



Centered on Quality
Based on Service

Ultrasonic flowmeter

Precision instruments · Accurate measurement

Anhui Jujie Automation Technology Co., Ltd.

I About Us



10⁺

Over 10 years of independent research and development and production experience.

2500⁺

2,500+ square meters of modern offices and workshops

Anhui Jujie Automation Technology Co., Ltd. is located in Wuhu, Anhui Province, the city of makers. After ten years, Jujie Automation has continued to deepen its presence in the field of industrial automation. The annual production and sales volume of its newly launched liquid turbine flowmeters is over 10,000 units, and its paperless recording instruments have obtained multiple patent certifications and third-party certification tests. Jujie Automation carefully grasps every detail and is committed to providing users with considerate products and services.



Since its establishment, the company has applied for more than 10 patents, 8 software copyrights, and 3 registered trademarks. In 2023, the company passed the honorary titles of National Science and Technology Small and Medium Enterprises and National High-tech Enterprises. The company has also passed various certifications such as SGS, TUV, CE, CPA, ISO9001, ISO14001, ISO45001 and explosion-proof certifications for multiple products, laying a solid foundation for the development of the brand.



●● Calibration Device



● Liquid flow calibration device

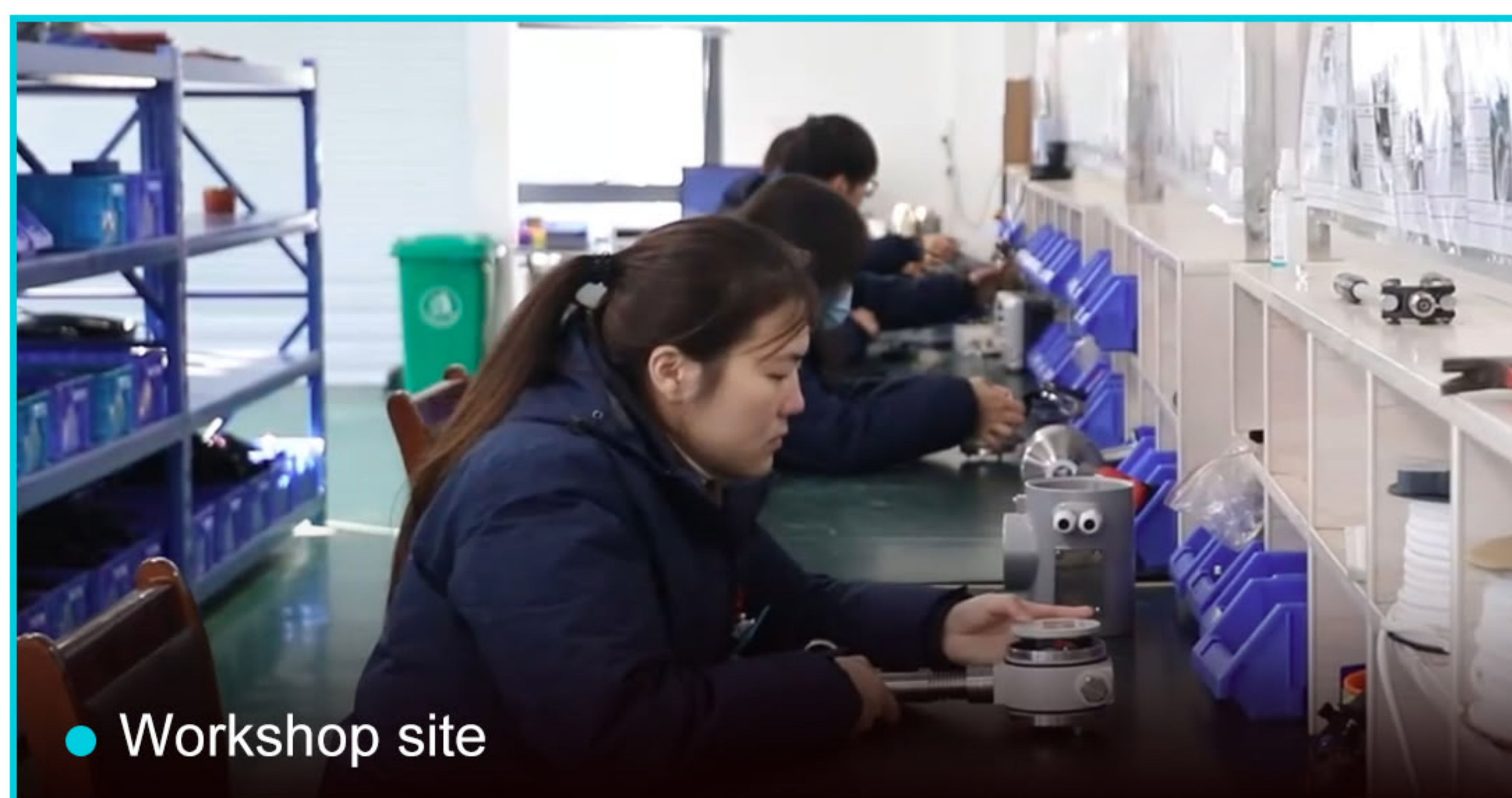


● Small-diameter liquid flow calibration device

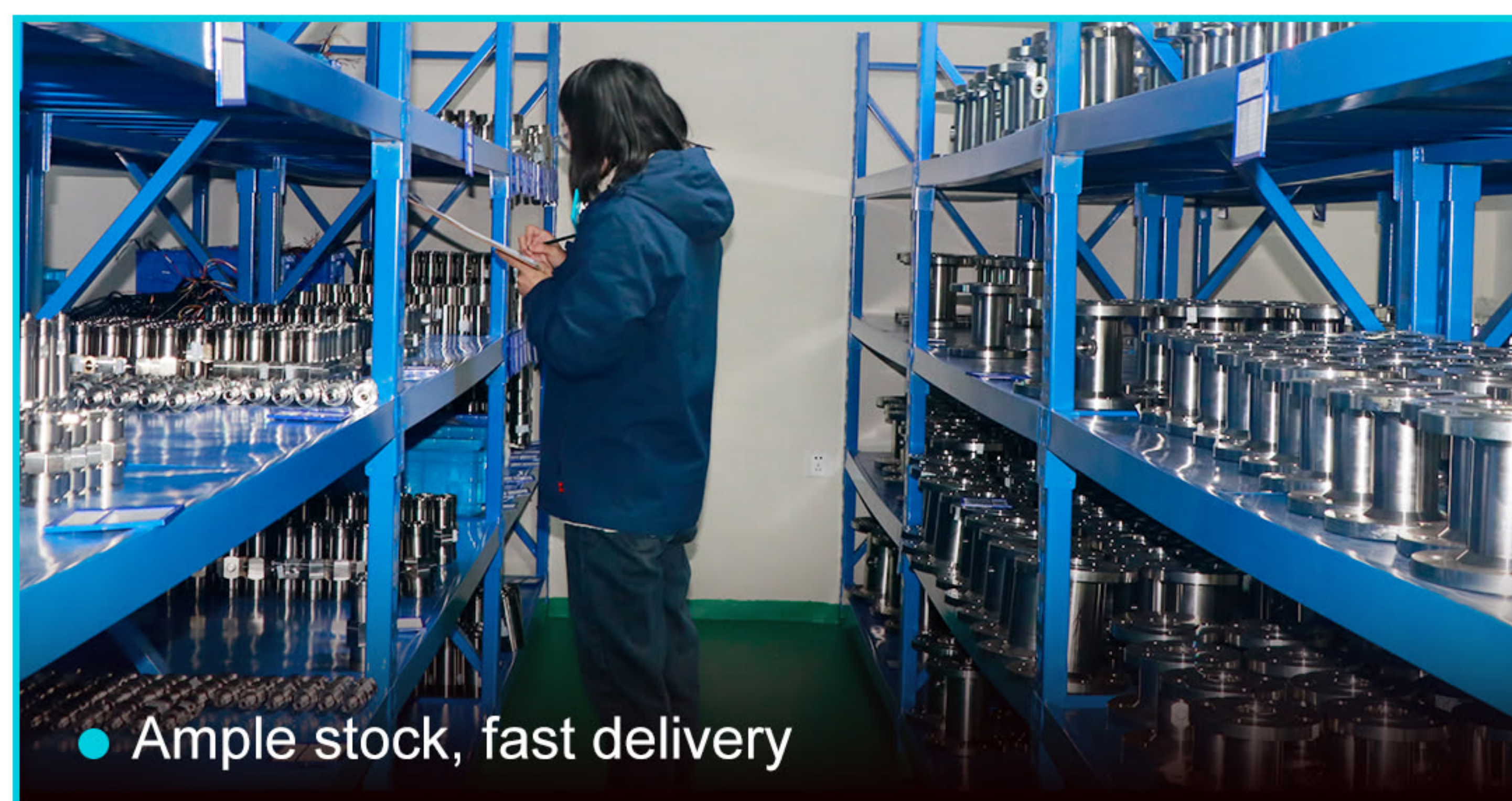


● Gas flow calibration device

●● Factory Photos



● Workshop site



● Ample stock, fast delivery

The 2,500-square-meter factory is equipped with various testing and calibration devices to ensure the quality of our products. It also has professional production and assembly lines and a complete warehousing system to protect our products.

Product Introduction

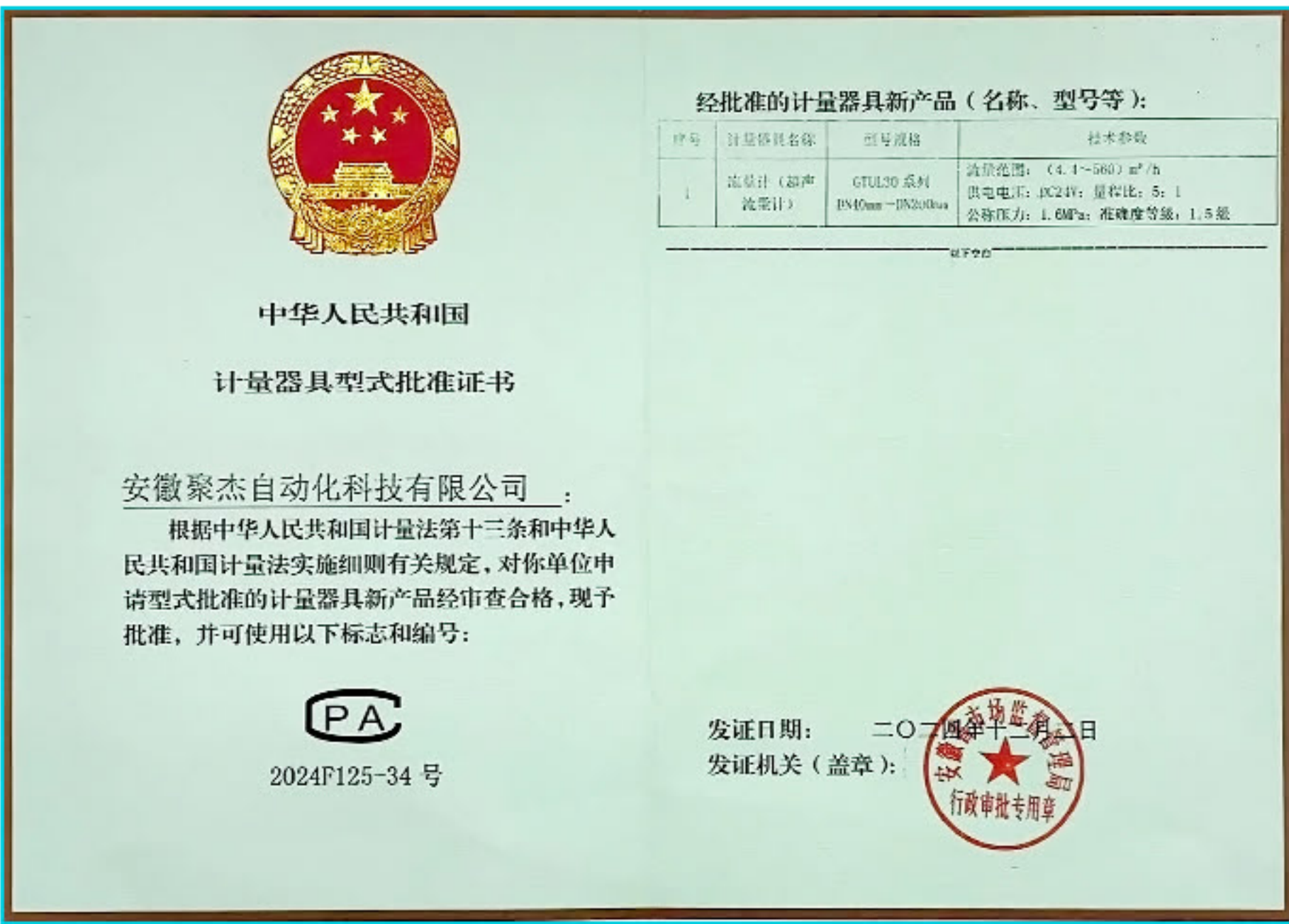
Product Introduction – Ultrasonic Flow Meter



