



Datasheet

Ultrasonic level transmitter

AI-ULMPC



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Ultrasonic level meter (measurement of liquid level/material level) is a non-contact, high reliability, cost-effective, easy-to-install and maintain liquid level/material level measuring instrument. It can meet most liquid level/level measurement requirements without contacting the measured medium. It is a new generation of ultrasonic level gauge with completely independent property rights of our company.

Applications

- Fire water tank
- Deep well water level
- River reservoir
- Engineering pool
- Sewage/waste water
- Chemical material



Features

- Simple operation
- Fault self-diagnosis technology, realize real-time fault self-diagnosis
- A variety of working conditions algorithm selection, improve environmental adaptability;
- High measurement resolution
- Fast response, the fastest response time
- Automatic temperature compensation

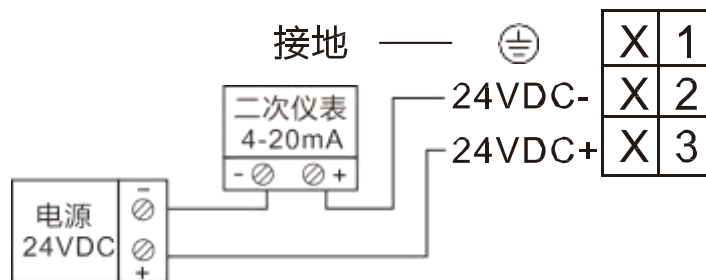
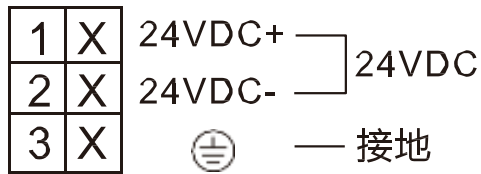
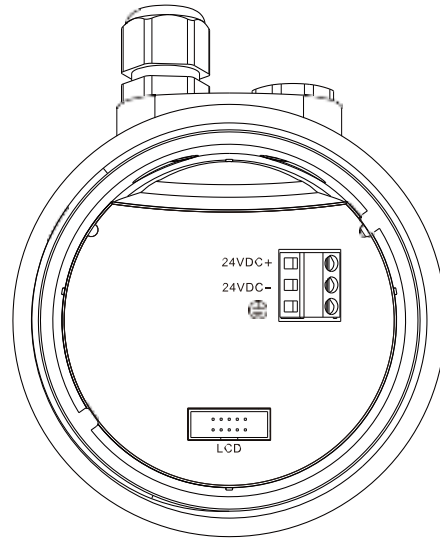
Ultrasonic level meter

