



# UC4-11341

UC4

ULTRASONIC SENSORS

**SICK**  
Sensor Intelligence.



## Ordering information

Type	Part no.
UC4-11341	6034667

Other models and accessories → [www.sick.com/UC4](http://www.sick.com/UC4)



## Detailed technical data

### Mechanics/electronics

<b>Supply voltage <math>V_s</math></b>	DC 15 V ... 30 V <sup>1)</sup>
<b>Power consumption</b>	≤ 0.75 W <sup>2)</sup>
<b>Initialization time</b>	< 300 ms
<b>Design</b>	Rectangular
<b>Housing material</b>	Plastic (ABS) Ultrasonic transducer: polyurethane foam, glass epoxy resin
<b>Connection type</b>	Male connector, M8, 3-pin
<b>Indication</b>	2 x LED
<b>Weight</b>	10 g
<b>Sending axis</b>	Straight
<b>Dimensions (W x H x D)</b>	16 mm x 40.1 mm x 16.7 mm
<b>Enclosure rating</b>	IP65 / IP67
<b>Protection class</b>	III

<sup>1)</sup> Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A.

<sup>2)</sup> Without load.

### Performance

<b>Operating range, limiting range</b>	13 mm ... 100 mm, 150 mm <sup>1)</sup>
<b>Target</b>	Natural objects
<b>Resolution</b>	≥ 0.1 mm
<b>Repeatability</b>	± 0.15 % <sup>2)</sup>
<b>Accuracy</b>	± 1 % <sup>3)</sup>
<b>Response time</b>	24 ms

<sup>1)</sup> Teach-in from 21 mm.

<sup>2)</sup> In relation to the current measured value, minimum value ≥ resolution.

<sup>3)</sup> Referring to current measurement value.

<sup>4)</sup> Functions may vary depending on sensor type.

<b>Switching frequency</b>	30 Hz
<b>Output time</b>	8 ms
<b>Ultrasonic frequency (typical)</b>	380 kHz
<b>Detection area (typical)</b>	See diagrams
<b>Additional function</b>	Adjustable operating modes: Switching point (DtO) / Switching window/Background (ObSB), teach-in of digital output, invertable digital output, teach-in button(s) (can be deactivated), reset to factory default 4)

1) Teach-in from 21 mm.

2) In relation to the current measured value, minimum value  $\geq$  resolution.

3) Referring to current measurement value.

4) Functions may vary depending on sensor type.

## Interfaces

<b>Digital output</b>	Number	1 <sup>1)</sup>
	Type	PNP
	Maximum output current $I_A$	$\leq 200$ mA
<b>Hysteresis</b>		2 mm

1) PNP: HIGH =  $V_S - (< 2$  V) / LOW = 0 V.

## Ambient data

<b>Ambient temperature, operation</b>	-25 °C ... +70 °C <sup>1)</sup>
<b>Ambient temperature, storage</b>	-40 °C ... +85 °C
<b>Temperature drift</b>	0.17 % / K <sup>2)</sup>

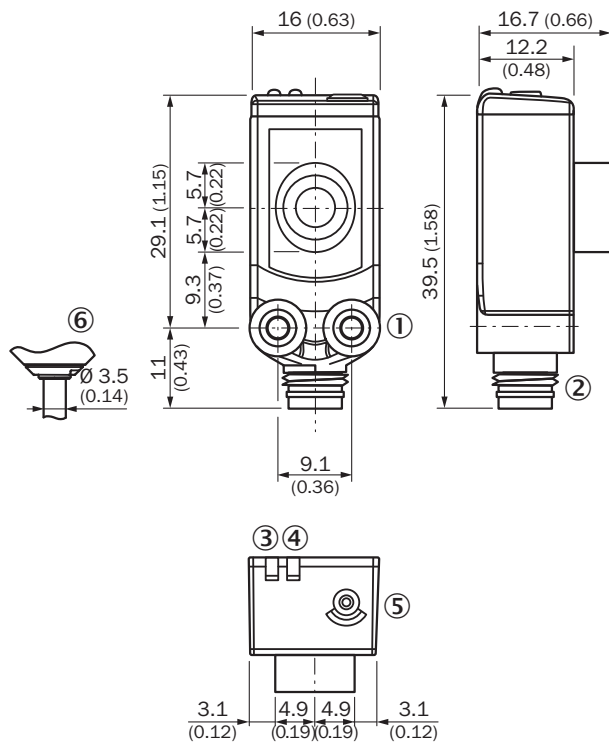
1) At operating temperatures of  $> 50$  °C, the rear side of the UC4 must be installed with its surface flat against a bracket.

