



ULTRASONIC DISTANCE SENSORS

UC4-13347 | UC4

ULTRASONIC DISTANCE SENSORS



Ordering information

Туре	Part no.
UC4-13347	6054709

Other models and accessories -> www.sick.com/UC4

Detailed technical data

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

 $^{\rm (1)}$ Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A. $^{\rm (2)}$ Without load.

Safety-related parameters

MTTFD	101 years
DC _{avg}	0%

Performance

Operating range, limiting range	20 mm 150 mm, 250 mm ¹⁾
Target	Natural objects
Resolution	≥ 0.1 mm

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⁾ Subsequent smoothing of the analog output, depending on the application, may increase the response time by up to 200 %.

⁵⁾ Functions may vary depending on sensor type.

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Repeatability	± 0.15 % ²⁾
Accuracy	±1% ³⁾
Temperature compensation	\checkmark
Response time	24 ms ⁴⁾
Output time	8 ms
Ultrasonic frequency (typical)	380 kHz
Detection area (typical)	See diagrams
Additional function	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 ⁵⁾

 $^{\mbox{1)}}$ Teach-in from 21 mm.

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

³⁾ Referring to current measurement value.

 $^{(4)}$ Subsequent smoothing of the analog output, depending on the application, may increase the response time by up to 200 %.

⁵⁾ Functions may vary depending on sensor type.

Interfaces

Analog output	
Number	1
Туре	Voltage output
Voltage	$0 \text{ V} \dots 10 \text{ V}, \ge 100,000 \Omega$
Resolution	12 bit

Ambient data

Ambient temperature, operation	-25 °C +70 °C ¹⁾
Ambient temperature, storage	-40 °C +85 °C

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

Classifications

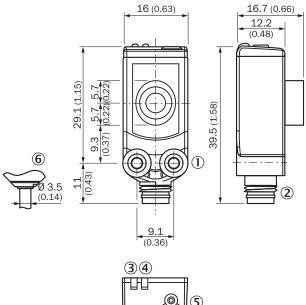
ECLASS 5.0	27270804
ECLASS 5.1.4	27270804
ECLASS 6.0	27270804
ECLASS 6.2	27270804
ECLASS 7.0	27270804
ECLASS 8.0	27270804
ECLASS 8.1	27270804
ECLASS 9.0	27270804
ECLASS 10.0	27270804
ECLASS 11.0	27270804
ECLASS 12.0	27272806
ETIM 5.0	EC001846
ETIM 6.0	EC001846
ETIM 7.0	EC001846
ETIM 8.0	EC001846

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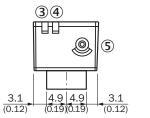
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UNSPSC 16.0901

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

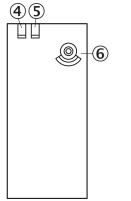
Connector M8, 3-pin



Connection diagram



Adjustment possible

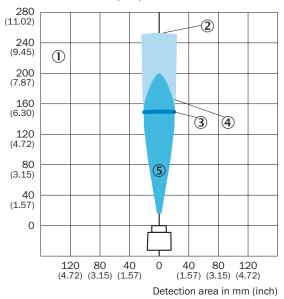


- ④ Status indicator digital output (orange)
- ⑤ Status display for supply voltage active (green)
- 6 Control elements

Detection area

UC4-13

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

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Recommended accessories

Other models and accessories -> www.sick.com/UC4

	Brief description	Туре	Part no.
Hardware			
(G	Accessory for ultrasonic channeling for the product family UC4	SonicTube UC4	5329249
Mounting brac	ckets and plates		
1. 4	Mounting bracket for wall mounting, Stainless steel 1.4571, mounting hardware included	BEF-W4-A	2051628
Others			
×.	 Connection type head A: Female connector, M8, 3-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals 	YF8U13- 020VA1XLEAX	2095860

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