Principle

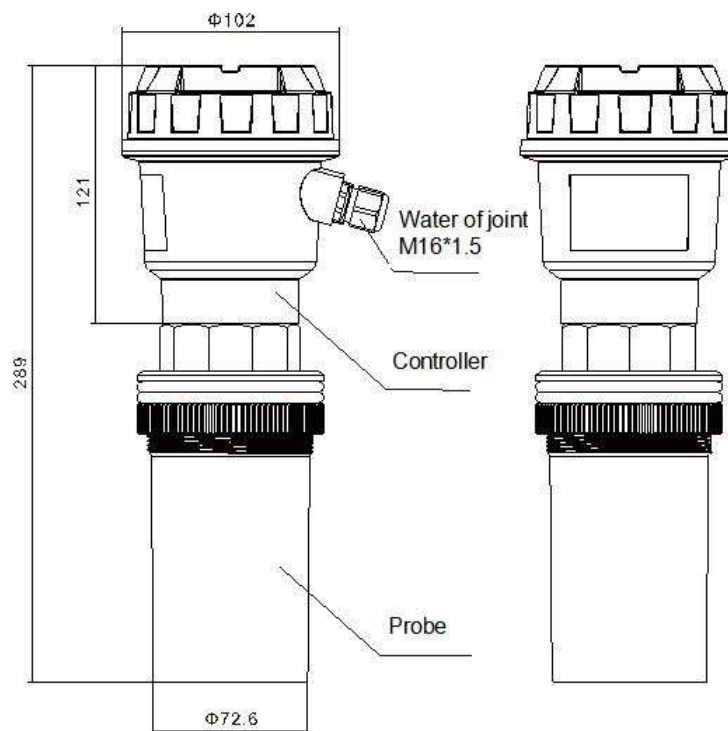
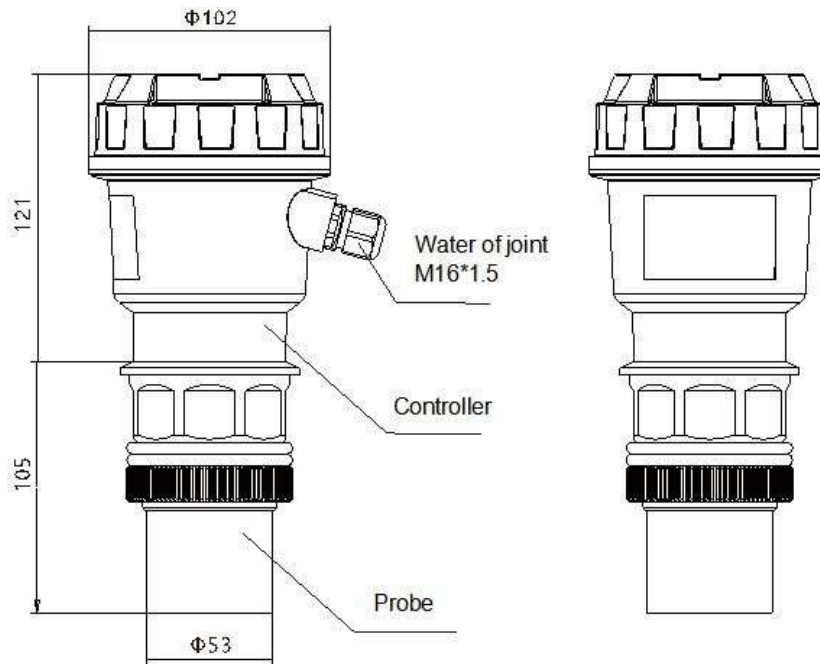
The ultrasonic wave is reflected when it meets the interface of liquid medium (solid medium) with different density, and the transmission time is measured to measure the liquid level / distance

Parameters	
Product	Ultrasonic level transmitter
Model	AI-ULMPC
Measure range	(0~5) m / (0~10) m / (0~15) m
Blind zone	≤0.4m (5m、 10m)
	≤0.6m (15m)
Accuracy	±0.5%FS ±0.3%FS
Display	Monochrome LCD with resolution of 128 * 64
Current output	(4 ~ 20) mA , the output accuracy is 0.2%FS Output load is (U-18V)/0.02A (U:supply voltage,2-wire) Output load is (U-14V)/0.02A (U:supply voltage,4-wire)
Measuring variable	Level/Distance
Power supply	18-28 VDC
Resolution	1mm or 0.1%FS (maximum)
Communication	RS485 (4-wire)
Relay output	2 groups (4-wire optional)
Working temperature	Instrument: (-20~+60)°C Probe: (-20~+80)°C
Ingress Protection	Instrument: IP65 Probe: IP68
Relative humidity	(10~85)%RH (no condensation)
Language	Chinese/English
Installation method	Threaded installation
Display method	With display (Optional without display. Refer to 1.5 for settings without display)

