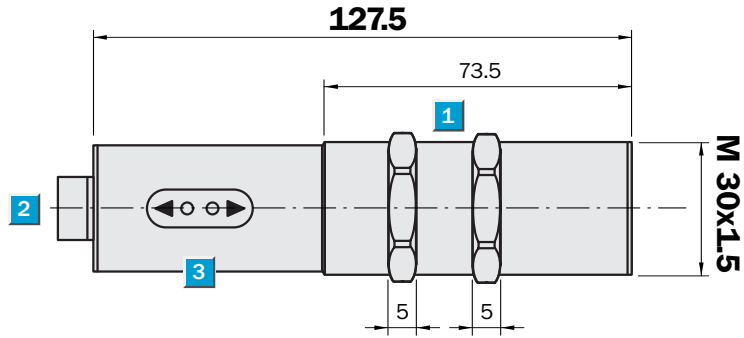


Operating scanning range
30 ... 1300 mm

Ultrasonic sensor

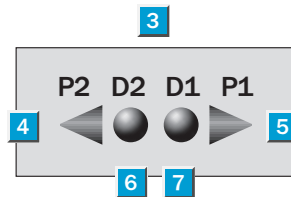
- High measurement accuracy thanks to time-of-flight measurement
- Independent of material shape (including films, glass and bottles)
- Teach-in
- Insensitive to dirt, dust and fog
- Operating scanning range up to 1,300 mm
- Binary outputs or analog output

Dimensional drawing



Adjustments possible

All types

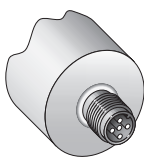


- 1 Fastening nuts, width across 36 mm
- 2 Connection plug M 12
- 3 Control and display panel
- 4 Setting key 2
- 5 Setting key 1
- 6 2
- 7 1

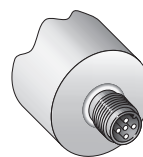
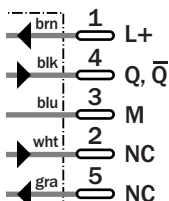


Connection types

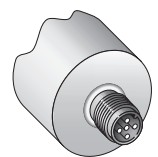
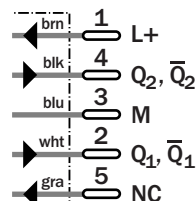
UM 30-11111	UM 30-11112	UM 30-11113
UM 30-12111	UM 30-12112	UM 30-12113
UM 30-13111	UM 30-13112	UM 30-13113



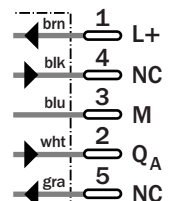
5-pin, M 12



5-pin, M 12



5-pin, M 12



Accessories
Mounting systems

Technical data	UM 30-	11111	11112	11113	12111	12112	12113	13111	13112	13113	
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Operating scanning range

(limiting scanning range)	30 ... 250 mm (350)										
	60 ... 350 mm (600)										
	200 ... 1300 mm (2000)										
Ultrasonic frequency	320 kHz										
	400 kHz										
	200 kHz										
Resolution	0.36 mm										
Reproducibility	± 0.15 % of final value										
Accuracy	≤ 2 % of final value										
Supply voltage V_S	12 ... 30 V DC ¹⁾										
Ripple	± 10 %										
Current consumption ²⁾	≤ 70 mA										
Switching outputs, reversible ³⁾	Q: PNP, $V_S - 2 V$, $I_{max} = 500 mA$										
	Q_1, Q_2 : PNP, $V_S - 2 V$, $I_{max} = 500 mA$										
Analog output, reversible ^{3) 4)}	Q_A : 4 ... 20 mA/0 ... 10 V										
Response time ⁵⁾	50 ms										
	70 ms										
	110 ms										
Switching frequency	11/s										
	8/s										
	6/s										
Switching hysteresis	20 mm										
	5 mm										
	2.5 mm										
Standby delay	2 s										
Connection type	Plug M 12, 5-pin										
Enclosure rating	IP 65										
Ambient temperature ⁶⁾	Operation -20 °C ... +70 °C										
	Storage -40 °C ... +85 °C										
Weight	260 g										
Housing material	Nickel-plated brass										