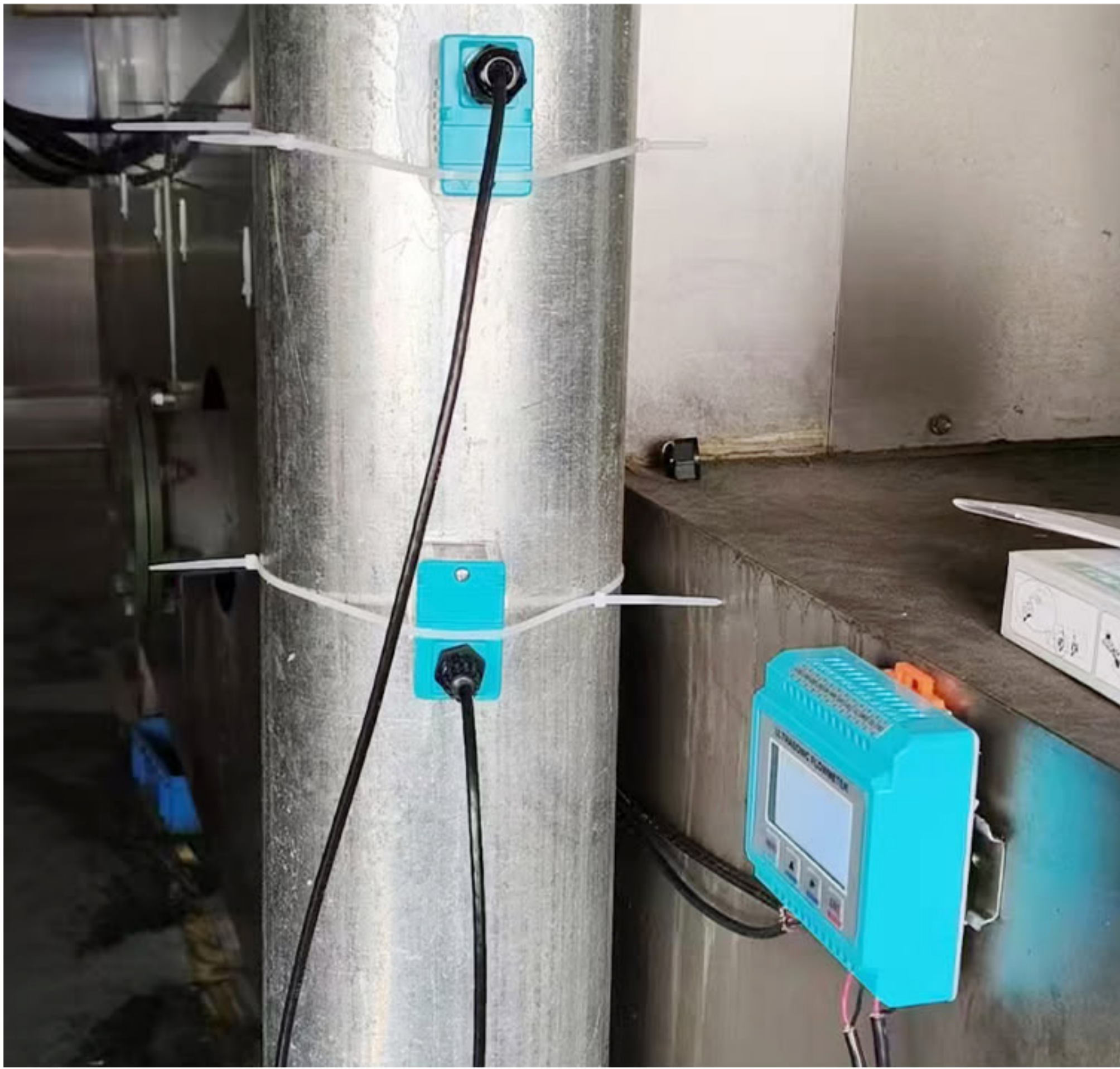
An ultrasonic flow meter is an instrument that measures fluid flow based on the propagation characteristics of ultrasonic waves. It requires no direct contact with the fluid (or only minimal contact), offering advantages such as non-invasiveness, high accuracy, no pressure loss, and wide applicability. It is widely used in petroleum, chemical, water conservancy, municipal water supply, and energy industries. Ultrasonic flow meters require no pipe breaking or production shutdown during installation; the sensor is externally clamped, and only pipe parameters need to be input.

When selecting an installation point, the following factors must be considered: full pipe, flow stability, scaling, temperature, pressure, and interference. The measured medium should be a single, stable liquid such as water, seawater, sewage, or alcohol, and the measured pipe material should be a homogeneous and dense material such as steel, stainless steel, cast iron, or PVC/fiberglass.

●● Ultrasonic Flow Meter - Product Qualification



●● Flow Meter Application Scenarios



●● Technical Parameters

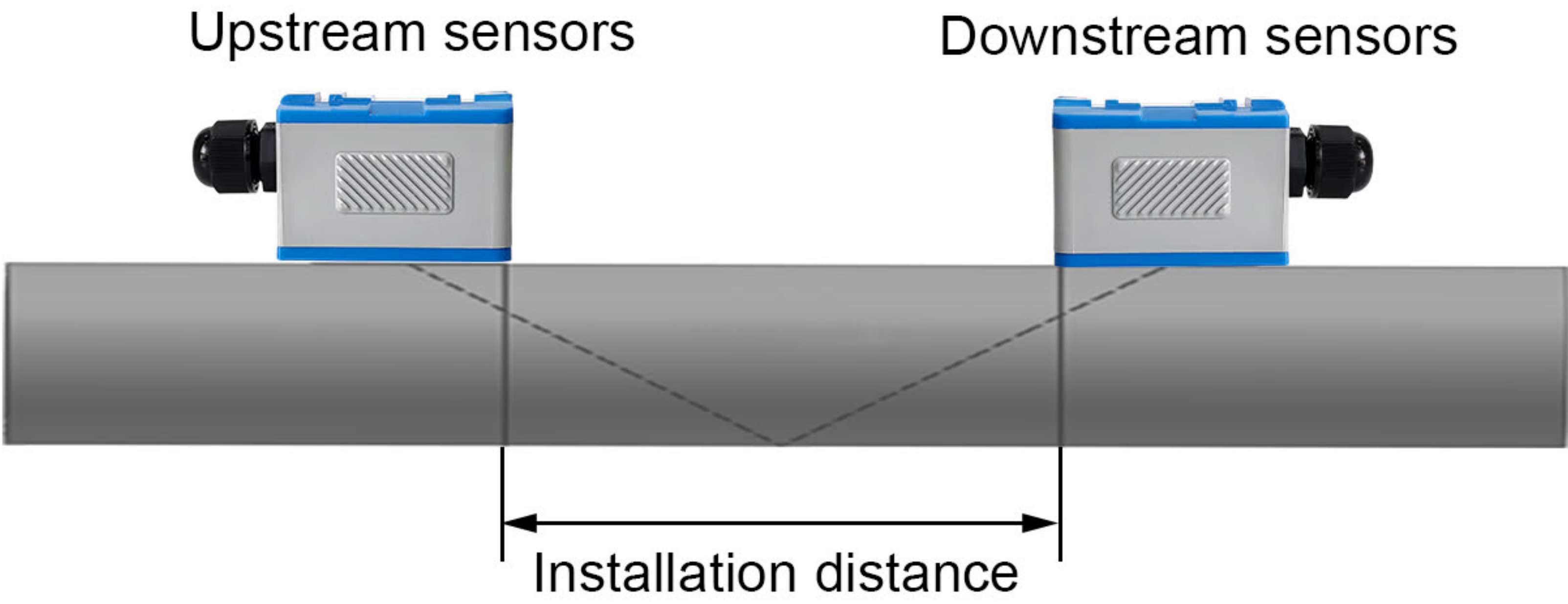
Measurement Accuracy	Level 1.5
Repeatability	0.2%
Flow Rate Range	DN200 and below (inclusive): 0.3-4 m/s; DN200 and above: 0.3-6 m/s
Measurement Principle	Based on the time difference principle of ultrasonic wave propagation, dual CPUs work in parallel, 4-byte floating-point operations
Measurement Cycle	500ms (twice per second)
Power Supply	Isolated DC8-36V or AC85-264V
Signal Input	3-channel 4-20mA analog input, capable of receiving signals such as pressure, liquid level, and temperature; 2 channels of three-wire platinum resistance 1 standard isolated RS485 output, 1 isolated 4-20mA or 0-20mA output (with active or passive options available)
Signal Output	Optional HART protocol; Dual-channel isolated OCT output; 1-way bidirectional serial, universal interface for peripherals, capable of connecting 4-20mA, frequency signals, thermal printers, data recorders, etc.
Communication Protocol	Modbus RTU protocol
Power Consumption	Operating current 50mA (without keyboard or buzzer connection, no sound)
Sensor	External, plug-in, and conduit-type installations

