

UC 12

Ultrasonic Sensor

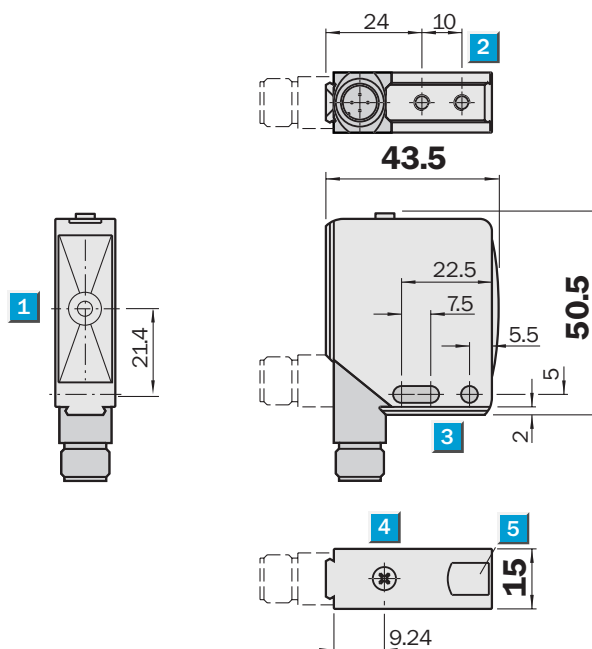


	Operating scanning range
	20 ... 150 mm 55 ... 250 mm
Ultrasonic sensor	

- High switching accuracy thanks to time-of-flight measurement
- Independent of material shape (including films, glass and bottles)
- Teach-in
- Insensitive to dirt, dust and fog
- 1 switching output PNP/NPN
- Very good background suppression (BGS)

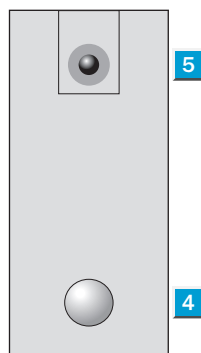


Dimensional drawing



Adjustments possible

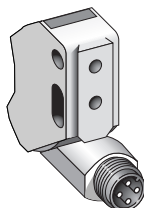
All types



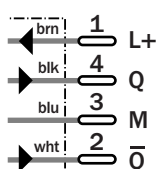
- | | |
|--|---|
| <div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div> | <p>Centre of sender and receiver axis</p> <p>M4 threaded mounting hole – 4 mm deep</p> <p>Mounting hole Ø 4,2 mm</p> <p>Control element(s)</p> <p>Signal strength indicator</p> |
|--|---|

Connection type

All types



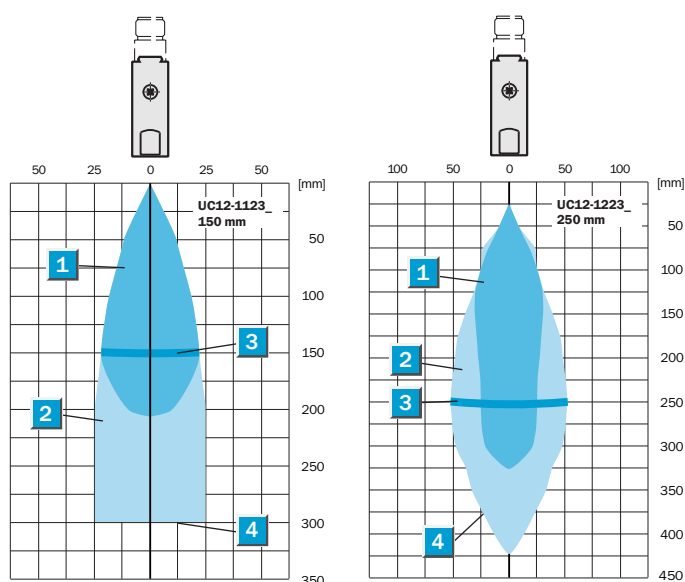
4-pin, M12



Technical data		UC12-	11231	12231	11235	12235						
Operating scanning distance	20 ... 150 mm (250 mm)											
(limiting scanning distance)	55 ... 250 mm (350 mm)											
Angle of sound-beam	see detection ranges											
Ultrasonic frequency	Approx. 380 kHz											
	Approx. 500 kHz											
Resolution	0.18 mm											
Reproducibility	±0,15 %											
Accuracy	≤ 2 % ¹⁾											
Supply voltage V_s	DC 10 ... 30 V											
Ripple	10 %											
Current consumption	≤ 40 mA											
Switching output ²⁾	PNP $U_V - 2 V, I_{max} = 500 mA$											
	NPN $-U_V + 2 V, I_{max} = 500 mA$											
Response time	27 ms											
Switching frequency	< 25/s											
Switching hysteresis	2.0 mm											
Standby delay	< 300 ms											
Indicator	Double-LED green/yellow											
Control element(s)	Teach-in-button											
Connection type	Plug M12, 4-pin											
VDE protection class	II											
Temperature compensation	Yes											
Enclosure rating	IP 67											
Ambient temperature	Operation -20 °C ... +70 °C											
	Storage -40 °C ... +85 °C											
Weight	Approx. 75 g											
Housing material ³⁾	Nickel-plated brass											

¹⁾ Referenz: limiting scanning distance²⁾ Outputs short-circuit protected³⁾ Ultrasonic transducer: Polyurethane-foam, glass epoxy resin

Detection ranges

1 Aligned plate 10 x 10 mm²

2 Pipe diameter 10 mm

3 Operating scanning distance

4 Limiting scanning distance

Order information

Type	Order no.
UC12-11231	6 029 831
UC12-12231	6 029 832
UC12-11235	6 029 833
UC12-12235	6 029 834

Great Britain

Phone +44 (0)1727 83 11 21

E-Mail: info@sick.co.uk

USA

Phone +1(952) 941-6780

tollfree +1-800-325-7425

E-Mail: info@sickusa.com

Australia

Phone +61 3 9497 4100

tollfree +1800 33 48 02

E-Mail: sales@sick.com.au

More representatives and agencies
in all major industrial nations at
www.sick.com

SICK
Waldkirch • Deutschland