



# VLC100-0201000

VLC100

AUTOMATION LIGHT GRIDS

**SICK**  
Sensor Intelligence.



Illustration may differ

### Ordering information

Type	part no.
VLC100-0201000	1054540

Other models and accessories → [www.sick.com/VLC100](http://www.sick.com/VLC100)

### Detailed technical data

#### Features

<b>Sensor principle</b>	Photoelectric retro-reflective sensor
<b>Minimum detectable object (MDO)</b>	6 mm ... 18 mm <sup>1)</sup>

<sup>1)</sup> Dependence of the range.

#### Mechanics/electronics

<b>Wave length</b>	850 nm
<b>Supply voltage <math>V_s</math></b>	DC $\geq 24$ V <sup>1)</sup>
<b>Ripple</b>	$\pm 5$ %
<b>Output current <math>I_{max.}</math></b>	$\leq 20$ mA <sup>2)</sup>
<b>Output load, capacitive</b>	2.2 $\mu$ F
<b>Output load, Inductive</b>	2.2 H
<b>Initialization time</b>	6 s
<b>Switching output</b>	2 x PNP
<b>Inputs</b>	Teach-in input
<b>Output mode</b>	Q, /Q <sup>3)</sup>
<b>Dimensions (W x H x D)</b>	90 mm x 50 mm x 90 mm
<b>Connection type</b>	Cable with plug M12, 8-pin, 390 mm
<b>Housing material</b>	Aluminum
<b>Indication</b>	4 x LED
<b>Enclosure rating</b>	IP54 <sup>4)</sup>
<b>Circuit protection</b>	$U_V$ connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression
<b>Weight</b>	355 g

<sup>1)</sup> Typical value.

<sup>2)</sup> 165 mA at 24 V without output load.

<sup>3)</sup> /Q = active when all light beams are free.

<sup>4)</sup> According to EN 60529.

<b>Front screen</b>	Glass
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- 1) Typical value.
- 2) 165 mA at 24 V without output load.
- 3) /Q = active when all light beams are free.
- 4) According to EN 60529.

### Performance

<b>Maximum range</b>	2 m
<b>Minimum range</b>	≥ 0.4 m
<b>Operating range</b>	2 m x 2 m
<b>Response time</b>	≤ 20 ms <sup>1)</sup>

- 1) With resistive load.