Sensor Specifications

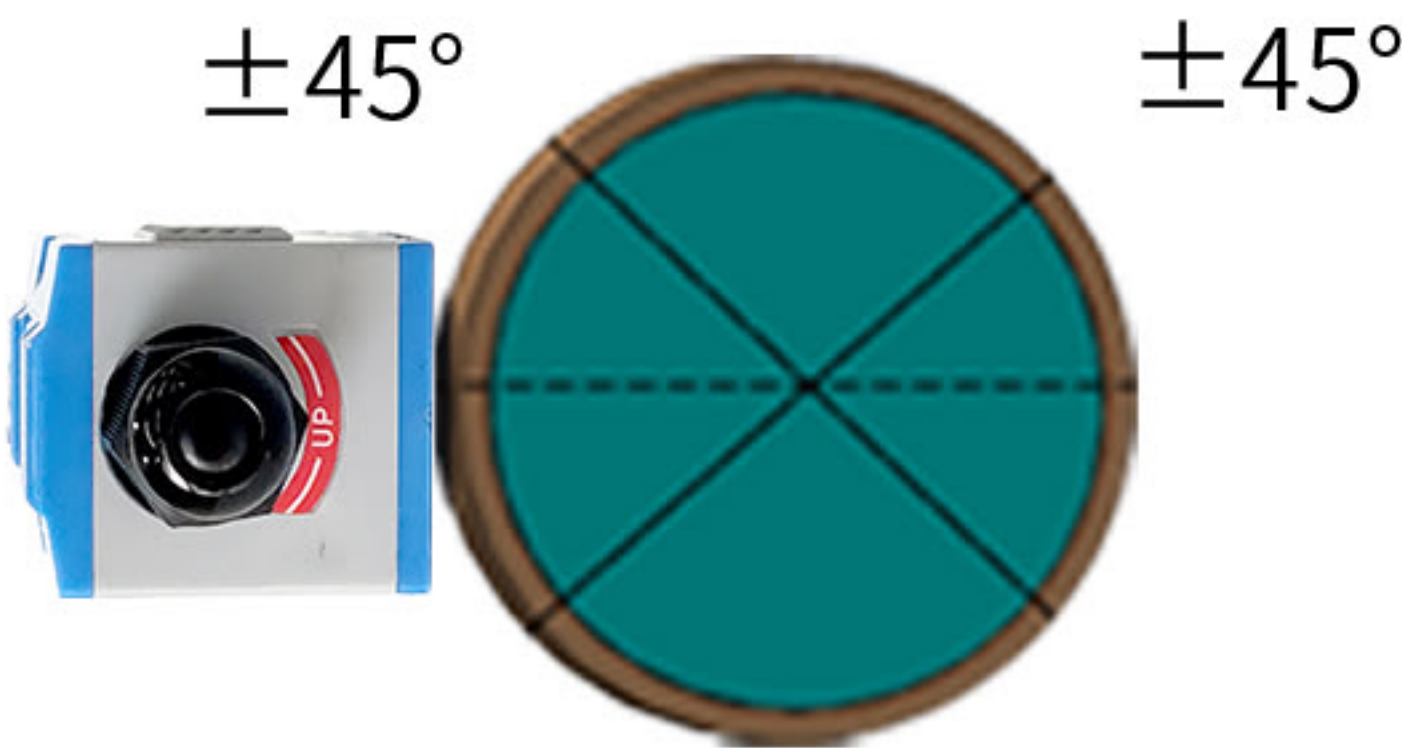
Classification		Picture	Applicable Pipe Diameter	Fluid Temperature
External Clamp Sensor	21st Edition - Normal Temperature Type		Small DN15-DN100	-30~70℃
			Medium DN50-DN700	
			Large DN300-DN6000	
	23st Edition - Normal Temperature Type		Small DN15-DN100	-30~70℃
			Medium DN50-DN700	
			Large DN300-DN6000	
	High Temperature Type		Small DN15-DN100	-30~120℃
			Medium DN50-DN700	
			Large DN300-DN6000	
Insertion Sensor			Standard/Extended Type DN50-DN6000	-30~160℃
			Parallel Type DN200-DN6000	
Pipe Section	Small caliber		Threaded/Flanged/Clamped Type DN15-DN40	-30~120℃
	large caliber		Threaded/Flanged Type DN50-DN2000	

Sensor Installation Method

V method The installation method is relatively standard, easy to use, and accurate. During installation, the two sensors are horizontally aligned, and their center line is horizontal with the pipe axis. The pipe diameter range that can be measured is approximately DN15-DN40mm.



