



Recorder



Flow



Pressure



Temp



Analyzer



Level

Datasheet

Split Type Ultrasonic Level

Transmitter

SUP-ULS-B

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Datasheet

## Split Type Ultrasonic Level Transmitter SUP-ULS-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.

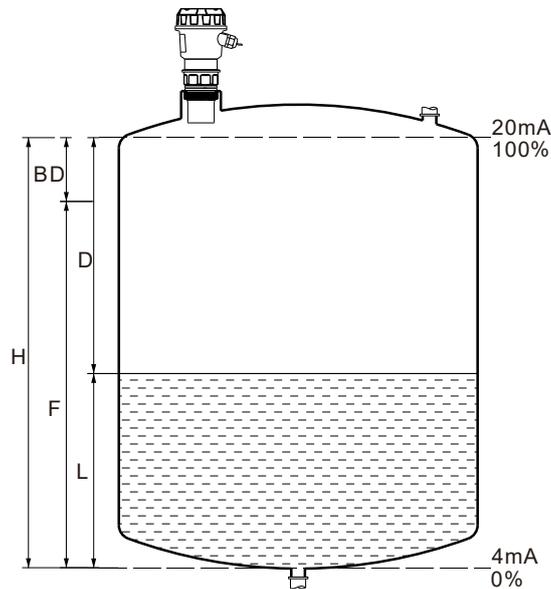


Figure 1 Measuring principle

BD: Blind distance

H: Installation height

F: Measuring range

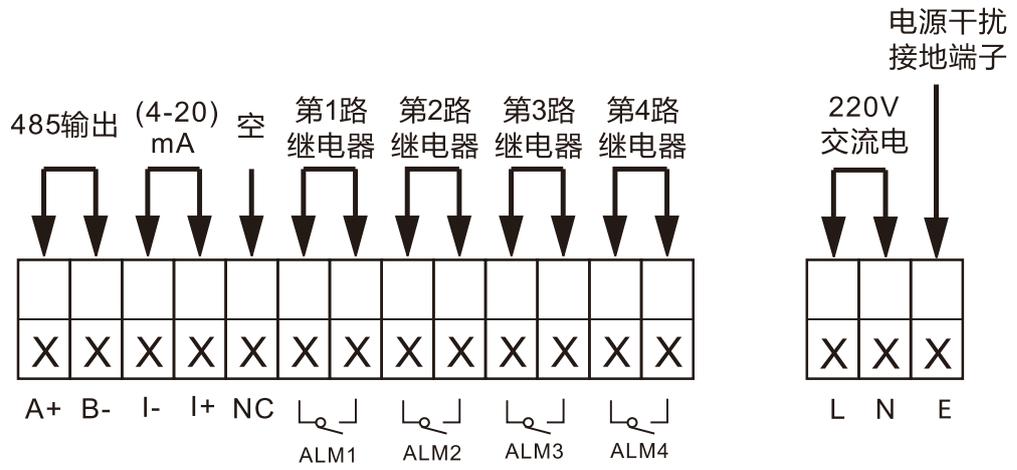
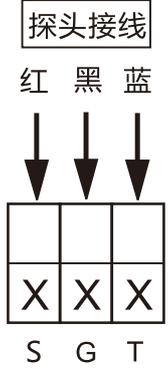
D: The distance from probe emitting surface to material surface