Wiring



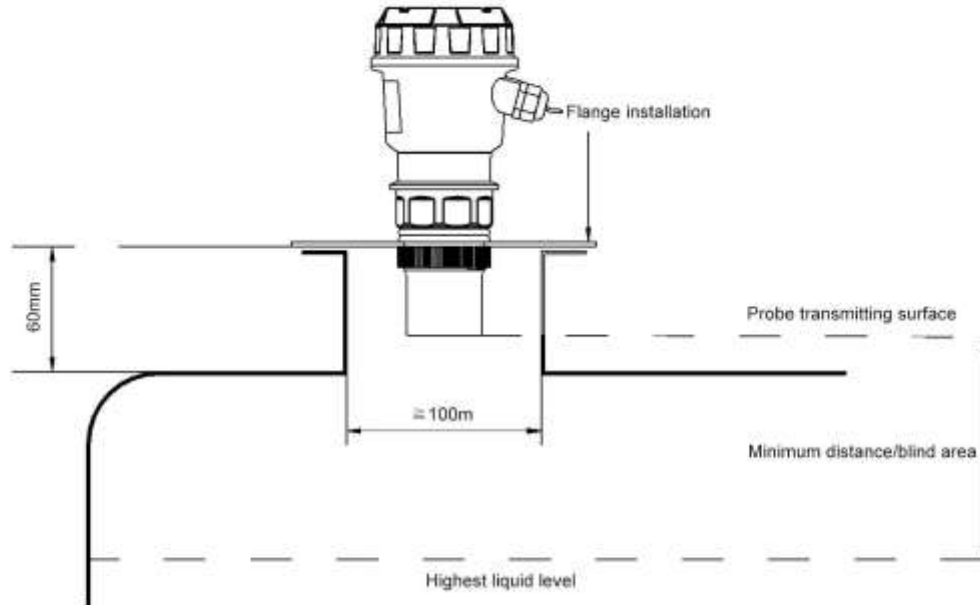
Dimensions



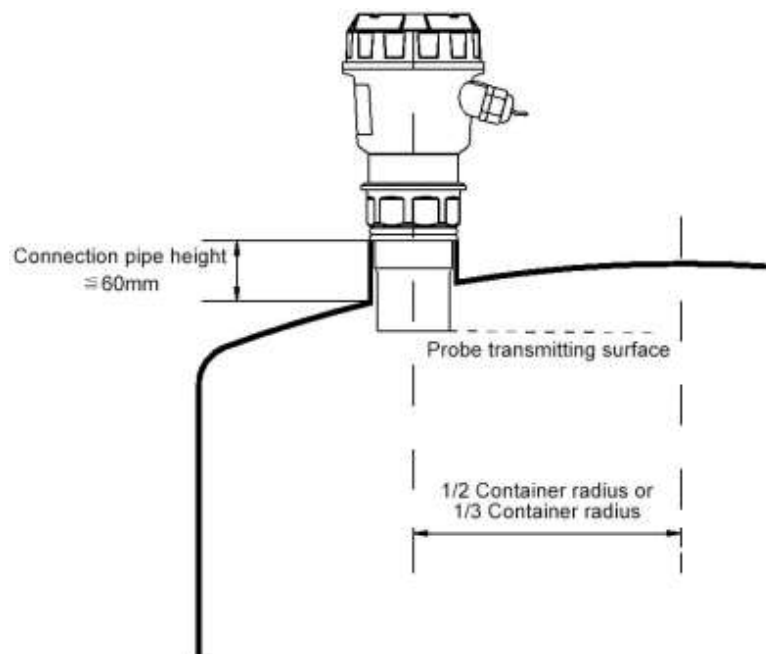
Installation

Liquid measurement