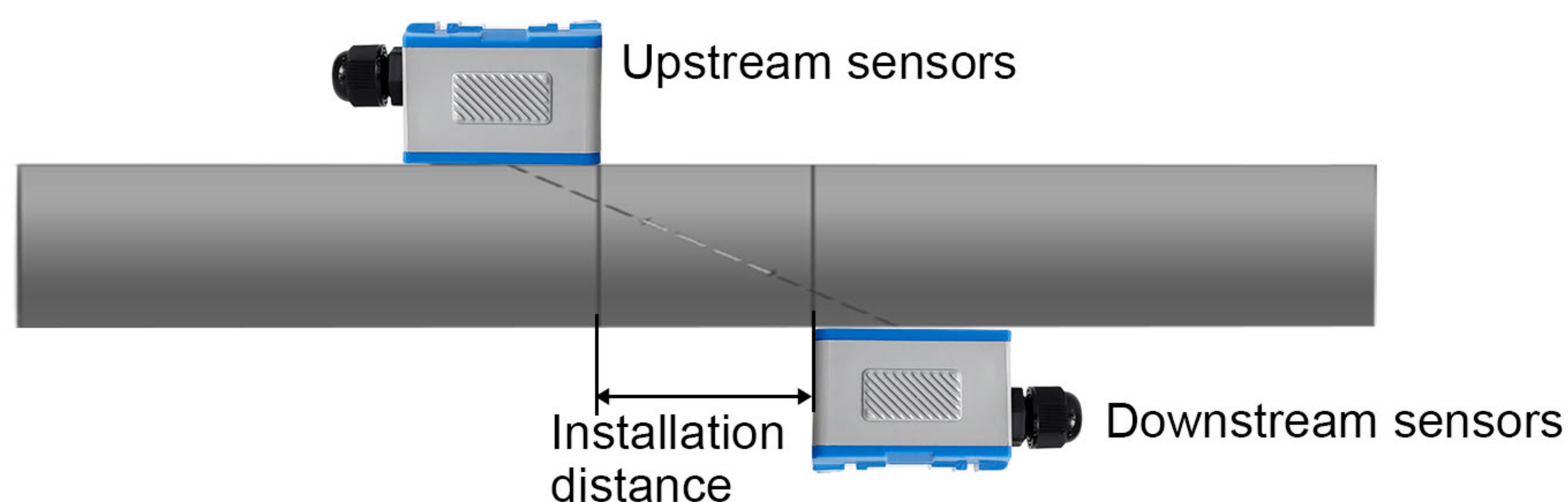
V-shaped front view



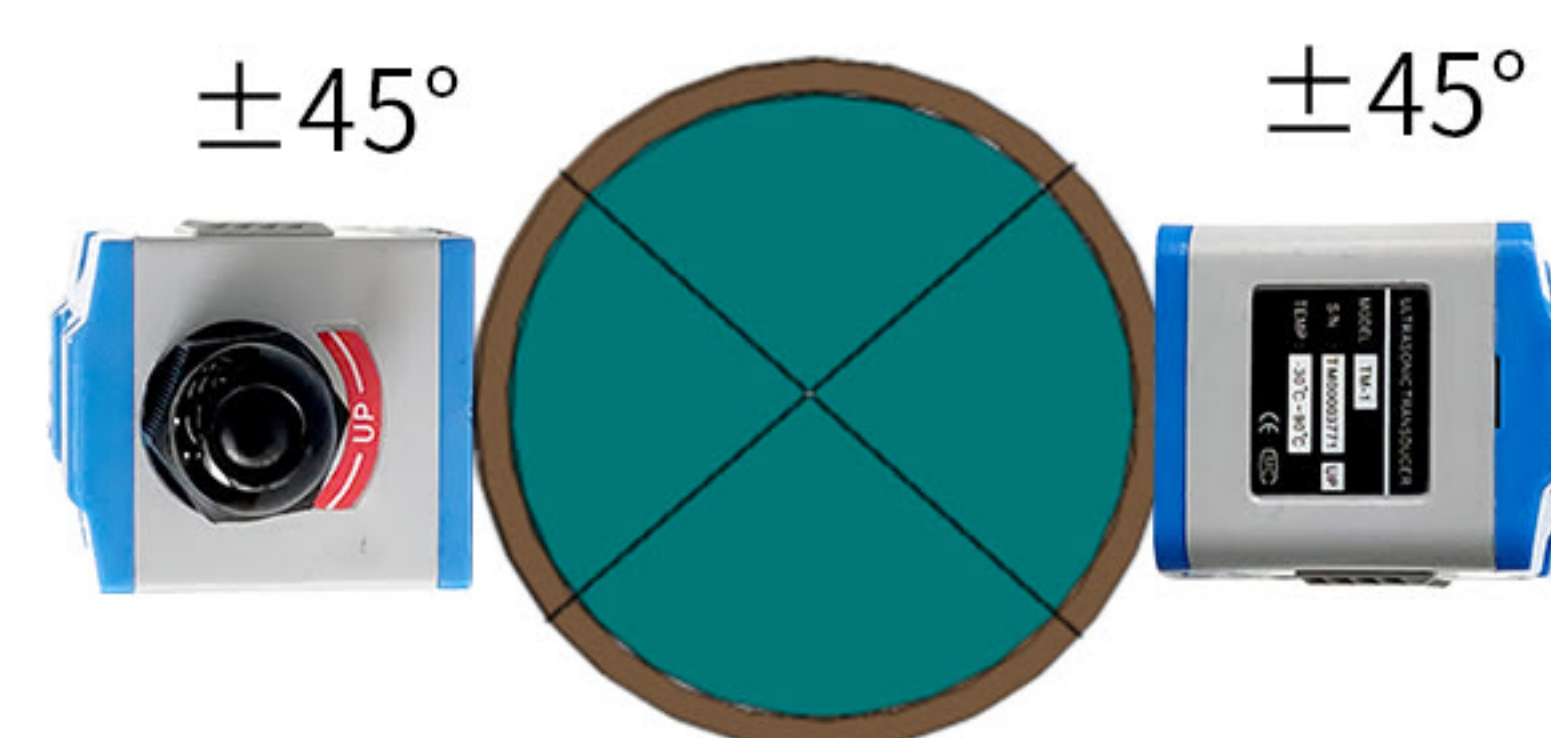
V-section diagram

Z method

This is a commonly used installation method, characterized by direct ultrasonic wave transmission within the pipe without reflection (known as single-path), resulting in minimal signal attenuation and loss. It can measure pipe diameters from DN50 to DN6000mm. In practical installation, it is recommended to use the Z-method for pipes with a diameter of 200mm or more.