L: Level

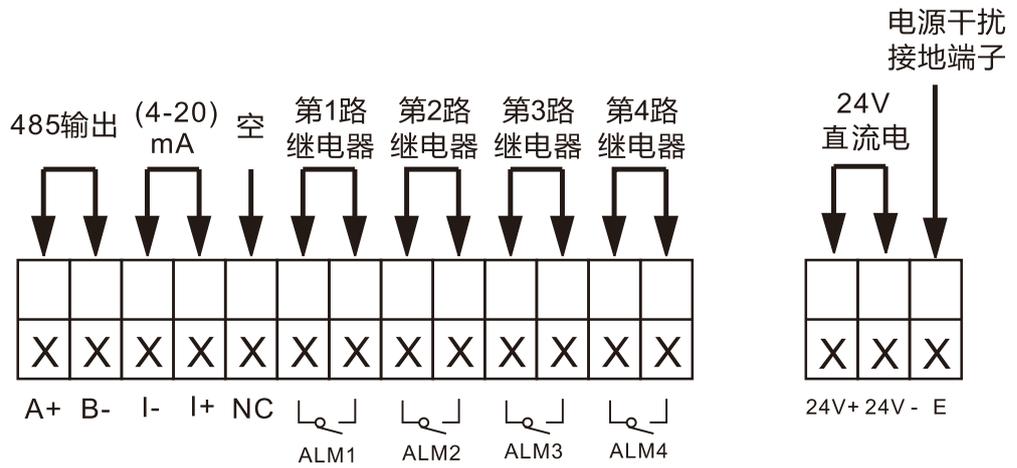
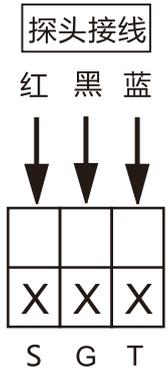
Parameters	
Measuring variable	Level / Distance
Power supply	(100~240)VAC,5W Max,50/60Hz; (18~28)VDC
Measuring range	( 0~5 ) m / ( 0~10 ) m / ( 0~15 ) m
Accuracy	±0.5% FS
Blind area	≤0.3m (5m)
	≤0.35m (10m)
	≤0.5m (15m)
Resolution	1mm or 0.1%FS (maximum)
Display	Monochrome LCD with resolution of 128 * 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

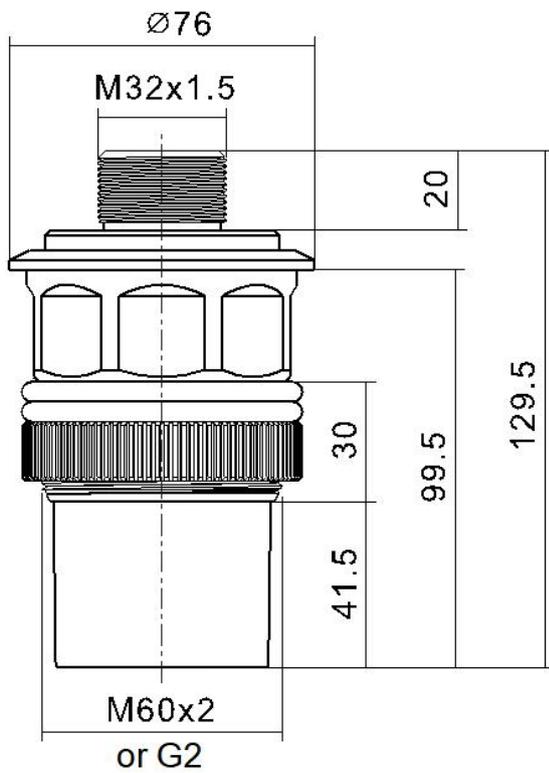
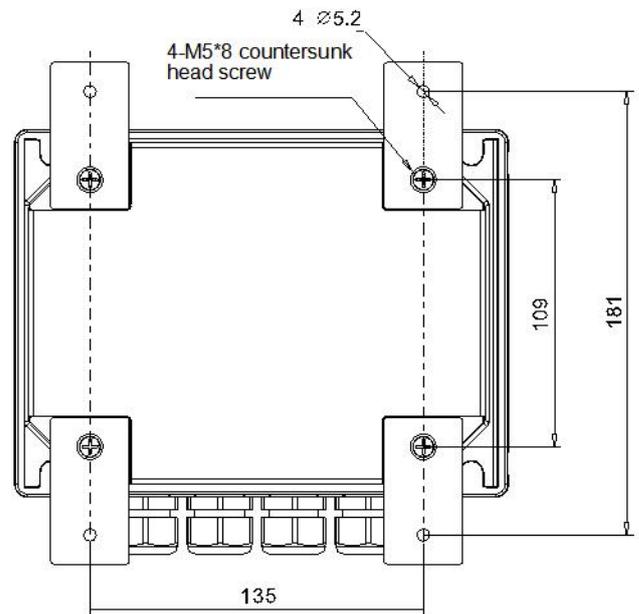
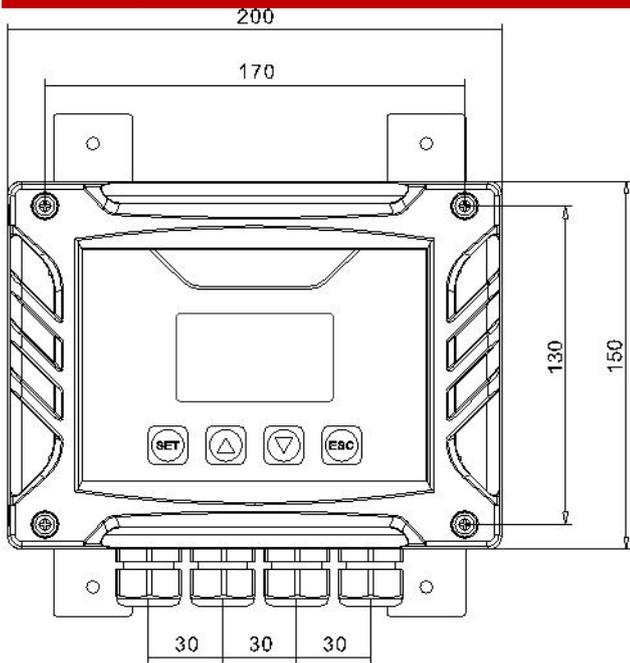


