



Recorder

Flow

Pressure

Temp

Analyzer

Level

Datasheet

Split Type Ultrasonic Level Transmitter

AI-UL-B

Datasheet

Split Type Ultrasonic Level Transmitter AI-UL-B

Ultrasonic level meter (for material and liquid level measurement) is a non-contact highly reliable and cost-effective material level measuring instrument which is easily installed and maintained. It can meet most of the material level measurement requirements without touch property rights developed by the company via years of hard work.

Applications

- Environmental protection
- Building construction
- Warehouse Logistics
- Food and Beverage Industry
- Power industry
- Petrochemicals
- Water treatment industry



Features

- Non-contact measurement
- High precision
- High reliability
- Easy to install
- Wide measuring range
- Various output signals
- Intelligent function-rich

Split Type Ultrasonic Level Transmitter

Principle

The ultrasonic wave is reflected when it meets the interface of liquid medium (solid medium) with different density, and the transmission time is measured to measure the liquid level / distance.

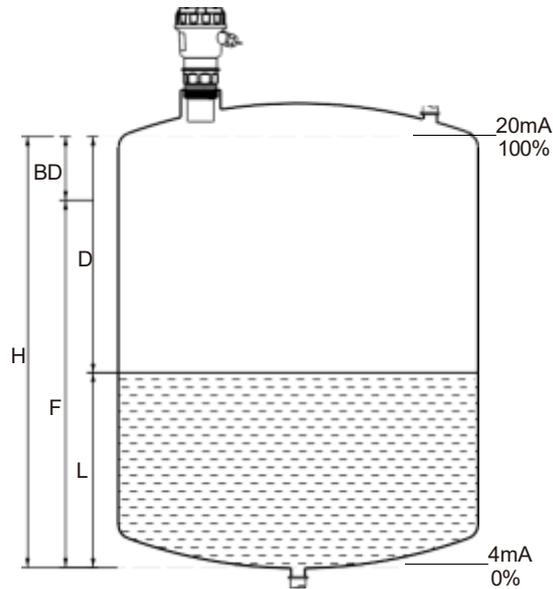


Figure 1 Measuring principle

BD: Blind distance

H: Installation height

F: Measuring range

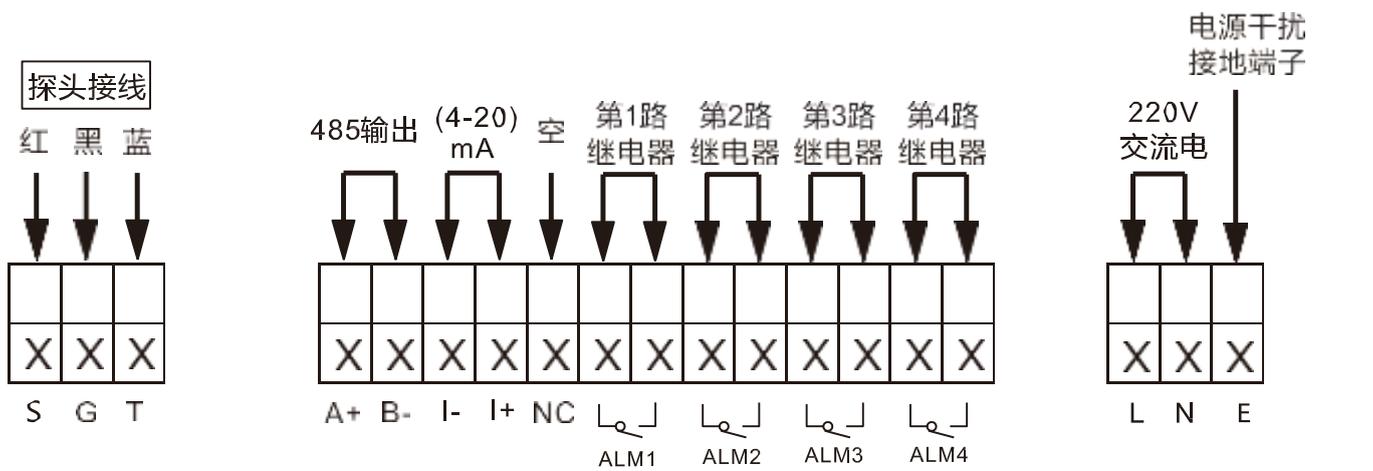
D: The distance from probe emitting surface to material surface