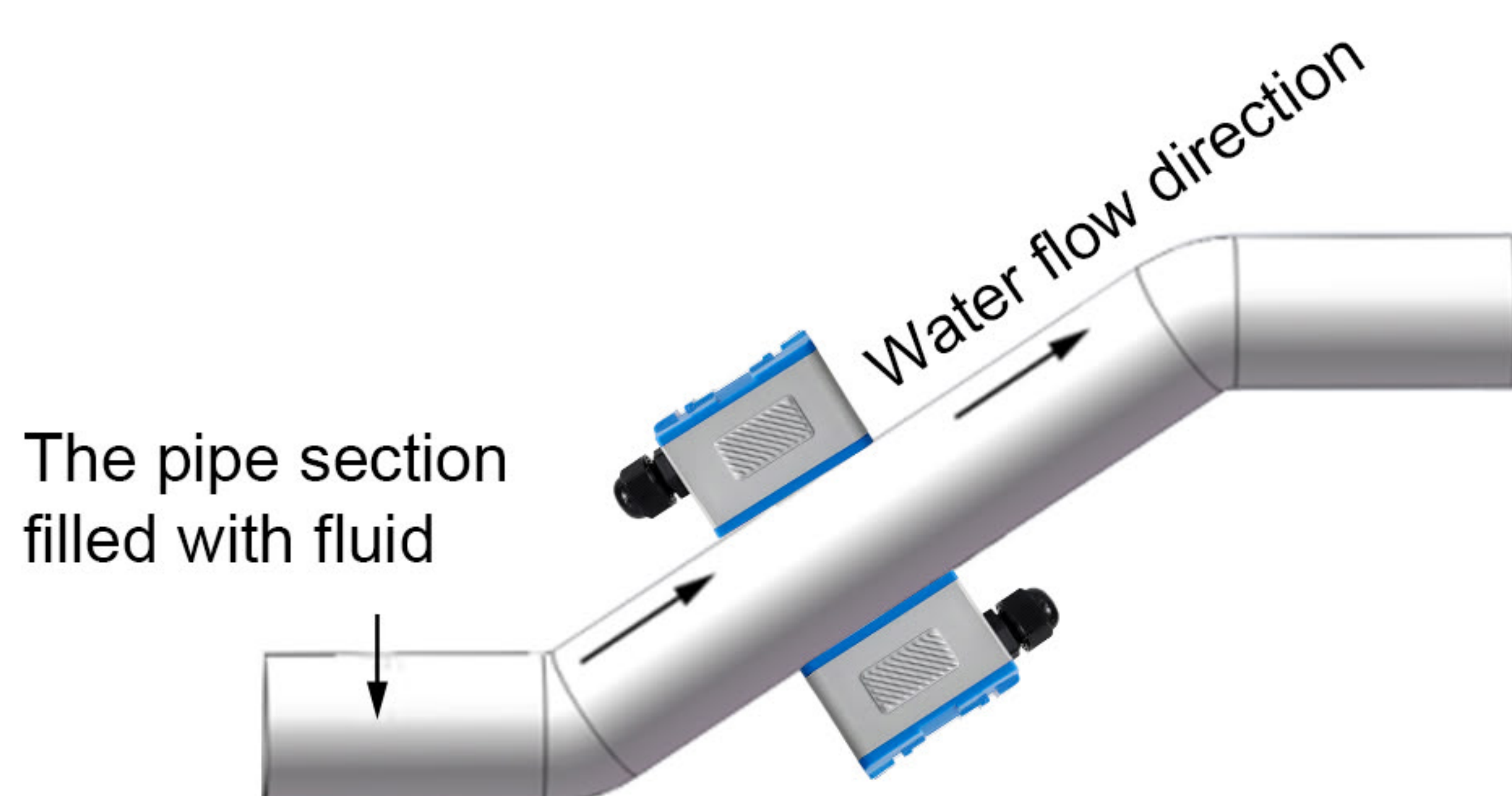


V-shaped front view



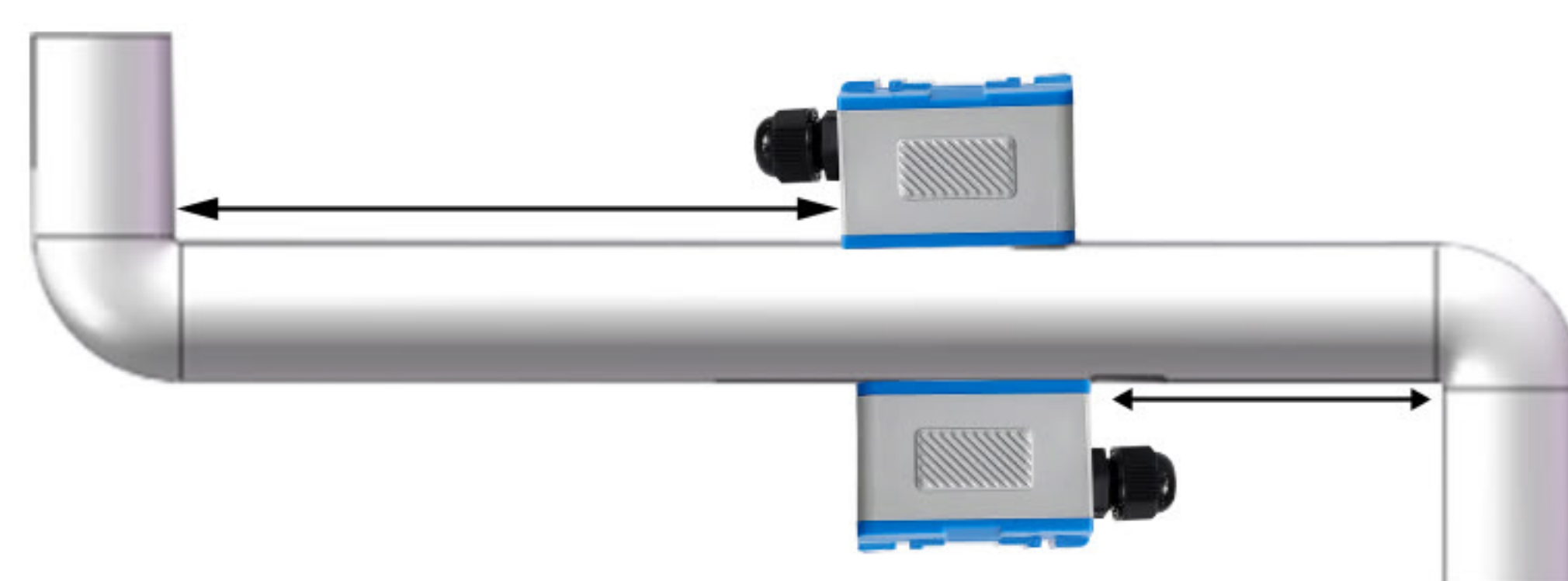
V-section diagram

Sensor Installation Guide



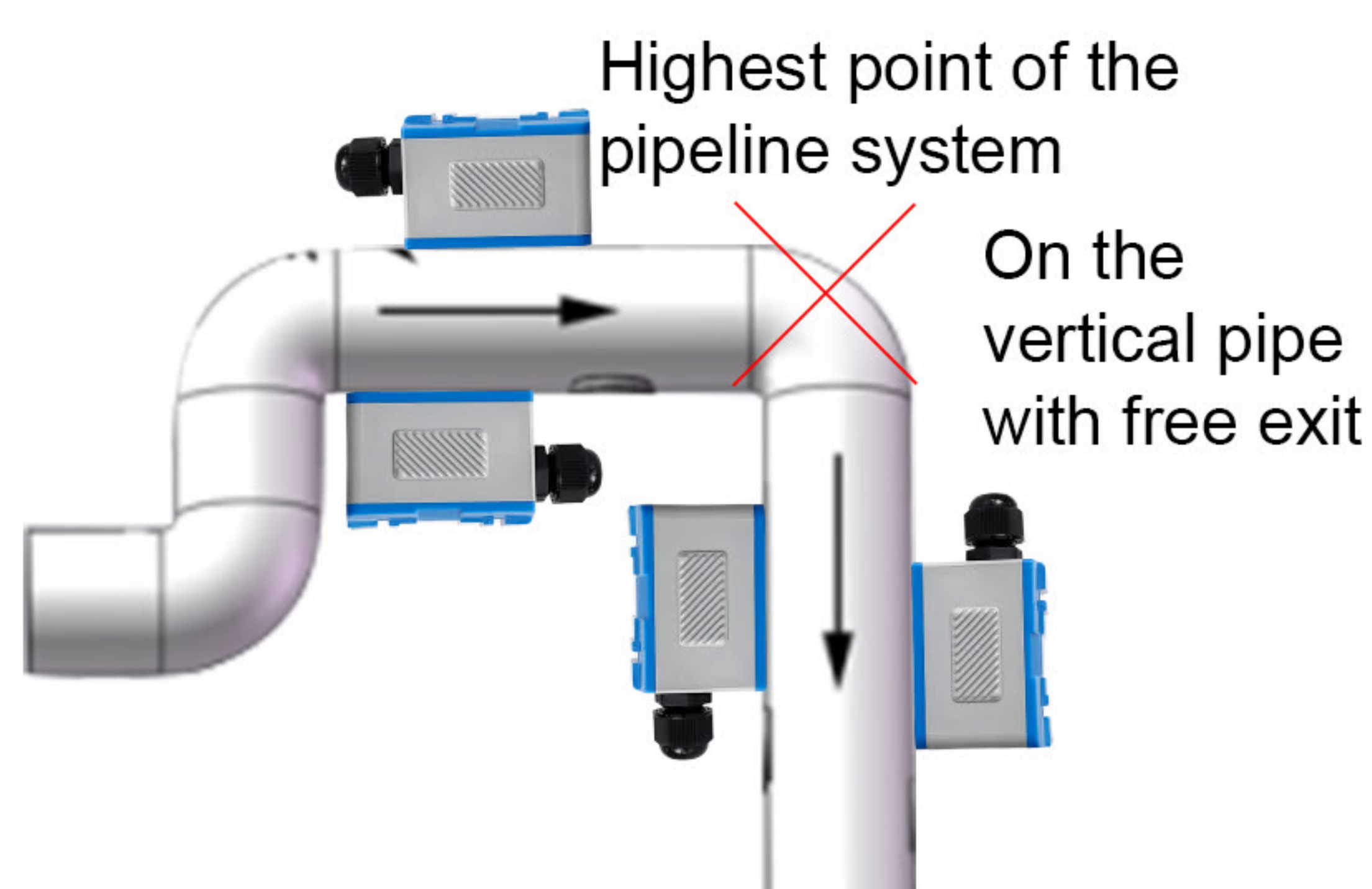
1. Select a location where the pipe is full, such as a straight pipe section (fluid flowing upwards) or a horizontal pipe section.