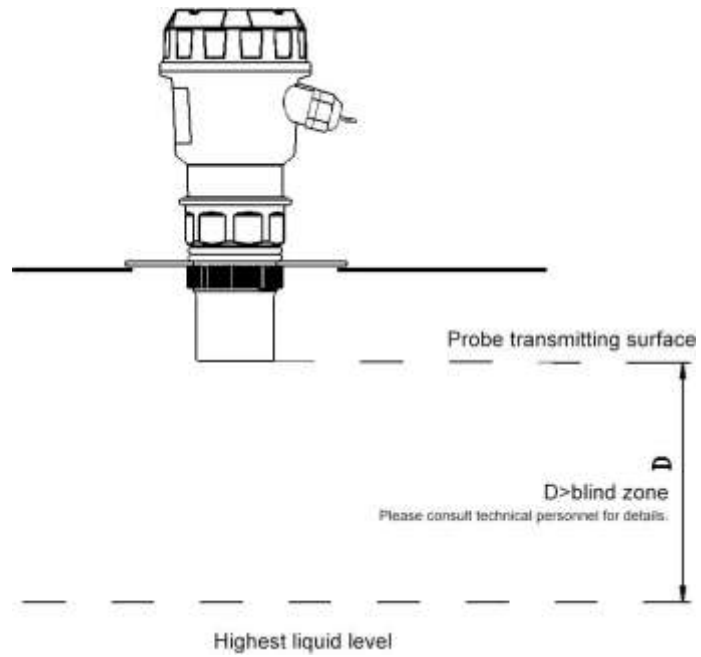
Flat-top tank



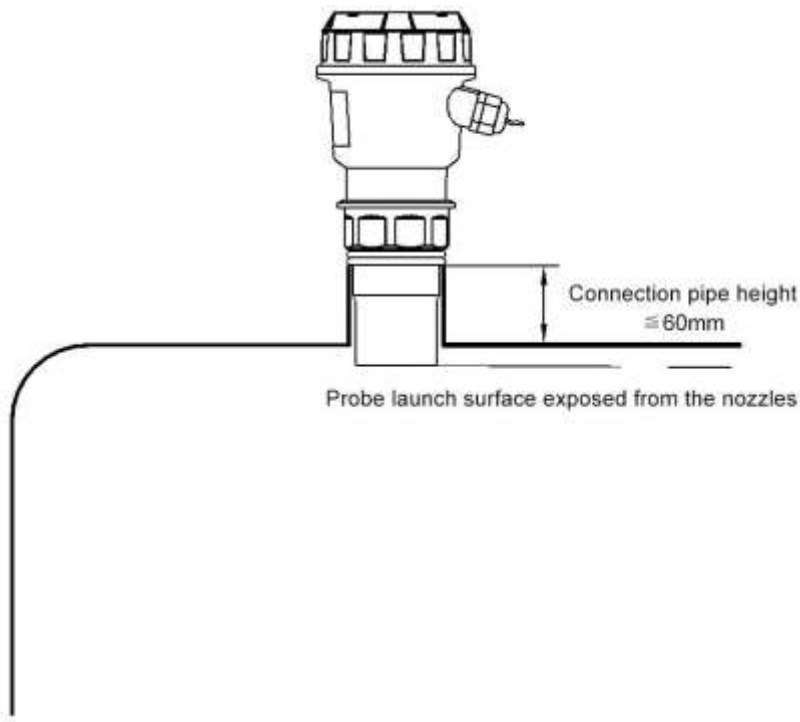
Flange installation - installed in a short nozzle