Remote typetype dimension (220V power supply)

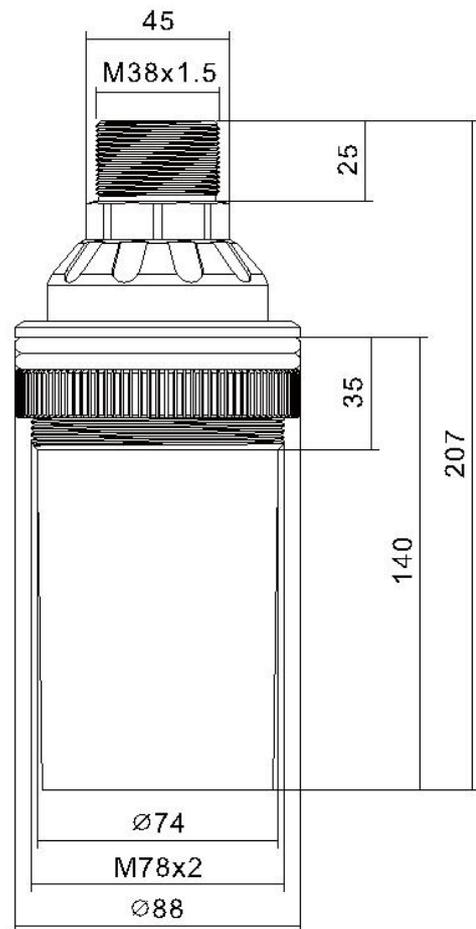


Remote typetype dimension (24V power supply)

Dimension



M60×2 Thread Sensor (5m/10m)

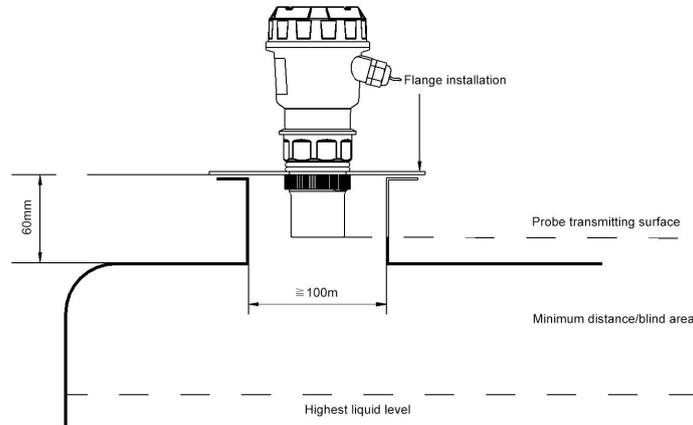


M78×2 Thread Sensor (15m)