Pipe sections larger than 10 times the straight pipe diameter

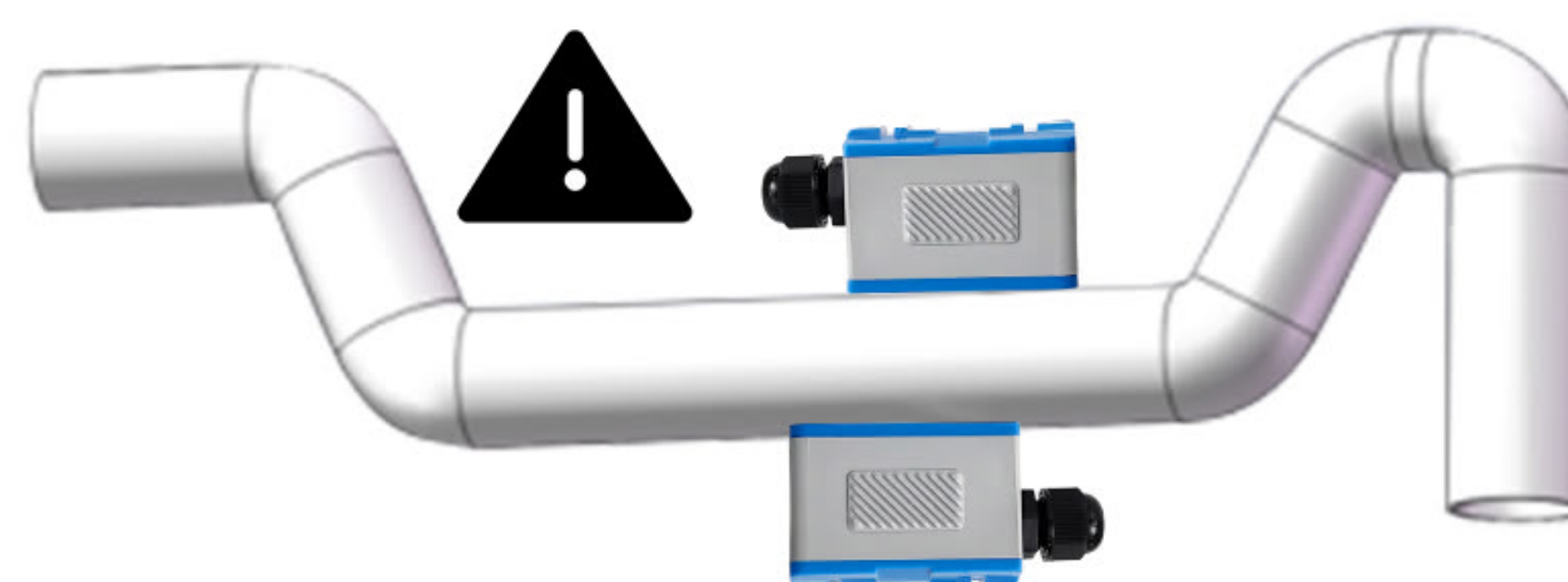


Pipe sections larger than 5 times the straight pipe diameter

2. The installation point should be selected on a straight pipe section with no valves, elbows, reducers, or other obstructions within a range of at least 10 times the straight pipe diameter upstream and at least 5 times the straight pipe diameter downstream. The installation point should be located far away from sources of interference such as valves, pumps, high-voltage electricity, and frequency converters.



3. Avoid installation at the highest point of the piping system or on vertical pipes with free outlets (where fluid flows downwards).



4. For open or partially full pipes, the flow meter should be installed at the U-shaped pipe section.

5. The temperature and pressure at the installation point should be within the sensor's operating range;

6. Fully consider the scaling condition of the pipe wall: Select a pipe without scaling for installation. If this is not possible, consider scaling as a lining to achieve better measurement accuracy;

7. Both sensors must be installed horizontally on the pipe's axial plane, within $\pm 45^\circ$ of the horizontal position on the axial plane, to prevent incomplete filling, air bubbles, or sedimentation at the bottom from affecting normal sensor measurement. If horizontal symmetrical installation is not possible due to space limitations, the sensors can be installed vertically or at an angle, provided there are no air bubbles in the upper part of the pipe.

