



Special characteristics

- Non-contact measurement with high reliability for liquid and solid level
- Remote type design with flexible installation for complex environments
- Automatic temperature compensation with fault self-diagnosis technology

Features

- High accuracy: $\pm 0.3\%FS$ / $\pm 0.5\%FS$, resolution $< 1mm$
- Wide range: (0 ~ 5)m / (0 ~ 10)m / (0 ~ 15)m
- Multiple outputs: (4 ~ 20)mA, RS485, relay alarm
- Wide temperature range: $-20 \sim +80^{\circ}C$

Measuring principle

The ultrasonic level meter operates based on the ultrasonic time-of-flight principle, where the distance to the material surface is determined by measuring the travel time of the reflected ultrasonic pulse, which is proportional to the liquid or material level.



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.

Preferred areas of use are



Widely used for accurate level measurement of liquids and solids in industrial process control, water treatment, and chemical storage applications.

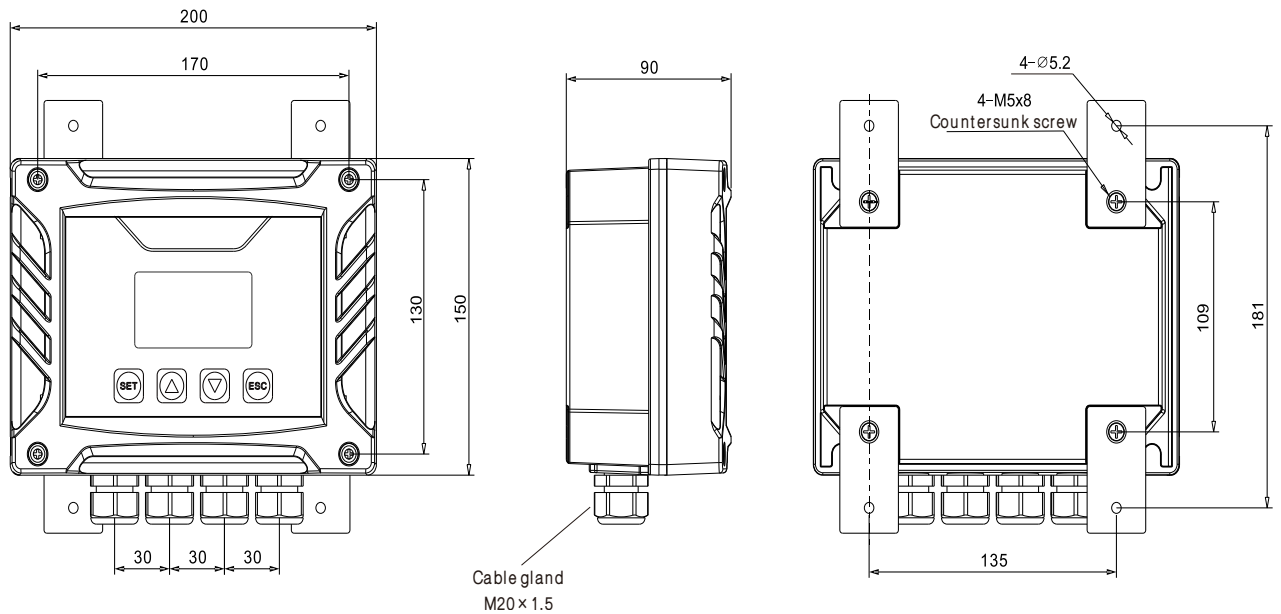
Material and test



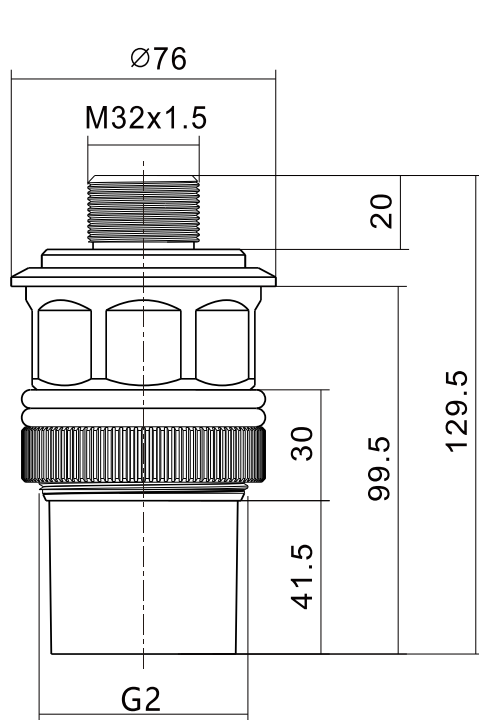
Parameters

Type	Remote type Integrated type
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	±0.3%FS / ±0.5%FS
Blocking distance	≤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)

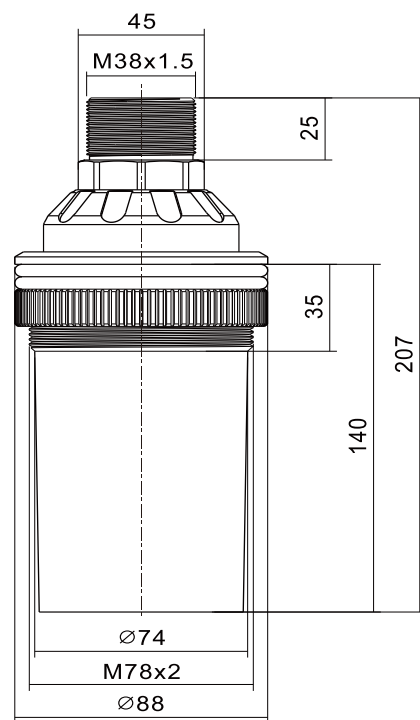
■ Dimension



Dimensions of the host



G2 Thread Sensor (5m/10m)



M78x2 Thread Sensor (15m)

Remote type dimension

■ Ordering Code

FK-ULS-B-C-NS-K-SA-WE-10-EA														Description
ULS-B	-	-	-	-	-	-	-	-	-	-	-	-	-	Split Type Ultrasonic Level Transmitter
Measurement Range and Thread Type	C													5m, G2 thread
	D													10m, G2 thread
	L													15m, M78×2 thread
Probe Material		NS												Plastic ABS(Standard Probe)
		N6												Polytetrafluoroethylene (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
				SR										4-20mA+Dual SPST+RS485, 220VAC
				ST										4-20mA+Quad SPST+RS485, 220VAC
Electrical Interface, Housing Material, and Ingress Protection					WE									M20×1.5 Cable Gland, Plastic ABS, IP65(Meter head IP65; Probe IP68)
Probe Cable Length						10								10m
						15								15m
						20								20m

	30								30m
	XX								Other(≤50m. The wiring environment should be far away from strong electrical sites with interference.)
Accessories	EA								L-shaped stainless steel mounting bracket 0.8m
	EB								L-shaped stainless steel mounting bracket 1.5m(Only 15m available)
	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