Flange type is installed on flat head tank without nozzle

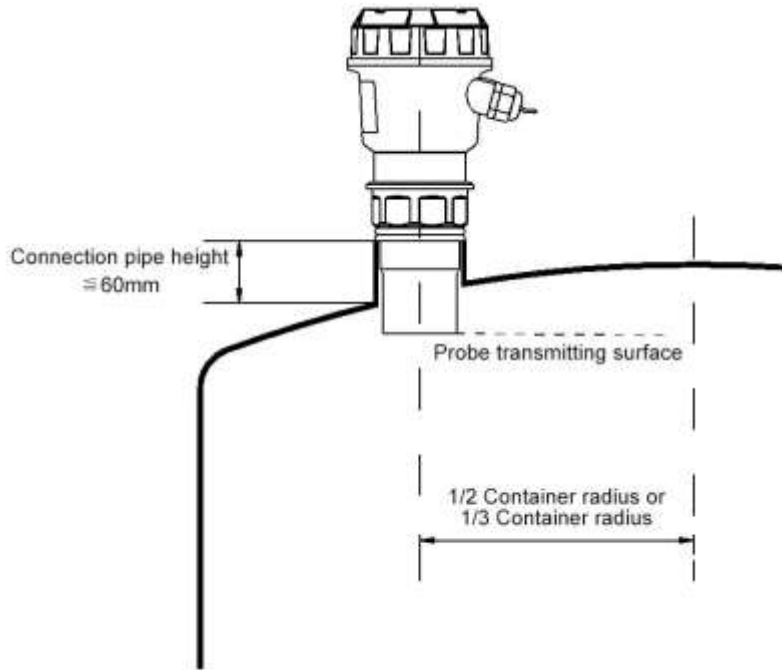


Flange type is installed on flat head tank without nozzle

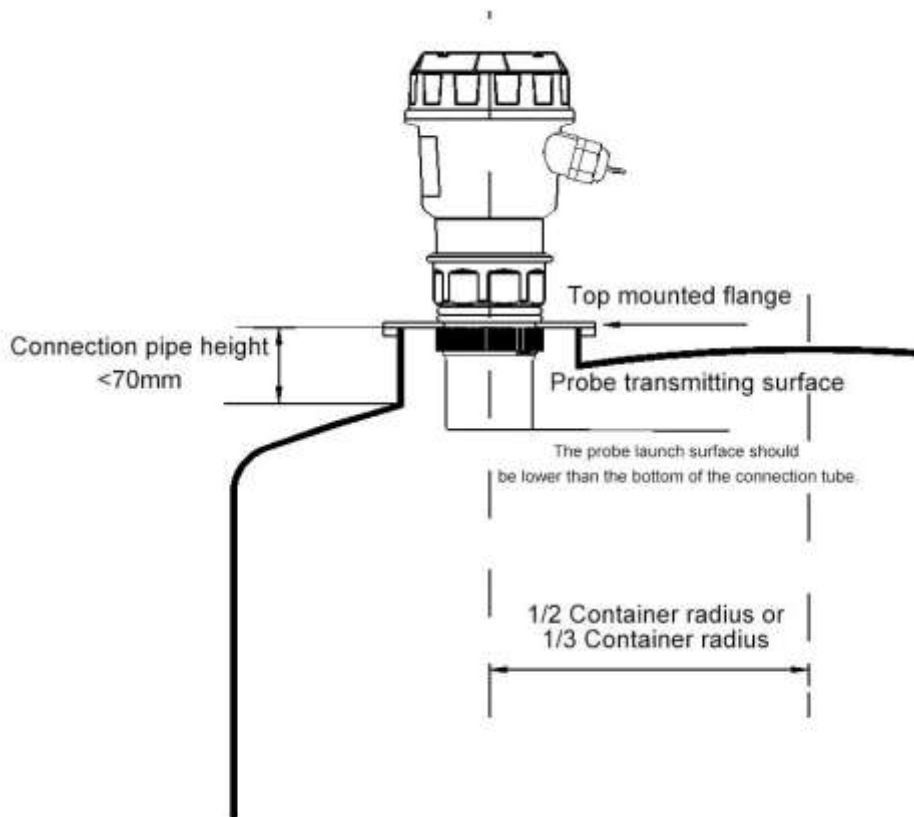


The probe is mounted on the threaded nozzle.