L: Level

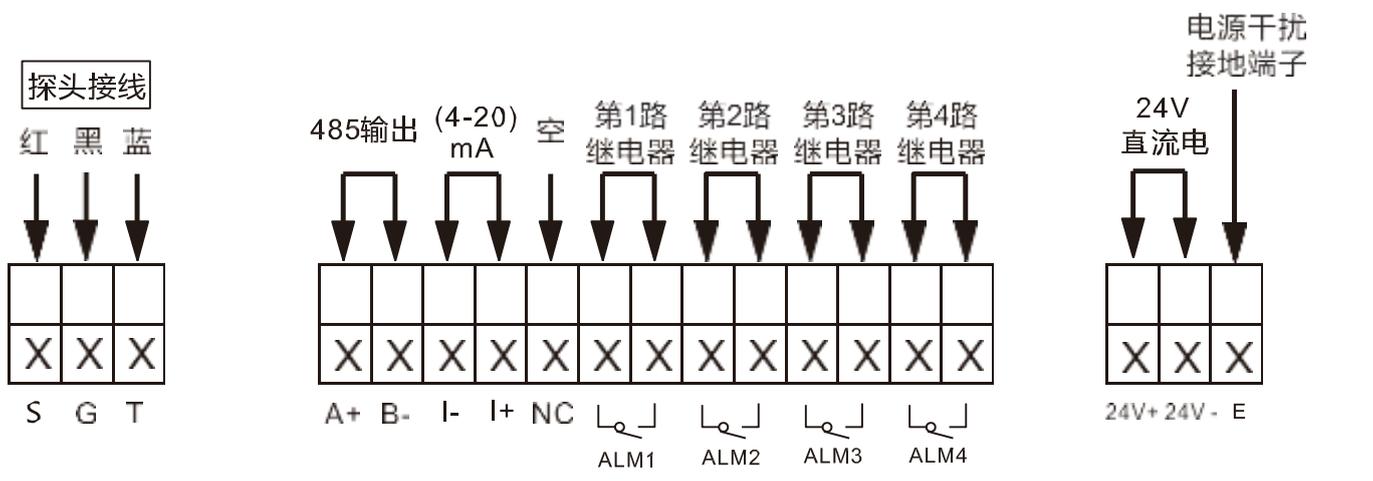
Parameters	
Measuring variable	Level / Distance
Power supply	(100~240)VAC,5W Max,50/60Hz; (18~28)VDC
Measuring range	(0~5) m / (0~10) m / (0~15) m
Accuracy	±0.5% FS
Blind area	≤0.3m (5m)
	≤0.35m (10m)
	≤0.5m (15m)
Resolution	1mm or 0.1%FS (maximum)
Display	Monochrome LCD with resolution of 128 * 64
Current output	Isolated (4 ~ 20)mA , the maximum load is 500Ω, and the output accuracy is 0.2%FS
Communication	Isolated RS485 Modbus-RTU Communication Protocol
Relay output	2 groups (i.e. AC 250V/ 8A or DC 30V/ 5A) optional, 4 groups optional
Working temperature	Instrument: (-20~+60)°C
	Probe: (-20~+80)°C

Ingress Protection	Instrument: IP65 Probe: IP68
Probe cable	10m (standard configuration), 30m available
Relative humidity	(10~85)%RH (no condensation)
Language	Chinese/English
Installation method	Wall mounted installation

