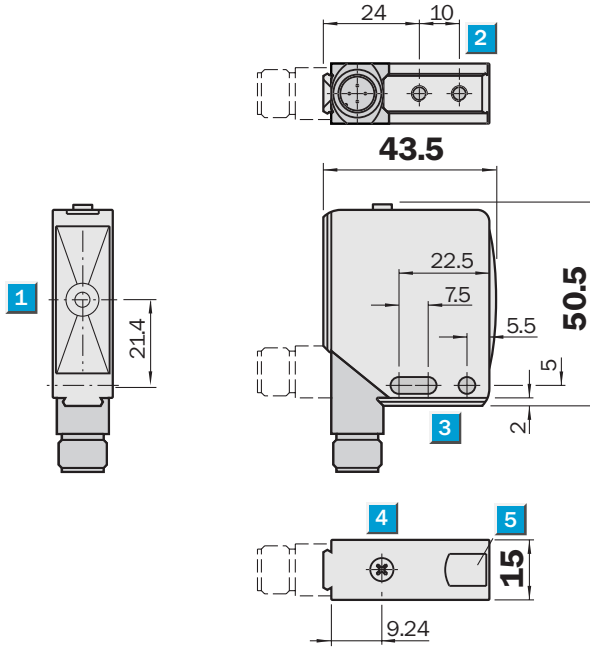
	Operating scanning distance
	20 ... 150 mm 55 ... 250 mm
Ultrasonic sensor	

- 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)

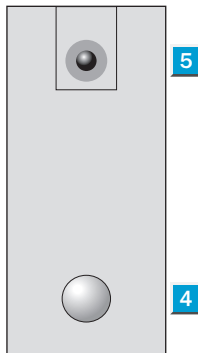


### Dimensional drawing



### Adjustments possible

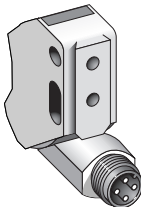
All types



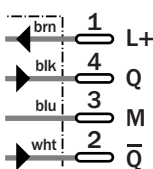
- 1 Centre of sender and receiver axis
- 2 M4 threaded mounting hole – 4 mm deep
- 3 Mounting hole Ø 4,2 mm
- 4 Control element(s)
- 5 Signal strength indicator

### Connection type

All types



4-pin, M12



Accessories  
Mounting systems



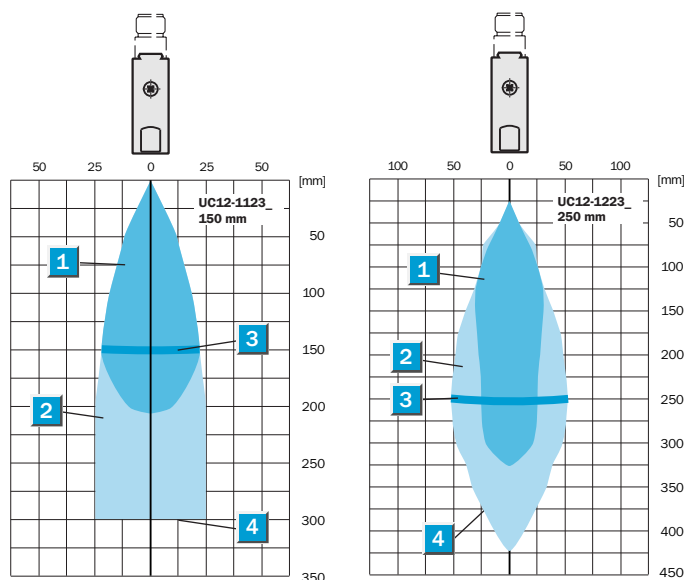
Technical data		UC12-	11231	12231	12235	12235						
<b>Operating scanning distance</b>	20 ... 150 mm (250 mm)											
<b>(limiting scanning distance)</b>	55 ... 250 mm (350 mm)											
Ultrasonic frequency	Approx. 380 kHz											
	Approx. 500 kHz											
Resolution	0.18 mm											
Reproducibility	typ. $\pm 0.15$ % of final value											
Accuracy	$\leq 2$ % of final value											
<b>Supply voltage <math>V_s</math></b>	10 ... 30 V DC											
Residual ripple	10 %											
Current consumption	$\leq 40$ mA											
<b>Switching output <sup>2)</sup></b>	Q: PNP											
	Q: NPN											
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											
<b>Connection type</b>	Plug M12, 4-pin											
<b>VDE protection class</b>	$\text{II}$											
<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. 75 g											
<b>Housing material <sup>3)</sup></b>	Nickel-plated brass											

<sup>1)</sup> Outputs short-circuit protected  
 $I_{\text{max}} = 200$  mA  
 PNP: High =  $V_s - (< 2 \text{ V})$  / LOW = 0 V  
 NPN: High =  $V_s$  / LOW  $\leq 2$  V

<sup>2)</sup> Temperature compensation  
 at  $-20$  ...  $+65$  °C

<sup>3)</sup> Ultrasonic transducer: Polyurethane-  
 foam, glass epoxy resin

### Measurement ranges



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

### Order information

Type	Order no.
UC12-11231	6029831
UC12-12231	6029832
UC12-11235	6029833
UC12-12235	6029834