Arched tank top

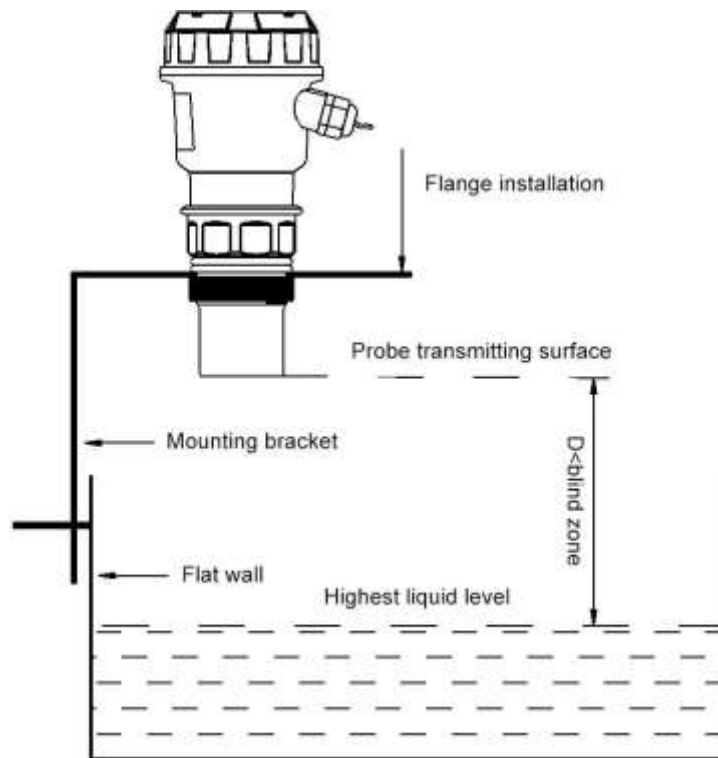


Installed on threaded nipple-dome roof

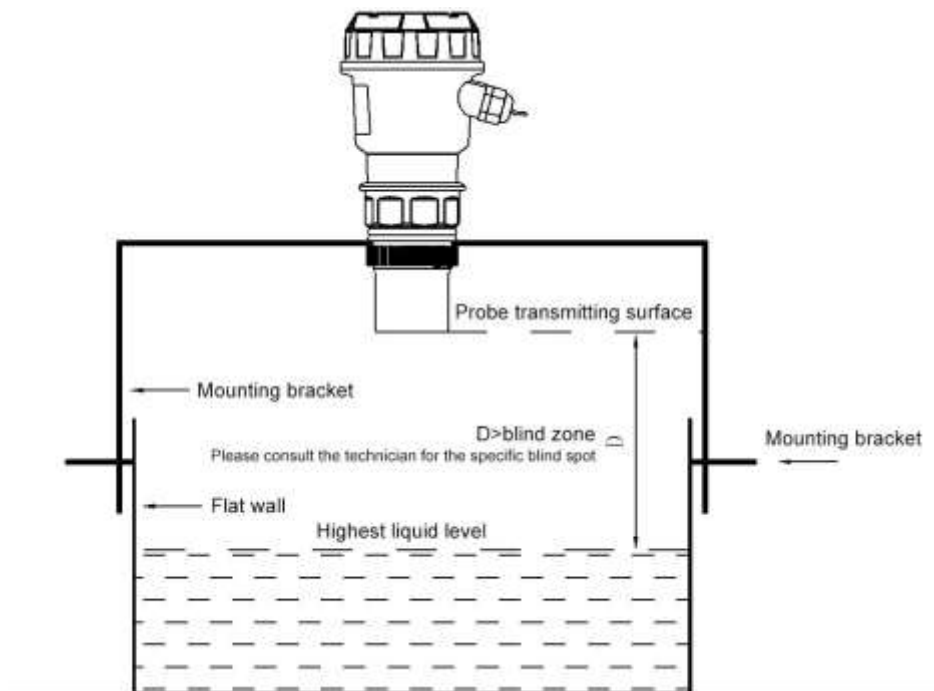


Installed on flange-dome roof

Open tank

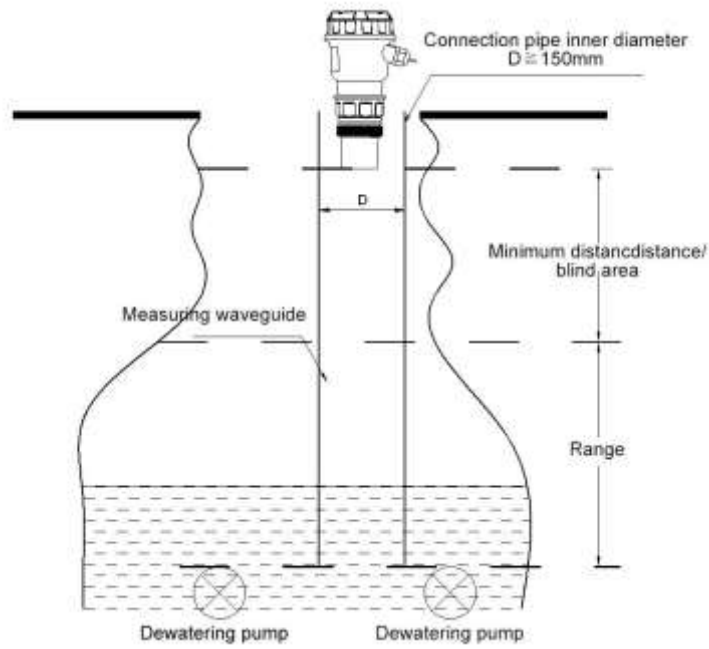