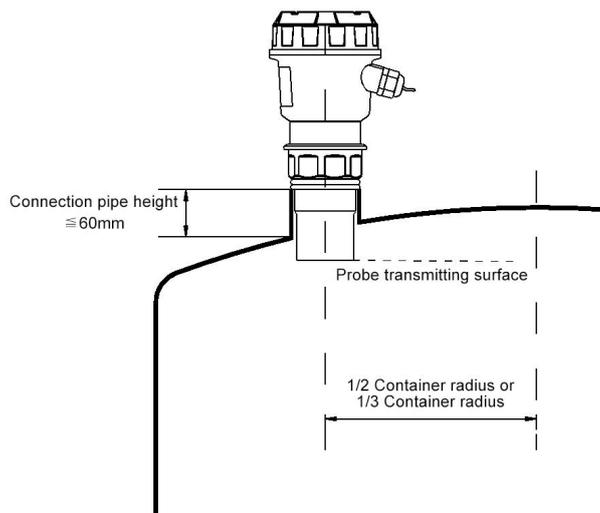
Installation

■ Installation

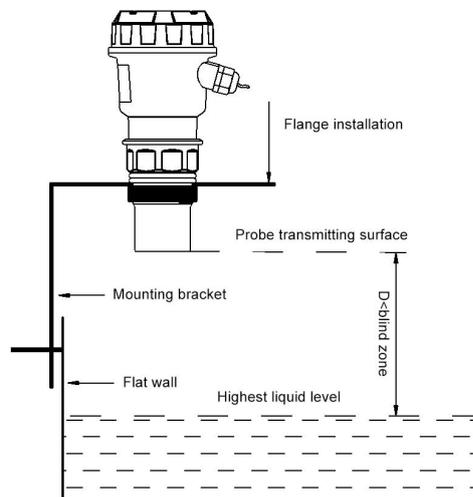
Flat-top tank



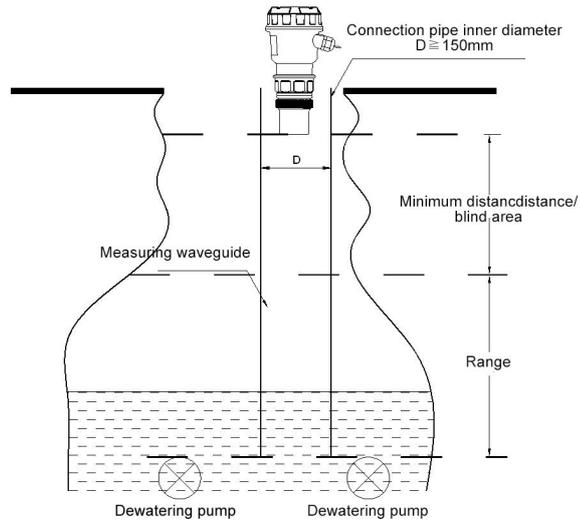
Arched tank top



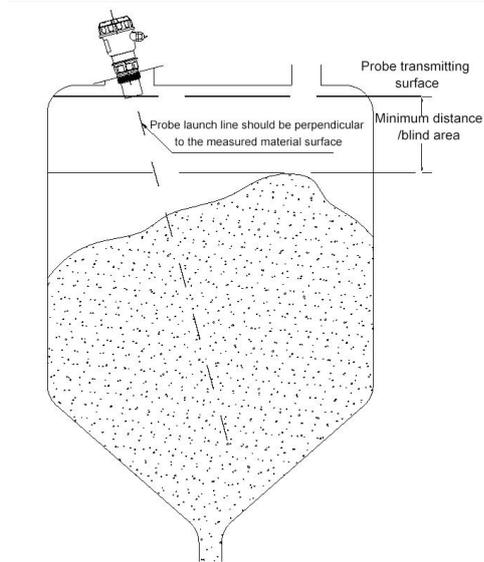
Open tank



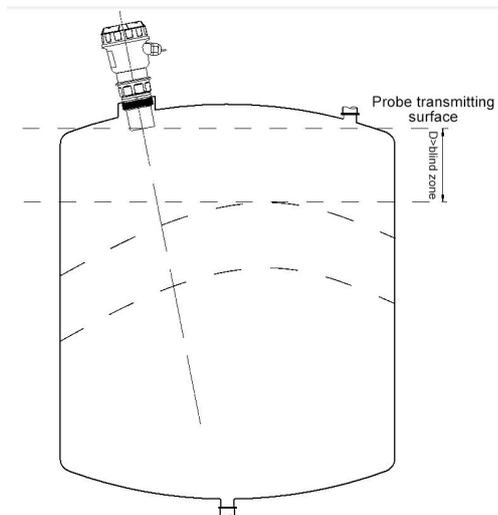
Drainage wells and ordinary wells



Flange mounting



Threaded pipe installation



Ordering code

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

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