

UM2000 - Ultrasonic Level Meter

- ▶ 2-wire 4...20mA/3-wire 0...10V output
- ▶ Liquid level / distance measuring mode programmable
- ▶ Applicable to liquid and solids
- ▶ Narrow-beam
- ▶ Optional intrinsically safe model

UM2000 contains an ultrasonic transmitter and an electronic module, the transmitter transmits ultrasonic pulses towards the level surface. The period during individual pulses spread towards the level and back was obtained and subsequently converted by the electronic module to an output current 4-20 mA or voltage 0-1 0V. Measuring range can be set through two keys.



Specifications

Measuring Range	0.1...1m/0.25...2m/ 0.25...6m/0. 5...10m/0.5...20m
Applicable Medium	Liquid
Acoustic wave	For details please see 'Technical Data'
Accuracy	
UM2000-06/10/20	≤0.2% F.S.
UM2000-01/02	≤0.3% F.S.
Resolution	<1mm
Power Supply	18...36Vdc, 18...30Vdc(ex-proof model)
Current Analog Output	
Output	2-wire 4...20mA
Load RA	RA≤270Ω
Voltage Analog Output	
Output	3-wire 0...10V
Load RA	RA>1KΩ
Temperature	
UM2000-02/06	-30...+70°C
UM2000-10/20	-30...+60°C
Material	
Housing	Plastic
Sensor	PVDF
Protection Class	IP67
Electrical Connection	Solenoid plug
Process Connection	G External thread, Flange

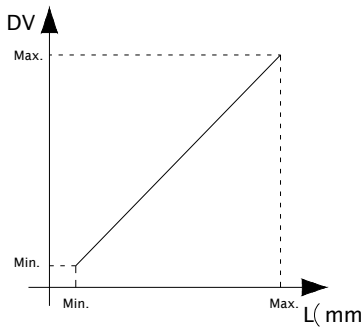
Applications

- ▶ Food/pharmaceutical industry
- ▶ Power plant
- ▶ Plastics processing
- ▶ Papermaking
- ▶ Water treatment

Flow Range Technical Data

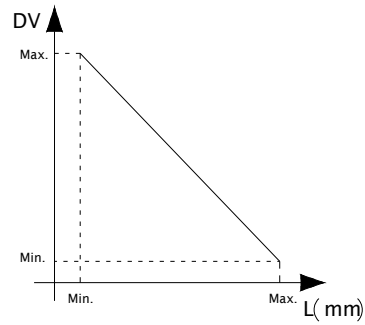
Measuring Range(m)	0.25-2 (UM2000-02)	0.25-6 (UM2000-06)	0.5-10 (UM2000-10)	0.5-20 (UM2000-20)
Acoustic wave	10°	14°	10°	12°
Measuring Period(s)	0.6s	1.0s	1.8s	5.0s

Working Mode



L: distance from sensor to objective surface
DV: display value

Distance measuring mode : The further distance between sensor and objective surface, the larger value displayed, and vice versa.



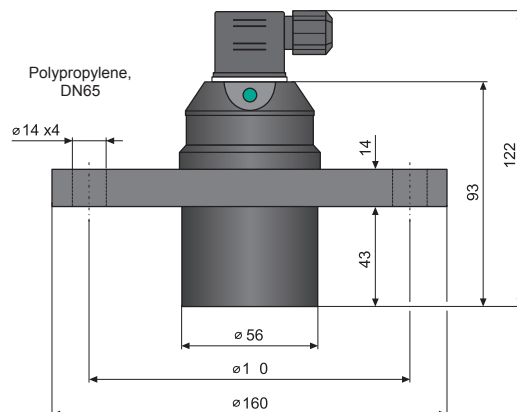
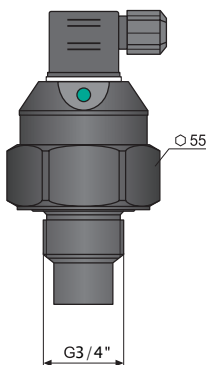
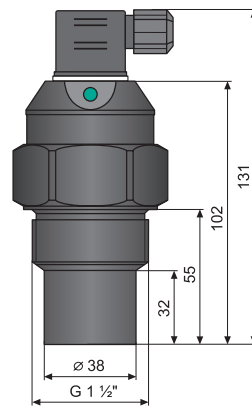
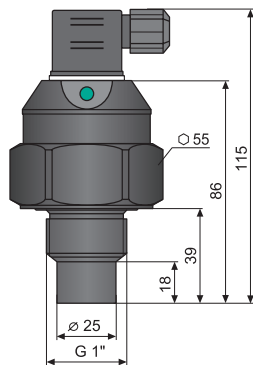
L: distance from sensor to objective surface
DV: display value

Level measuring mode : The further distance between sensor and objective surface, the larger value displayed, and vice versa.

Wiring

Wiring	2-wire 4...20mA Output	3-wire 0...10V Output								
<p>Solenoid plug</p> <table border="1"> <thead> <tr> <th>Signal</th> <th>Plug</th> </tr> </thead> <tbody> <tr> <td>U+</td> <td>1</td> </tr> <tr> <td>U-</td> <td>2</td> </tr> <tr> <td>(Signal)</td> <td>3</td> </tr> </tbody> </table>	Signal	Plug	U+	1	U-	2	(Signal)	3		
Signal	Plug									
U+	1									
U-	2									
(Signal)	3									

Dimensions in inches (mm)



Model Number

OrderNO.	Type	Range m	Process Connection	Output type mA/V
UM2001	UM2000-01/42G34HN	0.1...1	G3/4	Current Analog Output 2-wire 4...20mA
UM2002	UM2000-02/42G1HN	0.25...2	G1	
UM2006	UM2000-06/42G2HN	0.25...6	G1-1/2	
UM2010	UM2000-10/42G2HN	0.5...10	G1-1/2	
UM2020	UM2000-20/42FHN	0.5...20	Flange	
UM2101	UM2000-01/01G34HN	0.1...1	G3/4	Voltage Analog Output 3-wire 0...10V
UM2102	UM2000-02/01G1HN	0.25...2	G1	
UM2106	UM2000-06/01G2HN	0.25...6	G1-1/2	
UM2110	UM2000-10/01G2HN	0.5...10	G1-1/2	
UM2120	UM2000-20/01FHN	0.5...20	Flange	
UM2201	UM2000-01/_G34HN	0.1...1	G3/4	RS485 Mod bus
UM2202	UM2000-02/_G1HN	0.25...2	G1	
UM2206	UM2000-06/_G2HN	0.25...6	G1-1/2	
UM2210	UM2000-10/_G2HN	0.5...10	G1-1/2	
UM2220	UM2000-20/_FHN	0.5...20	Flange	