On the open tank - the top is mounted on one side bracket



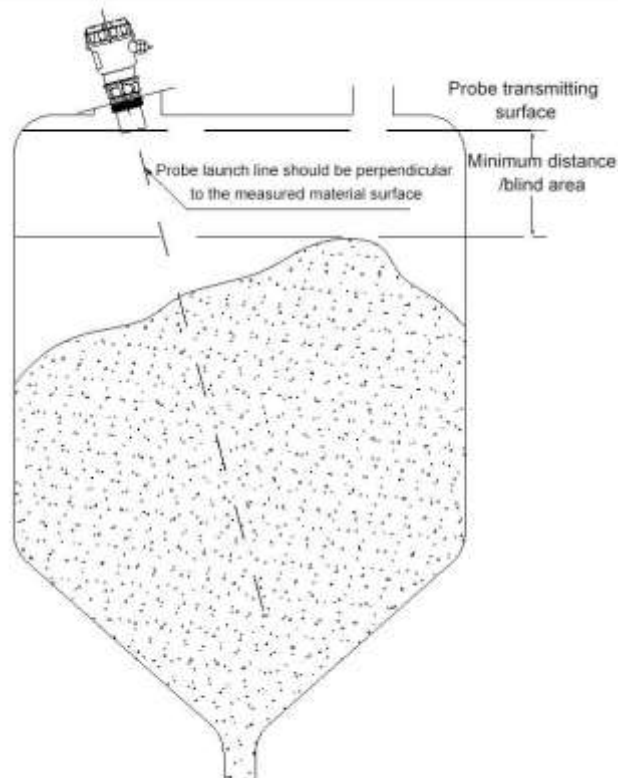
On Open tank - Top Center Bracket Installation

Drainage wells and ordin

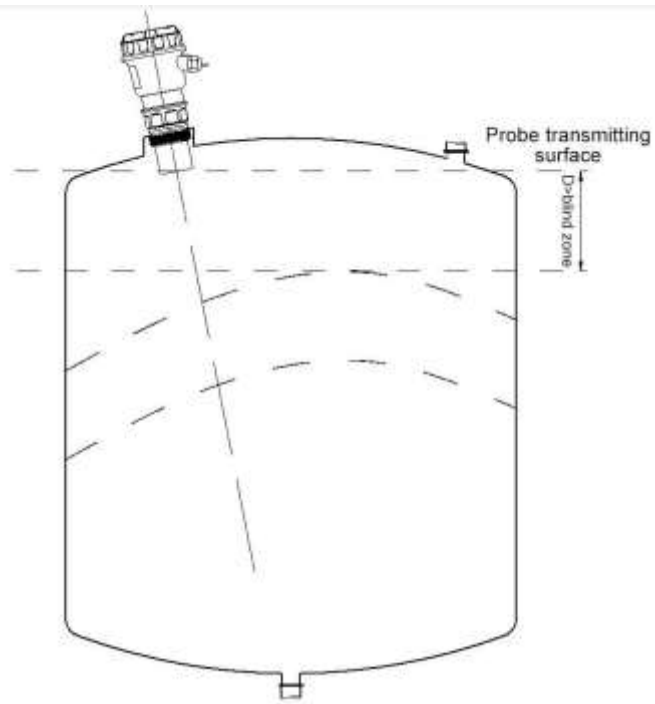


Nozzle used for measuring drainage well.