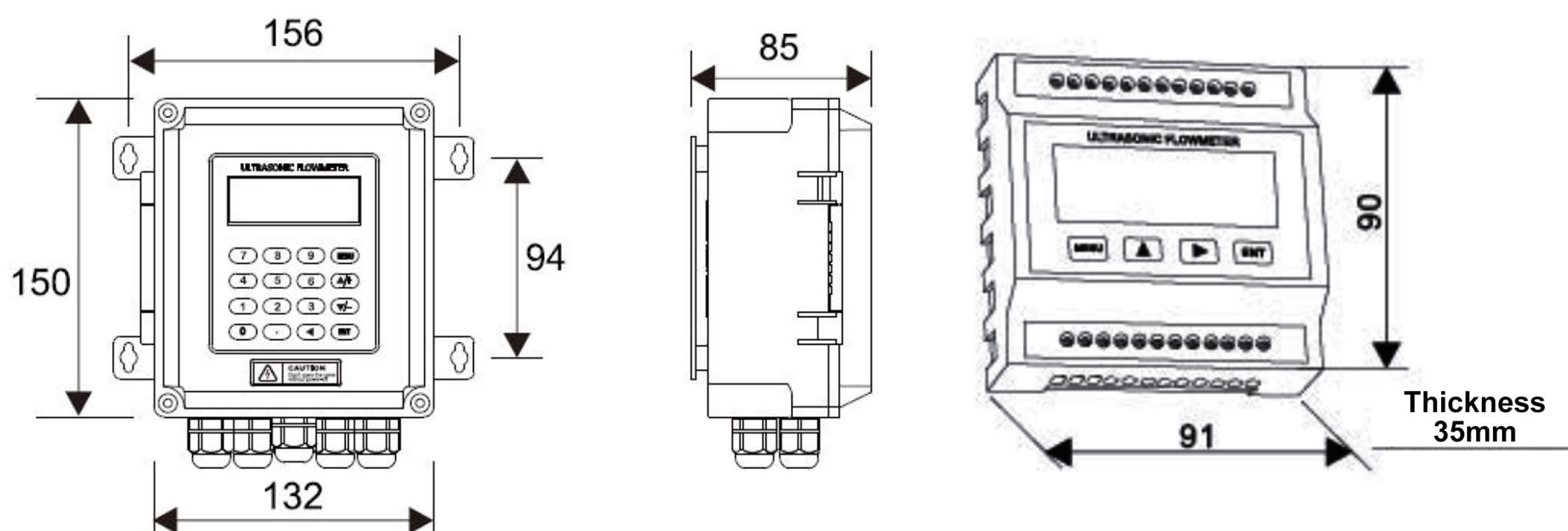
●● Applicable Pipe Materials



●● Ultrasonic Flow Meter Models



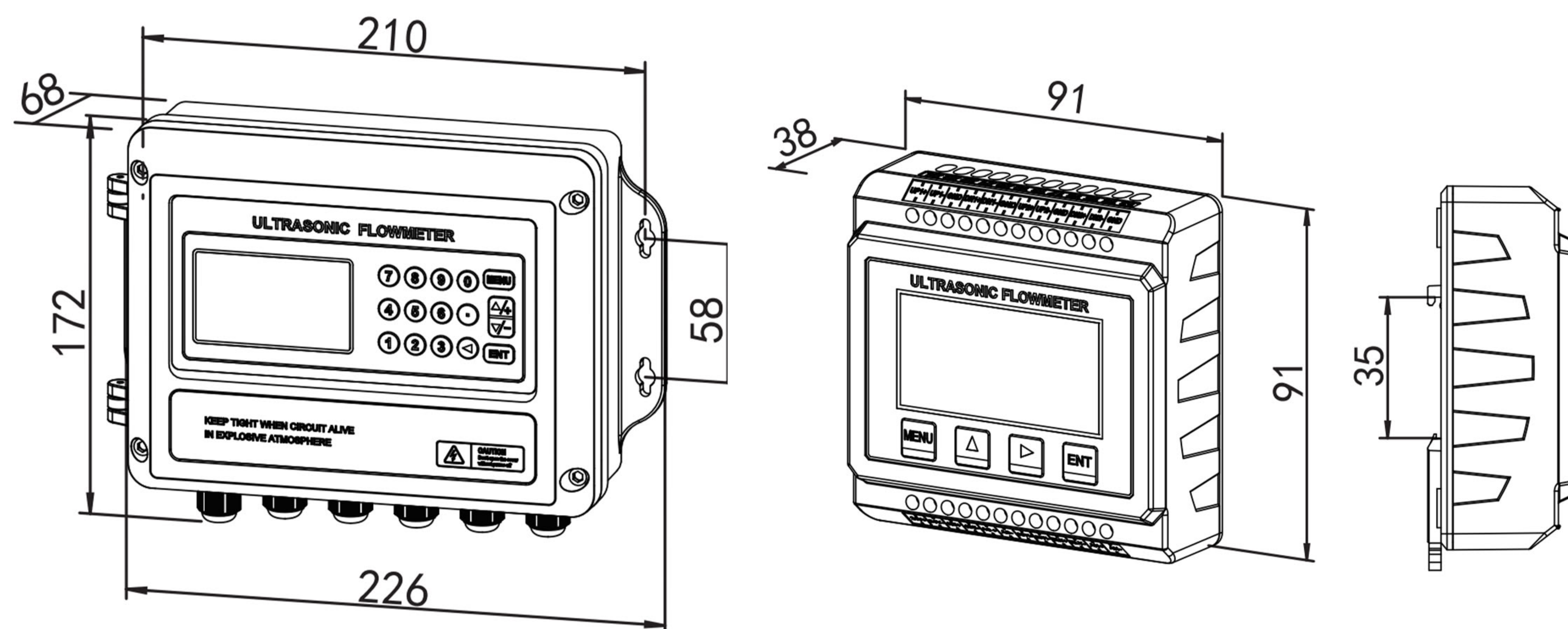
21st Edition Flow Meter Main Unit Dimensions (Unit: mm)



21st edition wall-mounted main unit dimensions

21st edition modular main unit dimensions

23st Edition Flow Meter Main Unit Dimensions (Unit: mm)



23st edition wall-mounted main unit dimensions

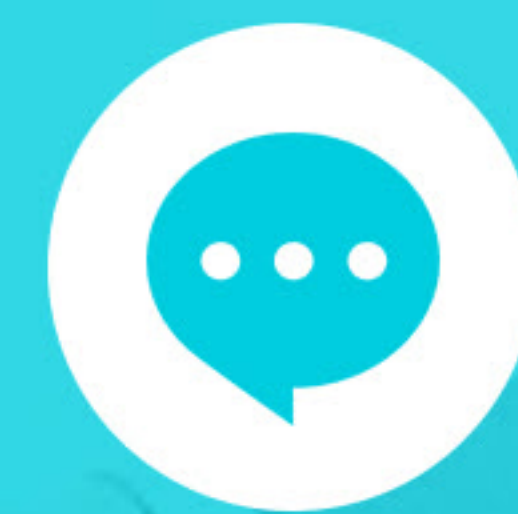
23st edition modular main unit dimensions

Ultrasonic Flow Meter Selection Table																		
Model												Selection Guide						
JJUL-□ - □ - □ - □ - □ - □ - □ - □ - □ - □ - □ - □ - □ - □ - □ - □																		
Version	30											Version 21 main unit						
	31											Version 23 main unit						
Host Type	B											Wall-mounted main unit						
	M											Modular main unit						
	H											Handheld main unit						
	P											Portable main unit						
	F											Explosion-proof main unit						
	S											Disk-mounted main unit						
	G											Pipe-mounted main unit						
	Y											All-in-one main unit						
USB Flash Drive Interface		U											With USB flash drive function					
Connection Method (pipe segment type)			-											Split-type spacer (no connection method, suitable for split-type applications)				
			L											Threaded connection (generally suitable for small diameters)				
			F											Flange connection (standard type)				
			K											Clamp connection (customization required)				
Number of Channels			n											n is the number of channels; single-channel is omitted.				
Probe Types (external and insertion probes)				L	1											External probe small clip (DN15~DN100mm)		
					2											External probe medium clip (DN50~DN700mm)		
					3											External probe large clip (DN500~DN6000mm)		
				F											IP69 waterproof (suitable for external clip-on probes)			
				P	1											Standard insertion probe (DN80mm and above)		
					2											Extended insertion probe (cement/large pipe)		
Temperature					T											High-temperature type: Clip-on probe 120℃; Insertion probe :160℃.		
Pipe Diameter					15											Pipe inner diameter 15mm		
					...											...		
					1000											Pipe inner diameter 1000mm		
Accuracy Level					C0											Accuracy class 1.0		
					C1											Accuracy class 1.5		
					C2											Accuracy class 2.0		
Material					M											Carbon steel (suitable for pipe sections)		
					S											304 stainless steel (suitable for pipe sections)		
					T											Copper (suitable for small diameter pipe sections)		
Explosion-Proof Rating					-											Unmarked, non-explosion-proof		
					E											Explosion-proof (ExdIICT6 Gb)		
Pressure Level					N											Standard pressure		
					H											High pressure (please specify before ordering)		
Flow Meter Type					S											Standard ultrasonic flow meter		
					R											Ultrasonic heat meter (default with 2 PT1000 RTDs)		
Power Supply Method					V0											24VDC/220VAC (Wall-mounted split unit)		
					V1											3.6V Lithium Battery (Pipe-type Ultrasonic Flow Meter)		
					V2											24VDC (Pipe-type Ultrasonic Flow Meter)		
Note: Ultrasonic flow meters come with RS485 communication and 4~20mA output by default. Selection Example 1: DN50 pipe, flange connection, local display, 24V power supply, 304 stainless steel, accuracy: 1.5 class, model: JJUL30G50FL2C1SNSV2; Selection Example 2: Wall-mounted ultrasonic flow meter, small external clamp, dual power supply, 1.5 class accuracy, model: JJUL30BL1C2NSV0																		



Service System

Our professional engineering service system is available 7*16 hours online to solve various problems related to product installation, measurement interference, operation, and usage. You can contact customer service through multiple platforms such as the company website and company store, or schedule an engineer to provide on-site guidance and training.



Contact
Online



Telephone
Contact



Video
Guide



On-site service
booking

 400-167-6978

 Joyercheng@jujietech.com

 <https://www.jujietech.com>

 Room 06-07, L-shaped plant, Broadcom Technology Park, No. 98, Guandoumen Road, Jiujiang Economic Development Zone, Wuhu City, Anhui Province