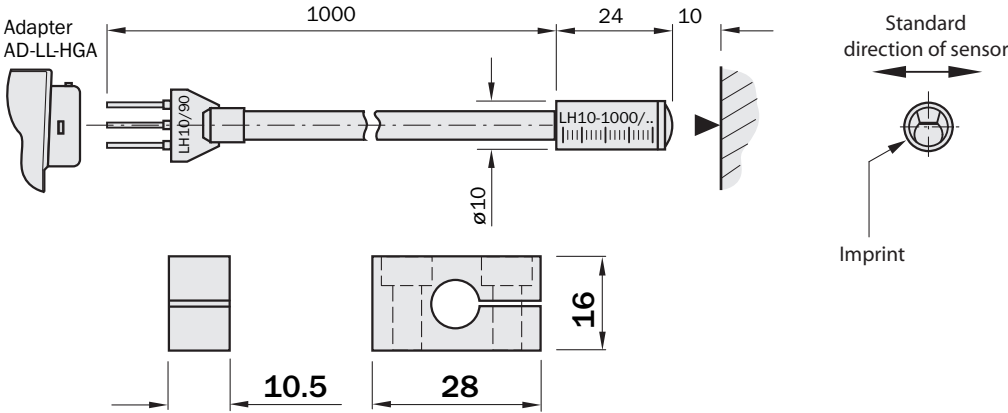
- ② sensitivity control
- ⑥ LED signal strength indicator

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

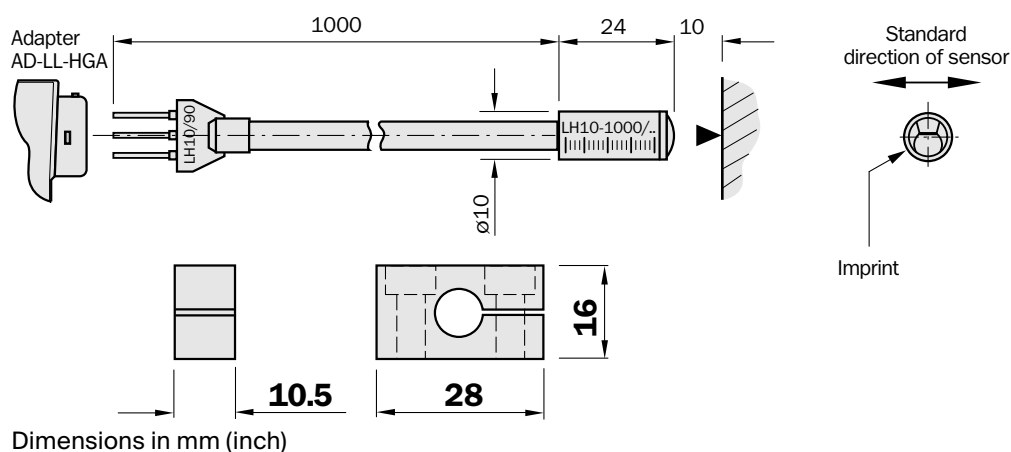
DIMENSIONAL DRAWING



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 %

Dimensions in mm (inch)

DIMENSIONAL DRAWING



Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/1011677



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SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

SICK
Sensor Intelligence