Wiring

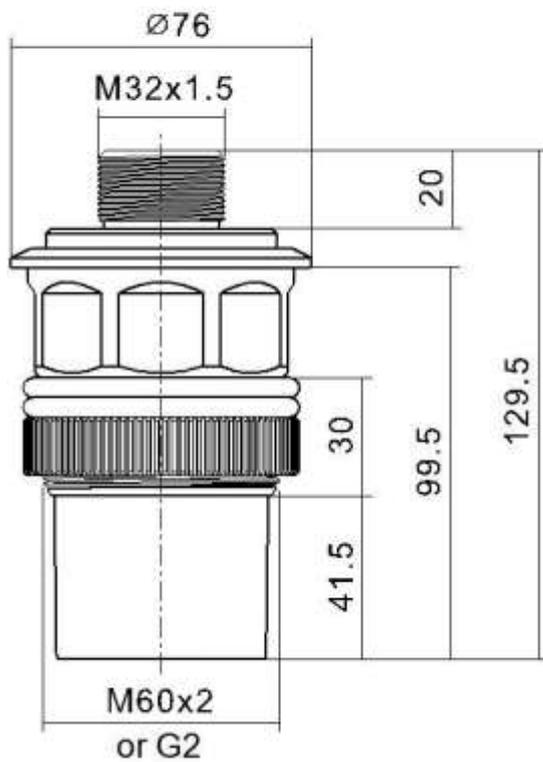
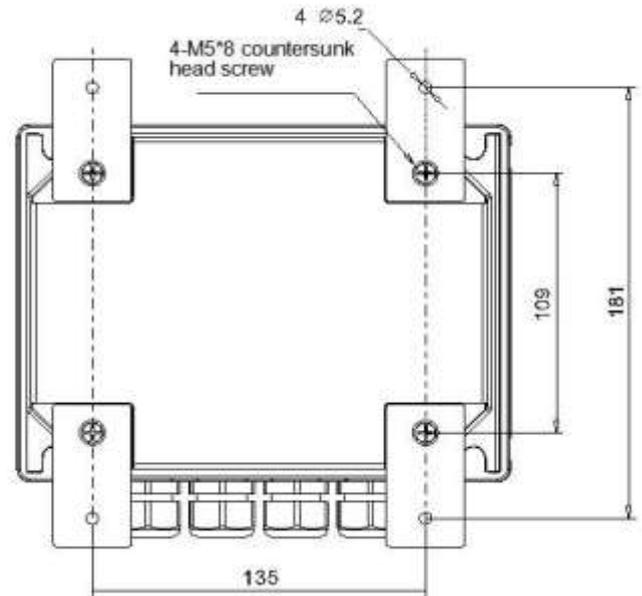
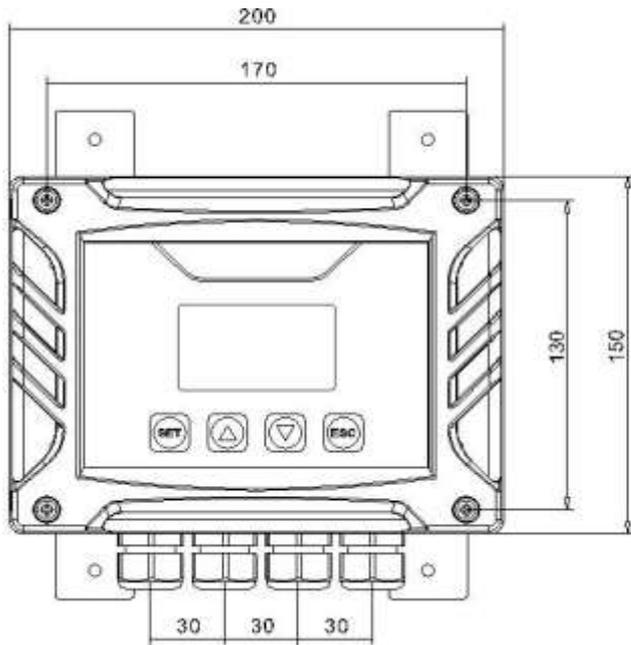


Remote typetype dimension (220V power supply)

