

## UC 12

### Ultrasonic Sensor

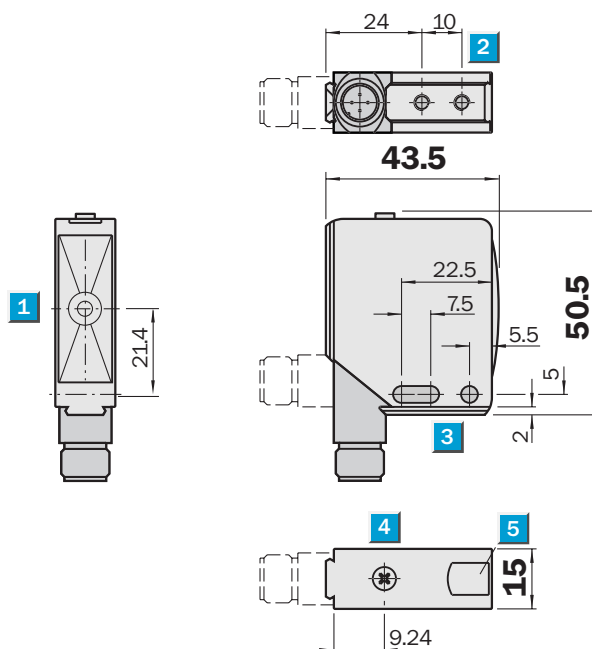


	Operating scanning range
	20 ... 150 mm 55 ... 250 mm
Ultrasonic sensor	

- 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)

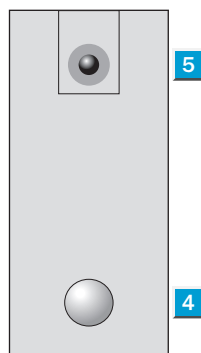


#### Dimensional drawing



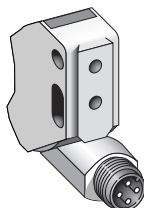
#### Adjustments possible

All types

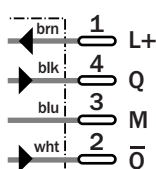


#### Connection type

All types



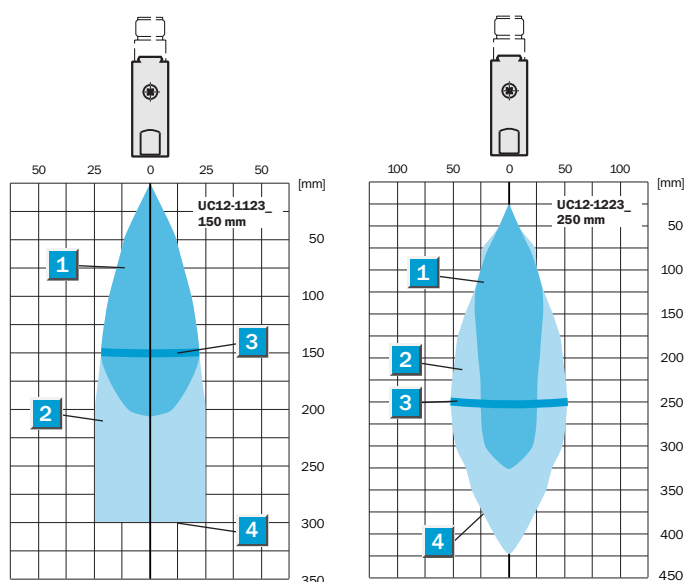
4-pin, M12



Technical data		UC12-	11231	12231	11235	12235						
<b>Operating scanning distance</b>	20 ... 150 mm (250 mm)											
<b>(limiting scanning distance)</b>	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 % <sup>1)</sup>											
<b>Supply voltage V<sub>s</sub></b>	DC 10 ... 30 V											
Ripple	10 %											
Current consumption	≤ 40 mA											
<b>Switching output <sup>2)</sup></b>	PNP	U <sub>V</sub> - 2 V, I <sub>max</sub> = 500 mA										
	NPN	-U <sub>V</sub> + 2 V, I <sub>max</sub> = 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											
<b>Connection type</b>	Plug M12, 4-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. 75 g											
<b>Housing material <sup>3)</sup></b>	Nickel-plated brass											

<sup>1)</sup> Referenz: limiting scanning distance<sup>2)</sup> Outputs short-circuit protected<sup>3)</sup> Ultrasonic transducer: Polyurethane-foam, glass epoxy resin

## Detection 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	6 029 831
UC12-12231	6 029 832
UC12-11235	6 029 833
UC12-12235	6 029 834

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