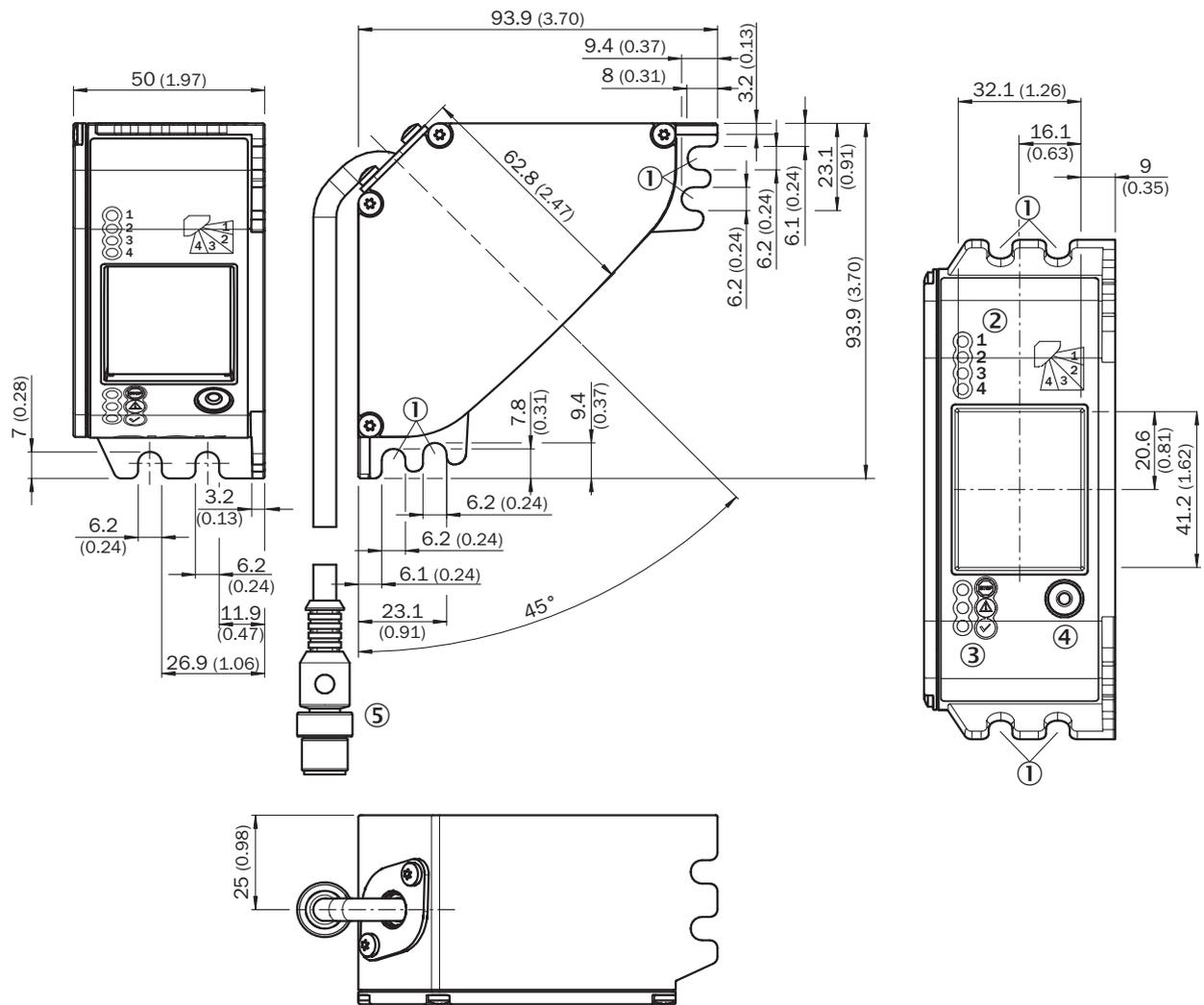
### Ambient data

<b>Shock resistance</b>	10 g / 16 ms / EN 60068-2-27
<b>Vibration resistance</b>	EN 60068-2-6
<b>Air humidity</b>	15 % ... 95 %, Non-condensing
<b>Ambient operating temperature</b>	0 °C ... +50 °C
<b>Ambient temperature, storage</b>	-25 °C ... +70 °C

### Classifications

<b>ECLASS 5.0</b>	27270910
<b>ECLASS 5.1.4</b>	27270910
<b>ECLASS 6.0</b>	27270910
<b>ECLASS 6.2</b>	27270910
<b>ECLASS 7.0</b>	27270910
<b>ECLASS 8.0</b>	27270910
<b>ECLASS 8.1</b>	27270910
<b>ECLASS 9.0</b>	27270910
<b>ECLASS 10.0</b>	27270910
<b>ECLASS 11.0</b>	27270910
<b>ECLASS 12.0</b>	27270910
<b>ETIM 5.0</b>	EC002549
<b>ETIM 6.0</b>	EC002549
<b>ETIM 7.0</b>	EC002549
<b>ETIM 8.0</b>	EC002549
<b>UNSPSC 16.0901</b>	39121528

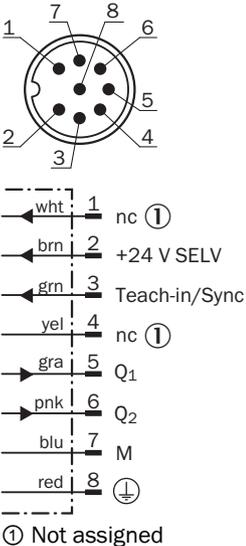
### Dimensional drawing



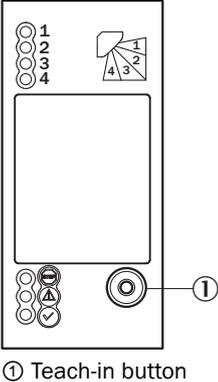
Dimensions in mm (inch)

- ① Mounting hole,  $\varnothing$  3.2 mm
- ② LED display, field segments
- ③ status indicator: green, yellow, red LEDs
- ④ Teach-in button
- ⑤ male connector M12, 8-pin

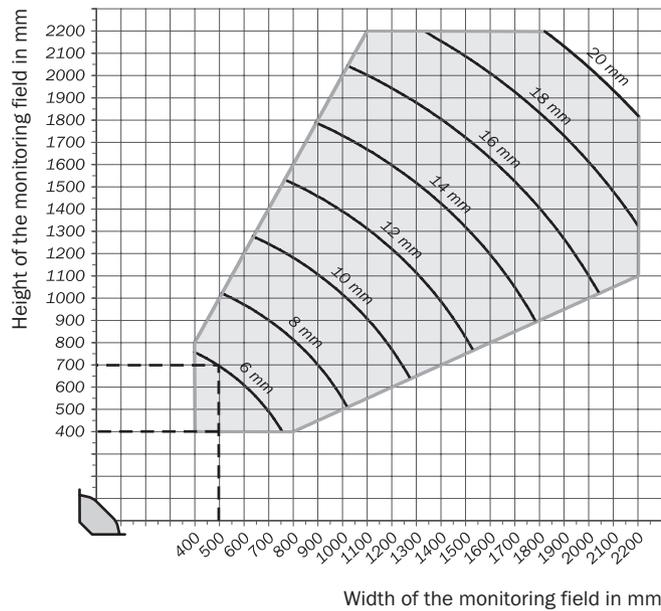
Connection type and diagram



Adjustments



### Detection area (W x H)



### Recommended accessories

Other models and accessories → [www.sick.com/VLC100](http://www.sick.com/VLC100)

	Brief description	Type	part no.
reflectors and optics			
	<ul style="list-style-type: none"> <li><b>Description:</b> Reflective tape, 1,500 mm x 48 mm x 0.8 mm, protective field size max. 1.5 m x 1.5 m, self-adhesive, abrasion-resistant, 2 pieces</li> <li><b>Dimensions:</b> 48 mm 0.8 mm 1,500 mm</li> <li><b>Items supplied:</b> 2 pieces</li> </ul>	Reflector tape 2 x 1.5 m	2051582
Mounting systems			
	<ul style="list-style-type: none"> <li><b>Description:</b> Mounting kit for mounting the sensor on the profile frame</li> </ul>	Mounting kit	2045375
connectors and cables			
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Female connector, M12, 8-pin, straight, A-coded</li> <li><b>Connection type head B:</b> Flying leads</li> <li><b>Signal type:</b> Sensor/actuator cable</li> <li><b>Cable:</b> 5 m, 8-wire, PVC</li> <li><b>Description:</b> Sensor/actuator cable, shielded</li> <li><b>Application:</b> Zones with chemicals, Uncontaminated zones</li> </ul>	YF2A28-050VA6XLEAX	2096244

## 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)