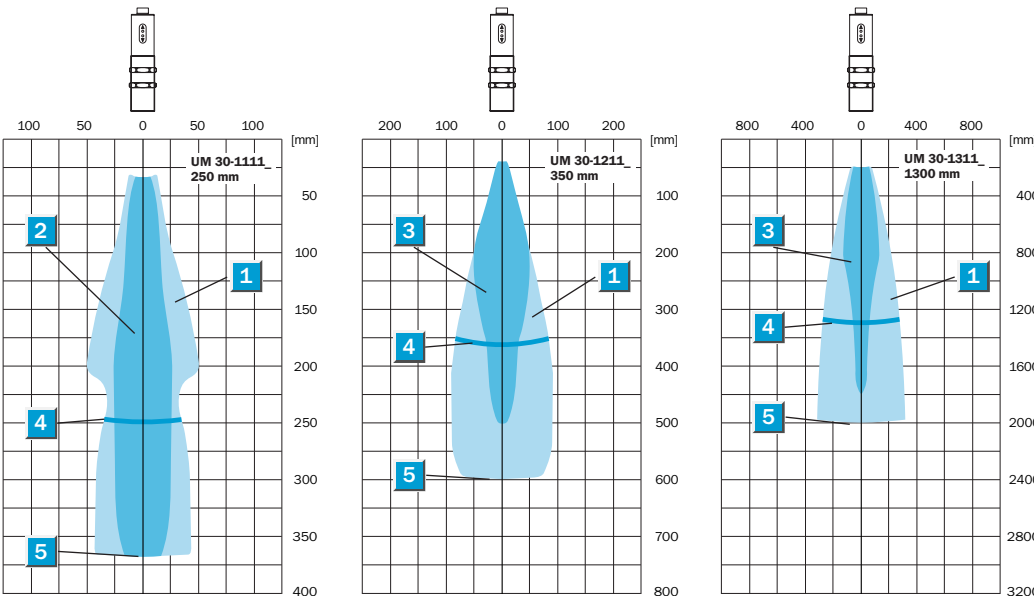
- 1) Limit values
- 2) Without load
- 3) Outputs short-circuit protected

4) Automatic switching between voltage and current outputs dependent on load

Current output 4 ... 20 mA:
 $R_L \leq 500 \Omega$, $V_S \geq 20 V$;
 $R_L \leq 100 \Omega$, $V_S \geq 12 V$
 Voltage output 0 ... 10 V:
 $R_L \geq 100 k\Omega$; $V_S > 15 V$

- 5) Only with UM 30-___3: Recovery time 32 ms according to EMC EN 50 319
- 6) Temperature compensation at -20 ... +50 °C

Detection ranges



- 1 Aligned plate 500 x 500 mm
- 2 Pipe diameter 10 mm
- 3 Pipe diameter 27 mm

- 4 Operating scanning range
- 5 Limiting scanning range

Order information

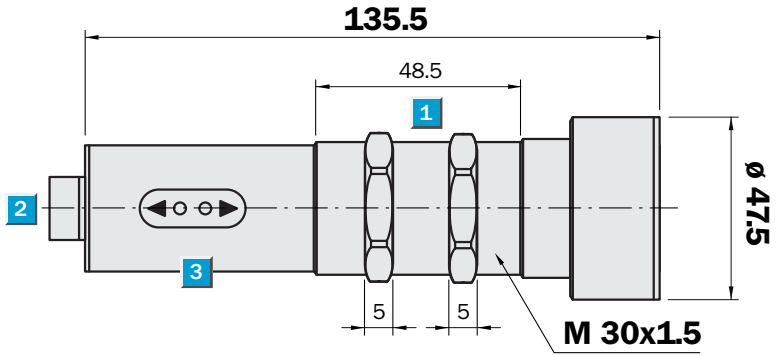
Type	Part no.
UM 30-11111	6 025 655
UM 30-12111	6 025 656
UM 30-13111	6 025 657
UM 30-11112	6 025 660
UM 30-12112	6 025 661
UM 30-13112	6 025 662
UM 30-11113	6 025 665
UM 30-12113	6 025 666
UM 30-13113	6 025 667

Operating scanning range
350 ... 3400 mm

Ultrasonic sensor

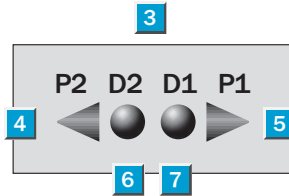
- High measurement accuracy thanks to time-of-flight measurement
- Independent of material shape (including films, glass and bottles)
- Teach-in
- Insensitive to dirt, dust and fog
- Operating scanning range up to 3,400 mm
- Binary outputs or analog output

Dimensional drawing



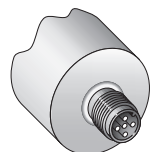
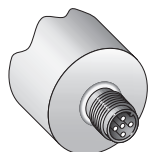
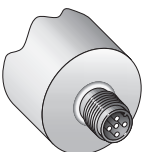
Adjustments possible

