



VS-TDS 100F

TRANSIT TIME ULTRASONIC FLOW METERS

UZUMAKI SERVICES.,LTD

CE



Application

- ◆ Water and waste water management;
- ◆ Water and waste water treatment plants;
- ◆ Power plants, such as nuclear power plants and hydraulic power plants;
- ◆ Mining and metallurgy plants;
- ◆ Petroleum process monitoring and control;
- ◆ Chemical process monitoring and control;
- ◆ Pulp and paper process monitoring and control;
- ◆ Food and beverage processing;
- ◆ Marine maintenance and operation;
- ◆ Energy supply and production systems;
- ◆ Flow measurement networking.

Liquid

- ◆ Water (hot water, chilled water, city water, sea water, waste water, etc.);
- ◆ Sewage with small particle content;
- ◆ Oil (crude oil, lubricating oil, diesel oil, fuel oil, etc.);
- ◆ Chemicals (alcohol, acids, etc.);
- ◆ Plant effluent;
- ◆ Beverage, liquid food;

Pipe Material

- ◆ Carbon steel
- ◆ Stainless steel
- ◆ Cast iron
- ◆ Ductile iron
- ◆ Copper
- ◆ PVC
- ◆ Aluminum
- ◆ Asbestos

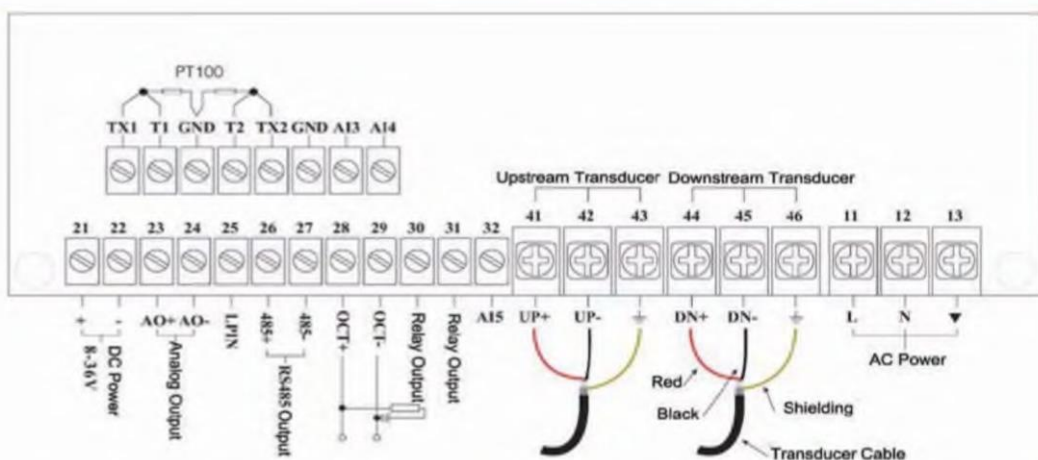


**No process interruption
No moving parts, no leakage
No risk of contamination and corrosion
Non-intrusive flow measurement**

VS TDS-100F Wall Mount Ultrasonic Flow Meter




VS TDS-100F accurately captures flow measurements using three approaches: clamp-on, flow-cell and insertion. Automatically memory the positive, negative, net totaliser flow rate and heat quantity of the last 512 days, 128 months, 10 years.

- ◆ Better than 1% accuracy
- ◆ 0.2% of repeatability
- ◆ 2×20 LCD display
- ◆ 4×4 key tactile-feedback membrane keypad
- ◆ 85–264VAC or 24VDC power supply
- ◆ Pipe diameters from 15mm to 6000mm
- ◆ RS485 output
- ◆ Operate with clamp-on, insertion and flow-cell transducer
- ◆ One channel programmable 4-20mA output
- ◆ Two channel programmable digital out (isolated OCT and Relay)
- ◆ Frequency output
- ◆ IP65
- ◆ SD USB data memory (1G, 4G ,8G etc)



Clamp-On Transducer



A pair of clamp-on transducers measure the flow from outside of a pipe. There is no pressure drop, no leaks and no contamination. The installation is very simple and no special skills or tools are required.

Technical parameters	S2-type	M2-type	L2-type
			
Pipe size (mm)	DN15~100	DN50~700	DN300~6000
Pipe size (inch)	(1/2~4")	(2~28")	(12~240")
Material	Plastic alloy		
Frequency	1MHz		
Installation method	V(N/W)	V/Z	Z
Calibration	Calibrate with main unit		
Magnetism	Magnetic		
Temperature	32F~320F (0 C~160 C)		
Protection class	IP65		
Cable	Standard length 5m×2. Can be extended to 10m×2 or 15m×2		

Insertion Transducer

A pair of insertion-type transducers are inserted into the pipe wall to interrogate the flow in the pipe. Since the transducers do not extrude into the flow, they do not generate any disturbance or cause any pressure drop. There is no moving parts to wear out.

If the pipe material is carbon steel or stainless steel, it can be installed directly by welding. But if the pipe material is cast iron, FRP, PVC or cement, please contact with the manufacturer to order the dedicated pipe hoop. To prevent leak water, please give the exact outside diameter or perimeter to the manufacturer.

Technical parameters	B-type	B Long-type
		
Pipe size	More than DN80mm	
Material	Ball valve and transducer pole's material: stainless steel, Valve base's material is carbon steel (stainless steel is optional)	
Frequency	1MHZ	
Pipe material	All metals, most plastics, fiber glass, etc.	
Installation method	Z method	
Application of temperature	-40 C -160 C	
Bore size	Φ19mm (please use the manufacture's dedicated tools to drill, it can install with pressure.)	
Pressure class	1.6MPa(less than 0.8MPa when installing)	
Protection class	IP68 (can work in water and water depth ≤ 3 meter)	
Mounting Space	More than 550mm between the well wall and the pipe wall	More than 700mm between the well wall and the pipe wall
Length	186mm	330mm