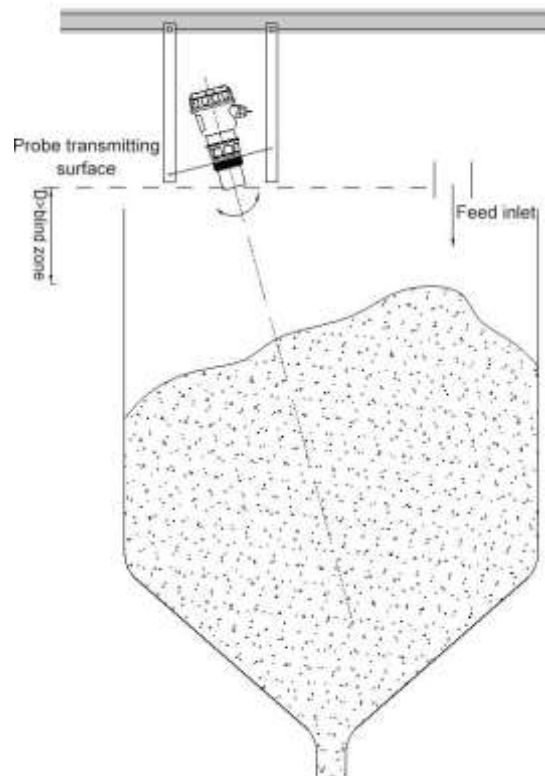
Solid measurement



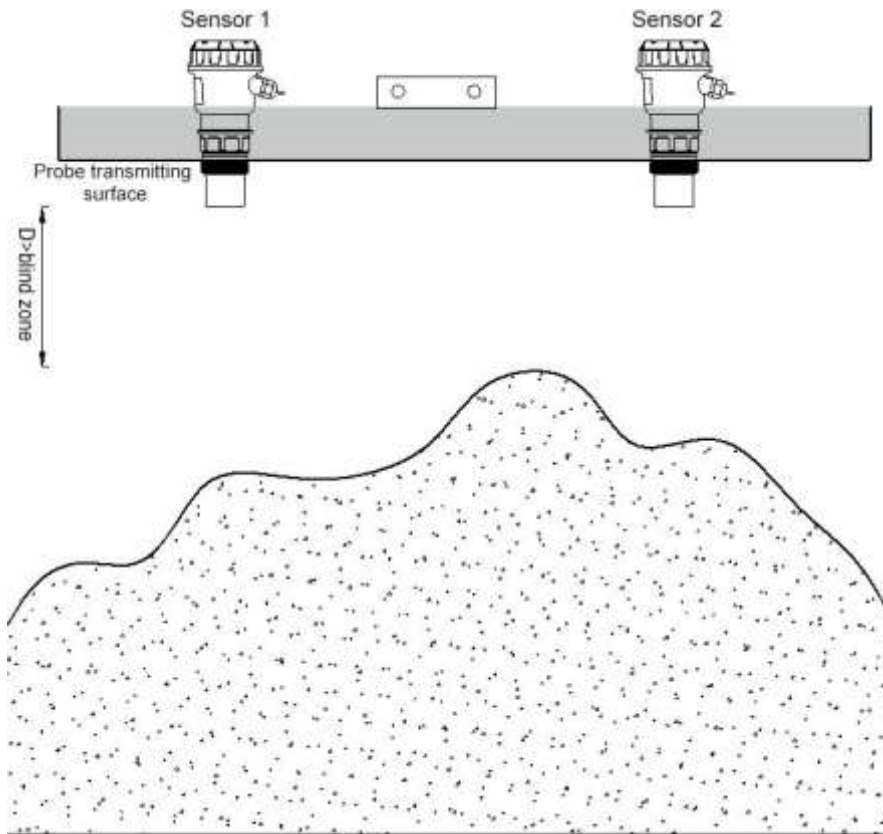
Installed on container flange



Threaded pipe installation



Installation of frame type



Measurement of open-air material pile-installation on lifting frame

Ordering Code

AI-ULMPC-C-NS-K-A1-WB-EA			Description
AI-ULMPC			
Measurement Range and Process Connection	C		5m , G2 Thread
	D		10m , G2 Thread
	L		15m , M78×2 Thread
Probe Material	NS		Plastic ABS
	N6		Polytetrafluoroethylene (PTFE)
Accuracy	K		0.5 Level
	H		0.3 Level
Output and Power Supply	A1		Two-Wire System 4-20mA
	SA		4-20mA , 24VDC
	SP		4-20mA+ Dual Group SPST+RS485 , 24VDC
	SG		4-20mA+ Dual Group SPST , 24VDC
	SE		4-20mA+RS485 , 24VDC
	SW		4-20mA+ Wireless NB-IoT , 24VDC
	SX		4-20mA+ Wireless NB-IoT+ Dual Group SPST+RS485 , 24VDC
	SY		4-20mA+ Wireless NB-IoT+ Dual Group SPST , 24VDC
SZ		4-20mA+ Wireless NB-IoT+RS485 , 24VDC	
Electrical Interface, Housing Material and Level of Protection		WB	M16×1.5 Cable Gland , Plastic ABS , IP65
Accessories	EA		L-Shaped Stainless Steel Mounting Bracket 0.8m
	EB		L-Shaped Stainless Steel Mounting Bracket 1.5m
	EC		Polycarbonate PC Protective Cover
	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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