All types

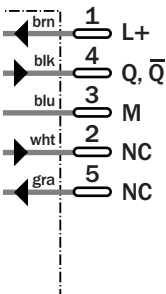


- 1 Fastening nuts, width across 36 mm
- 2 Connection plug M 12
- 3 Control and display panel
- 4 Setting key 2
- 5 Setting key 1
- 6 2
- 7 1

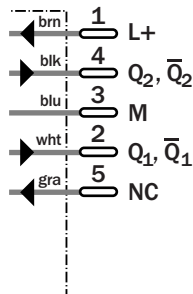
Connection types



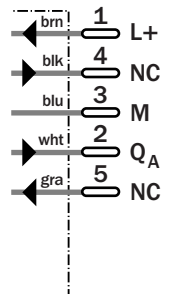
5-pin, M 12



5-pin, M 12



5-pin, M 12



Accessories

Mounting systems

Technical data	UM 30-	14111	14112	14113							
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Operating scanning range

(limiting scanning range)	350 ... 3400 mm (5000)			
Ultrasonic frequency	120 kHz			
Resolution	1 mm			
Reproducibility	± 0.15 % of final value			
Accuracy	≤ 2 % of final value			
Supply voltage V_S	12 ... 30 V DC ¹⁾			
Ripple	± 10 %			
Current consumption ²⁾	≤ 70 mA			
Switching outputs, reversible³⁾	Q: 1 x PNP, $V_S - 2 V$, $I_{max} = 500 mA$			
	Q_1, Q_2 : 2 x PNP, $V_S - 2 V$, $I_{max} = 500 mA$			
Analog output, reversible ^{3) 4)}	Q_A : 4 ... 20 mA/0 ... 10 V			
Response time ⁵⁾	180 ms			
Switching frequency	3/s			
Switching hysteresis	50 mm			
Standby delay	2 s			
Connection type	Plug M 12, 5-pin			
Enclosure rating	IP 65			
Ambient temperature ⁶⁾	Operation -20 °C ... +70 °C			
	Storage -40 °C ... +85 °C			
Weight	310 g			
Housing material	Nickel-plated brass			

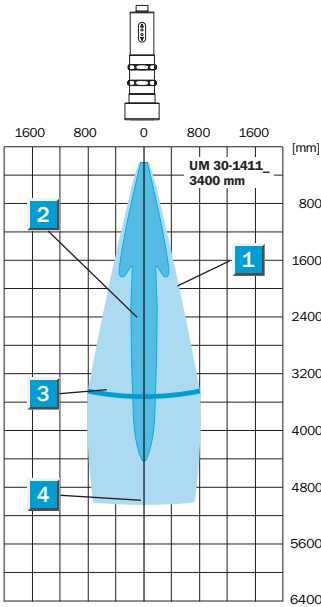
- 1) Limit values
- 2) Without load
- 3) Outputs short-circuit protected

4) Automatic switching between voltage and current outputs dependent on load

Current output 4 ... 20 mA:
 $R_L \leq 500 \Omega$, $V_S \geq 20 V$;
 $R_L \leq 100 \Omega$, $V_S \geq 12 V$
 Voltage output 0 ... 10 V:
 $R_L \geq 100 k\Omega$; $V_S > 15 V$

- 5) Only with UM 30-____3: Recovery time according to EMV EN 50 319
- 6) Temperature compensation at -20 ... +50 °C

Detection ranges



- | | |
|----------|----------------------------|
| 1 | Aligned plate 500 x 500 mm |
| 2 | Pipe diameter 27 mm |
| 3 | Operating scanning range |
| 4 | Limiting scanning range |

Order information

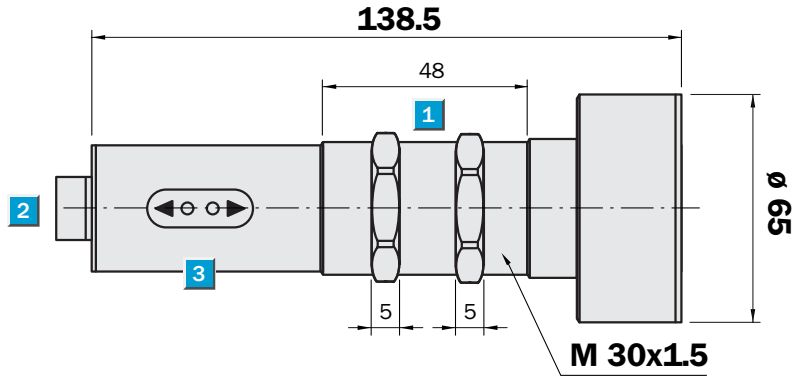
Type	Part no.
UM 30-14111	6 025 658
UM 30-14112	6 025 663
UM 30-14113	6 025 668