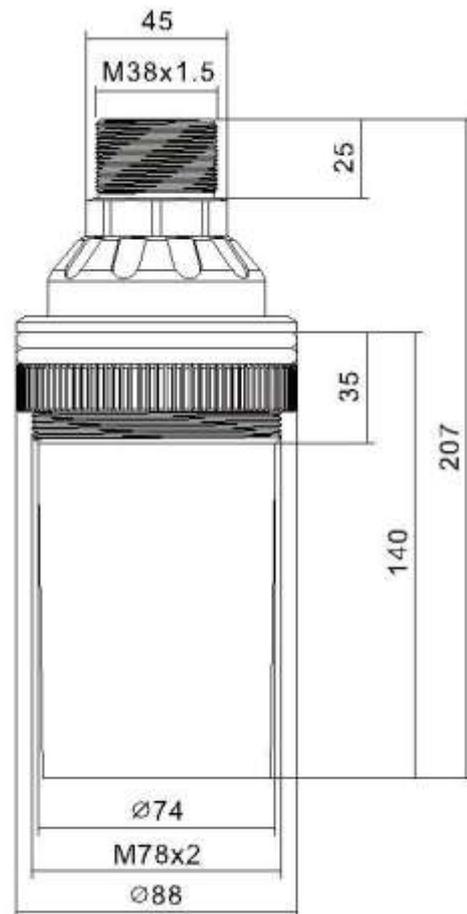


Remote typetype dimension (24V power supply)

Dimensions



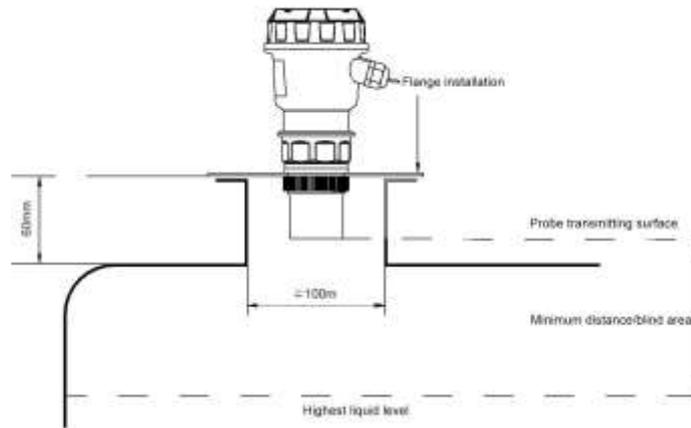
M60×2 Thread Sensor (5m/10m)



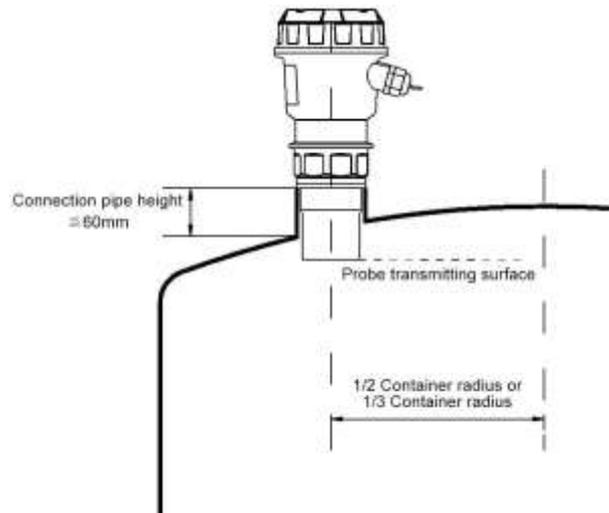
M78×2 Thread Sensor (15m)

