

UM200 – Ultrasonic Level Meter

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



UM200 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 0–10V. Measuring range can be set through two keys.

Specifications

Measuring Range	0.25...2m/ 0.25...6m/0. 5...10m/0.5...20m
Applicable Medium	Liquid and solids
Acoustic wave	For details please see 'Technical Data'
Accuracy	
UM200-06/10/20	≤0.2% F.S.
UM200-02	≤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	
UM200-02/06	-30...+70°C
UM200-10/20	-30...+60°C
Material	
Housing	Plastic
Sensor	PVDF
Protection Class	IP67
Electrical Connection	Solenoid plug

Applications

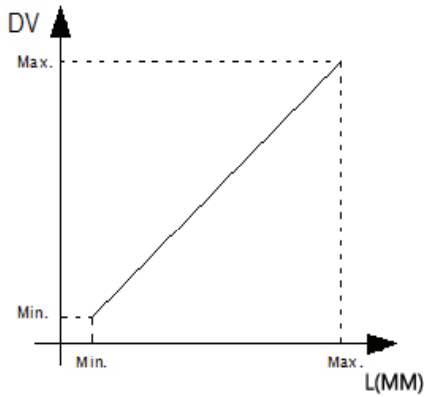
- ▶ Food & pharmaceutical industry
- ▶ Power plant
- ▶ Plastics processing
- ▶ Papermaking
- ▶ Water treatment

Technical Data

Measuring Range (m)	0.25-2 (UM200-02)	0.25-6 (UM200-06)	0.5-10 (UM200-10)	0.5-20 (UM200-20)
Acoustic wave	10°	14°	10°	12°
Measuring Period (s)	0.6s	1.0s	1.8s	5.0s

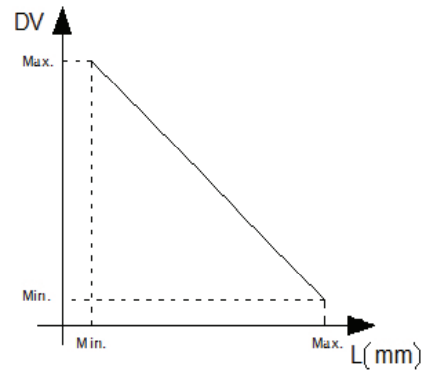
LEVEL

Working Mode



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

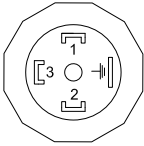
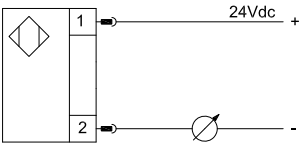
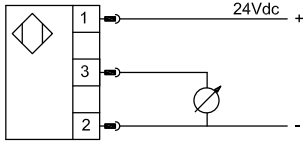
Distance measuring mode : The further distance between sensor and objective surface, the larger value displayed, and vice versa.



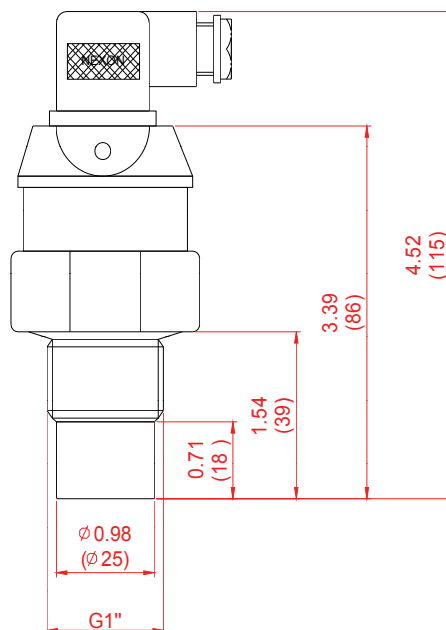
L : distance from sensor to objective surface
 DV : display value

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

Wiring

Wiring	2-wire 4...20mA analog output	3-wire 0...10V analog output								
 <p>Solenoid plug</p> <table border="1" data-bbox="435 1025 584 1162"> <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)



Order Code

UM :	Ultrasonic level meter
200 :	Series#
-02 :	Measuring range 0.25...2m
-06 :	Measuring range 0.25...6m
-10 :	Measuring range 0.5...10m
-20 :	Measuring range 0.5...20m
42 :	2-wire 4...20mA analog output
01 :	3-wire 0...10V analog output

UM	200	-02/	42	G1	H	N
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F :	Flange connection(only for UM200-10/20)
G1 :	G1 male thread (only for UM200-02)
G2 :	G1-1/2" male thread (only for UM200-06)
H :	Solenoid plug
N :	None
Xi :	Ex-proof model

Sepecial Order on Request

- ▶ Electrical and / or process connection