Operating scanning range
800 ... 6000 mm

Ultrasonic sensor

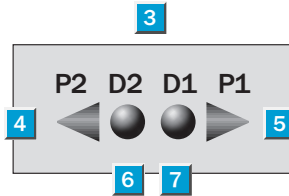
- High measurement accuracy thanks to time-of-flight measurement
- Independent of material shape (including films, glass and bottles)
- Teach-in
- Insensitive to dirt, dust and fog
- Operating scanning range up to 6,000 mm
- Binary outputs or analog output

Dimensional drawing



Adjustments possible

All types



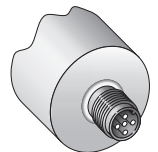
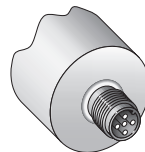
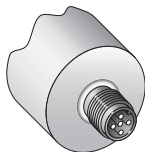
- 1 Fastening nuts, width across 36 mm
- 2 Connection plug M 12
- 3 Control and display panel
- 4 Setting key 2
- 5 Setting key 1
- 6 2
- 7 1

Connection types

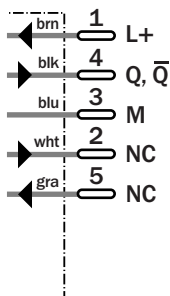
UM 30-15111

UM 30-15112

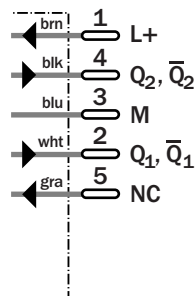
UM 30-15113



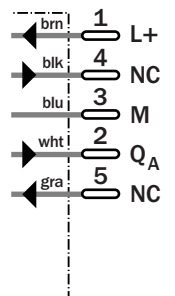
5-pin, M 12



5-pin, M 12



5-pin, M 12



Accessories

Mounting systems

Technical data	UM 30-	15111	15112	15113							
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Operating scanning range

(limiting scanning range)	800 ... 6000 mm (8000)			
Ultrasonic frequency	80 kHz			
Resolution	1 mm			
Reproducibility	± 0.15 % of final value			
Accuracy	≤ 2 % of final value			
Supply voltage V_S	12 ... 30 V DC ¹⁾			
Ripple	± 10 %			
Current consumption ²⁾	≤ 70 mA			
Switching outputs, reversible³⁾	Q: PNP, $V_S - 2 V$, $I_{max} = 500 mA$			
	Q_1, Q_2 : 2 x PNP, $V_S - 2 V$, $I_{max} = 500 mA$			
Analog output, reversible ^{3) 4)}	Q_A : 4 ... 20 mA/0 ... 10 V			
Response time ⁵⁾	240 ms			
Switching frequency	2/s			
Switching hysteresis	100 mm			
Standby delay	2 s			
Connection type	Plug M 12, 5-pin			
Enclosure rating	IP 65			
Ambient temperature ⁶⁾	Operation -20 °C ... +70 °C			
	Storage -40 °C ... +85 °C			
Weight	360 g			
Housing material	Nickel-plated brass			

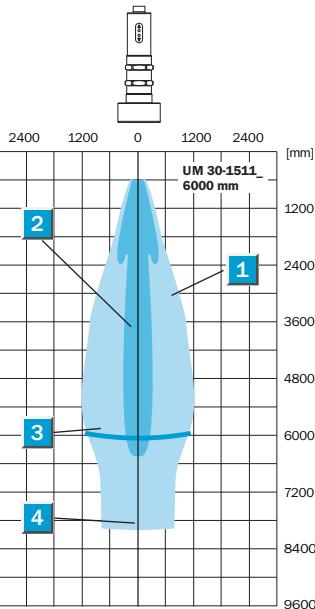
- 1) Limit values
- 2) Without load
- 3) Outputs short-circuit protected

4) Automatic switching between voltage and current outputs dependent on load

Current output 4 ... 20 mA:
 $R_L \leq 500 \Omega$, $V_S \geq 20 V$;
 $R_L \leq 100 \Omega$, $V_S \geq 12 V$
 Voltage output 0 ... 10 V:
 $R_L \geq 100 k\Omega$; $V_S > 15 V$

- 5) Only with UM 30-___3: Recovery time according to EMV EN 50 319
- 6) Temperature compensation at -20 ... +50 °C

Detection ranges



- 1 Aligned plate 500 x 500 mm
- 2 Pipe diameter 27 mm
- 3 Operating scanning range
- 4 Limiting scanning range

Order information

Type	Part no.
UM 30-15111	6 025 659
UM 30-15112	6 025 664
UM 30-15113	6 025 669