2) Referring to current measurement value.

## Classifications

<b>ECl@ss 5.0</b>	27270804
<b>ECl@ss 5.1.4</b>	27270804
<b>ECl@ss 6.0</b>	27270804
<b>ECl@ss 6.2</b>	27270804
<b>ECl@ss 7.0</b>	27270804
<b>ECl@ss 8.0</b>	27270804
<b>ECl@ss 8.1</b>	27270804
<b>ECl@ss 9.0</b>	27270804
<b>ECl@ss 10.0</b>	27270804
<b>ECl@ss 11.0</b>	27270804
<b>ECl@ss 12.0</b>	27272806
<b>ETIM 5.0</b>	EC001846
<b>ETIM 6.0</b>	EC001846
<b>ETIM 7.0</b>	EC001846
<b>ETIM 8.0</b>	EC001846
<b>UNSPSC 16.0901</b>	41111960

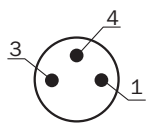
Dimensional drawing (Dimensions in mm (inch))



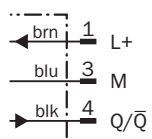
- ① Threaded mounting hole M3
- ② Connection
- ③ Status indicator digital output (orange)
- ④ Status display for supply voltage active (green)
- ⑤ Control elements

Connection type

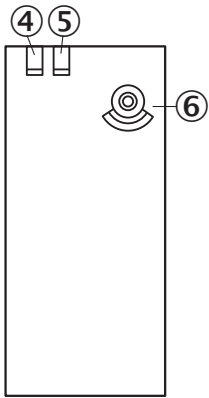
Connector M8, 3-pin



Connection diagram



### Adjustment possible

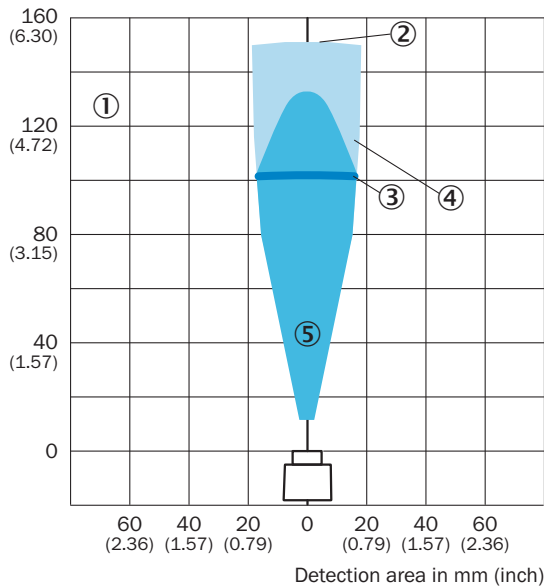


- ④ Status indicator digital output (orange)
- ⑤ Status display for supply voltage active (green)
- ⑥ Control elements

### Detection area

UC4-11




Detection area in mm (inch)



- ① Detection range dependent on reflection properties, size, and alignment of the object
- ② Limiting range
- ③ Operating range
- ④ Example object: aligned plate 100 mm x 100 mm
- ⑤ Example object: cylindrical bar with a diameter of 10 mm

## Recommended accessories

Other models and accessories → [www.sick.com/UC4](http://www.sick.com/UC4)

	Brief description	Type	Part no.
<b>Hardware</b>			
	Accessory for ultrasonic channeling for the product family UC4	SonicTube UC4	5329249
<b>Mounting brackets and plates</b>			
	Mounting bracket for wall mounting, Stainless steel 1.4571, mounting hardware included	BEF-W4-A	2051628
<b>Plug connectors and cables</b>			
	Head A: female connector, M8, 3-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m	YF8U13-020VA1XLEAX	2095860

## Recommended services

Additional services → [www.sick.com/UC4](http://www.sick.com/UC4)

	Type	Part no.
<b>Warranty extensions</b>		
<ul style="list-style-type: none"> <li>• <b>Product area:</b> Identification solutions, machine vision, Distance sensors, Detection and ranging solutions</li> <li>• <b>Range of services:</b> The services correspond to the scope of the statutory manufacturer warranty (SICK general terms and conditions of purchase)</li> <li>• <b>Duration:</b> Five-year warranty from delivery date.</li> </ul>	Extended warranty for a total of five years from delivery date	1680671

## 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)