

## UC4 Ultrasonic Sensor

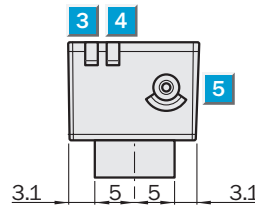
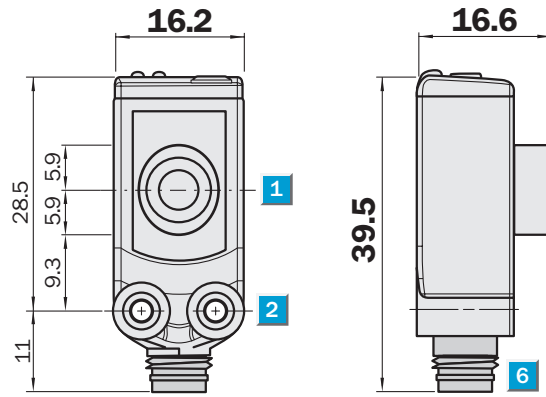


	Operating scanning distance
	13 ... 100 mm 13 ... 150 mm
Ultrasonic sensor	

- High switching accuracy thanks to time-of-flight measurement
- Independent of material shape (including films, glass and bottles)
- Proximity, Window and Reflector Mode
- Insensitive to dirt, dust and fog
- 1 switching output PNP/NPN
- Precise background suppression (BGS)



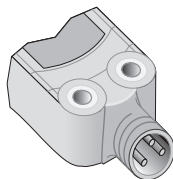
### Dimensional drawing



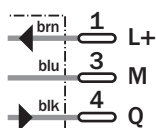
- 1 Centre of sender and receiver axis
- 2 Mounting hole M3
- 3 LED indicator yellow, status of switching output
- 4 LED indicator green, power on
- 5 Teach button
- 6 Connector M8, 3-pin

### Connection type

All types



3-pin, M8



Technical data		UC4-	11341	13341	11345	13345					
<b>Operating scanning distance</b> <sup>1)</sup>	13 ... 100 mm (150 mm)										
<b>(limiting scanning distance)</b>	13 ... 150 mm (250 mm)										
Ultrasonic frequency	Approx. 380 kHz										
Resolution	0.18 mm										
Reproducibility	±0.15 % <sup>2)</sup>										
Temperature drift	0.17 %/K ≤ 2 % <sup>2) 3)</sup>										
<b>Supply voltage V<sub>s</sub></b>	20 ... 30 V DC										
Residual ripple	10 %										
Current consumption	≤ 25 mA										
<b>Switching output</b> <sup>4)</sup>	Q, $\bar{Q}$ : PNP										
	Q, $\bar{Q}$ : NPN										
Response time <sup>5)</sup>	26 ms										
Switching frequency	20/s										
Switching hysteresis	2.0 mm										
Standby delay	< 300 ms										
Indicator	Two LED green/yellow										
Control element(s)	Teach-in button										
<b>Connection type</b>	Plug M8, 3-pin										
<b>VDE protection class</b>	⚡										
<b>Temperature compensation</b>	Yes										
<b>Enclosure rating</b>	IP 67										
<b>Ambient temperature</b>	Operation -20 °C ... +70 °C Storage -40 °C ... +85 °C										
<b>Weight</b>	Approx. 10 g										
<b>Housing material</b> <sup>6)</sup>	ABS plastic										

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

<sup>2)</sup> Reference: limiting scanning distance

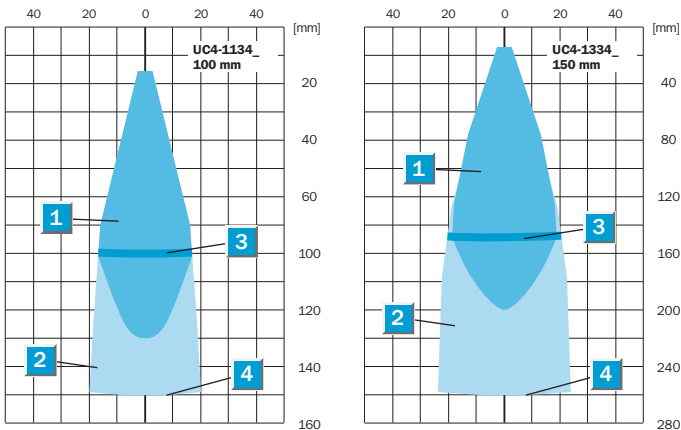
<sup>3)</sup> After maximum of 30 minutes warm-up time. Erratic temperature changes can cause temporary increase of switching accuracy.

<sup>4)</sup> Outputs short-circuit protected  
I<sub>max</sub> = 200 mA  
PNP: HIGH = V<sub>s</sub> - (< 2 V)/LOW = 0 V  
NPN: HIGH = V<sub>s</sub>/LOW ≤ 2 V

<sup>5)</sup> Object inserted sideways into measuring range

<sup>6)</sup> Ultrasonic transducer: Polyurethane-foam, glass epoxy resin

**Detection ranges**



<b>1</b>	Pipe diameter 10 mm
<b>2</b>	Aligned plate 100 x 100 mm <sup>2</sup>
<b>3</b>	Operating scanning distance
<b>4</b>	Limiting scanning distance

**Order information**

Type	Order no.
UC4-11341	6034667
UC4-13341	6034669
UC4-11345	6034668
UC4-13345	6034670

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