Installation

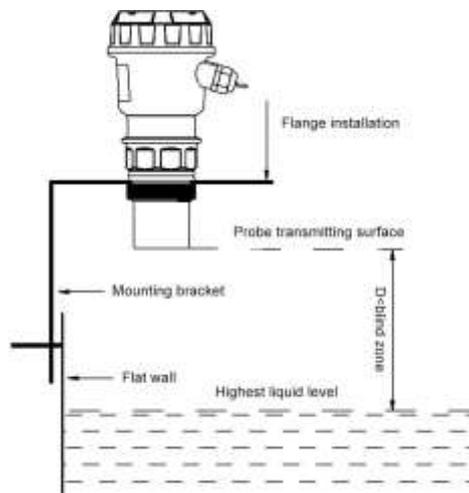
Flat-top tank



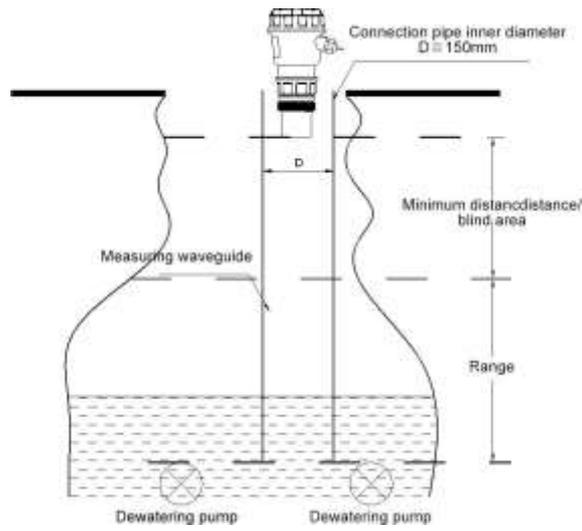
Arched tank top



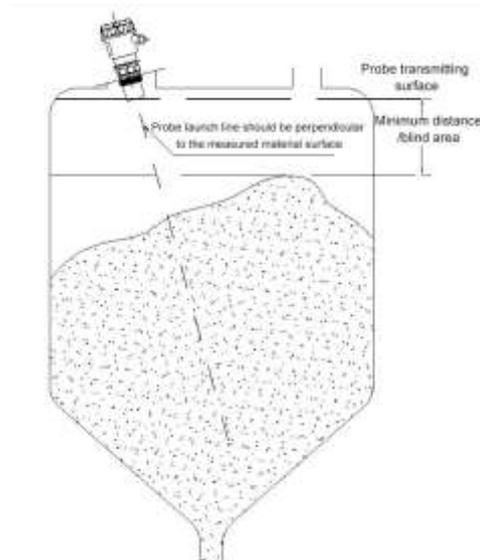
Open tank



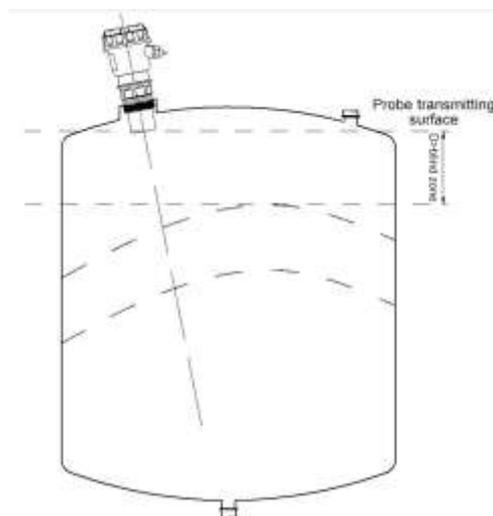
Drainage wells and ordinary wells



Flange mounting



Threaded pipe installation



Ordering Code

AI-UL-B -C-NS-K-SA-WE-10-EA						Description
AI-UL-B	-	-	-	-	-	5m, G2 thread 10m, G2 thread 15m, M78×2 thread Plastic ABS Polytetrafluoroethylen e (PTFE) 0.5 Class 0.3 Class 4-20mA , 24VDC 4-20mA+RS485 , 24VDC 4-20mA + Dual SPST, 24VDC 4-20mA + Four SPST, 24VDC 4-20mA + Dual SPST + RS485 , 24VDC 4-20mA+Quad SPST+RS485 , 24VDC 4-20mA , 220VAC 4-20mA+RS485 , 220VAC 4-20mA+Dual SPST, 220VAC 4-20mA+Quad SPST, 220VAC 4-20mA+Dual SPST+RS485, 220VAC 4-20mA+Quad SPST+RS485, 220VAC M20×1.5 Cable Gland, Plastic ABS, IP65
Measurement Range and Thread Type	C D L					
Probe Material		NS N6				
Accuracy			K H			
				SA SE		
				SG		
				SK		
				SP		
				SS		
				SB		
				SF		
				SJ		
				SL		
				SR		
				ST		
Electrical Interface, Housing Material, and Ingress Protection					WE	
					10	10m
					15	15m
				Probe Cable Length	20	20m
					30	30m
					XX	Other
						L-shaped stainless steel mounting bracket 0.8m
				Accessories	EA	
					EB	L-shaped stainless steel mounting bracket

1.5m

RA HG20539 PN3 DN65 PPH
RB HG20539 PN3 DN80 PPH
RC HG20539 PN3 DN100 PPH
RD HG20539 PN3 DN150 PPH
RE HG20539 PN3 DN200 PPH



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