FEATURE

*High Accuracy

Accuracy better than 1%

*Measure Range

Select different model sensors,can achieve DN15-DN6000mm pipe flow measurement

*High Reliability

Adopt low voltage,multi-pulse radiating circuit.Accuracy,Lifetime and Reliability are better.

*High Anti-interference

Adopt double balanced signal differencial transmission,receving circuit,
effective resist the drive,tower, Strong power lines and other source of interference.

*Powerful Memory Function

Automatic memory the cumulative flow of 512 days before, 128 months before, 10 years before.
Automatic memory the power-on and off of 64times before and the flow.
Automatic memory the meter working condition of 32days before.

*Support Temperature Sensor

Connect with Temperature sensor,it can meaure heat flow.

*Support SD card memory

Select SD card memory,it can realize mass storage by ultrasonic flowmeter

PRODUCT INTRODUCTION

The TDS 100F Ultrasonic Flowmeter widely used to measure different kinds of liquid.
Transmitter and transducer install seperately.Transmitter can install at indoor,Instrument cabinet,Dashboard.
Transducer install on the pipes. Transmitter and Transducer connect by special cable.
It can realize to measure flow.Connect with temperature sensor,it can measure heat flow.
Widely used in Running water,Heating, Water conservation,Metallurgy,Chemical industry,Machinery,Energy etc.
Used for production monitoring, water balance testing, thermal equilibrium network commissioning, energy monitoring.
It is most important flow measure instrument duiring manufacturing process.

MEASUREMENT CONPOSITION

Flow Measurement	Heat/Cold Energy Measurement	Feature
	 water supply pipe water return pipe	*Installation without drying up, no pressure loss *Easy installation and maintenance *Mating clamp temperature sensor that can measure the temperature of the outside of tube to achieve heat measure
Clamp On Type		
	 water supply pipe water return pipe	*Installation without drying up, no pressure loss *Stable and reliable during lont-term operation *Mating clamp temperature sensor that can measure the temperature of the outside of tube to achieve heat measure
Insertion Type		
	 water supply pipe water return pipe	*Installation require drying off the pipe *High accuracy,Stable and reliable during lont-term operation *Mating clamp temperature sensor that can measure the temperature of the outside of tube to achieve heat measure
Pipe Type		

TRANSMITTER

Due to different installation circumstance,choose different transmitter

*Wall-Mounted Type TSD 100F
*Used to mount on the wall
*Dimension:170*180*56mm
*Power supply:
DC8-36V or AC85-264V

*Panel Mounted Type TDS 100F
*Used for meter cabinsets installation
*Dimension:152*76mm
*Power supply:
DC8-36V or AC85-264V

*Explosion Proof Type TDS 100F
*Used for hazardous area
*Dimension:298*298*110mm
*Power supply:DC8-36V or AC85-264V
*Ex-proof Class:DIIBT4

TRANSDUCER

Due to different liquid,pipeline condition installation circumstance,choose different transducer

Type	Picture	Specification	Model	Pipe Size	Temperature	Dimension
Standard Clamp On Type		Small	TS-2	DN15~DN100	-30~90℃	45×25×32mm
		Medium	TM-1	DN50~DN700	-30~90℃	64×39×44mm
		Large	TL-1	DN300~DN6000	-30~90℃	97×54×53mm
High Temperature Clamp On Type		Small	TS-2-HT	DN15~DN100	-30~160℃	45×25×32mm
		Medium	TM-1-HT	DN50~DN700	-30~160℃	64×39×44mm
		Large	TL-1-HT	DN300~DN6000	-30~160℃	97×54×53mm
Insertion Type		Standard	TC-1	DN80~DN6000	-30~160℃	190×80×55mm
		longer type	TC-2	DN80~DN6000	-30~160℃	335×80×55mm
Pipeline Type		π	G3	DN15~DN25	-30~160℃	SS304 Thread Connection
		Standard	G2	DN32/DN40	-30~160℃	CS Thread Connection
		Standard	G1	DN50~DN6000	-30~160℃	CS Flange Connection

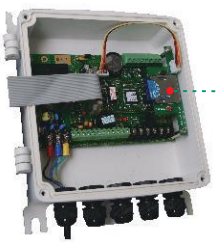
Temperature Sensor

Picture	Specification	Model	Measurement Range	Temperature Range	Installation Requirement	Accuracy
	Three Wire PT100 Clamp Temperature Sensor	CT-1	≥DN50	-40~160℃	no need cut flow	100℃ ±0.8℃ Temperature differece≤0.1℃ after match accurately
	Three Wire PT100 Insertion Temperature Sensor	TCT-1	≥DN50	-40~160℃	need cut flow	
	Three Wire PT100 pressure installation insertion temperature sensor	PCT-1	≥DN50	-40~160℃	no need cut flow	
	Small size three wire PT100 Insertion Type temperature sensor	SCT-1	<DN50	-40~160℃	need cut flow	

SD Memory Card

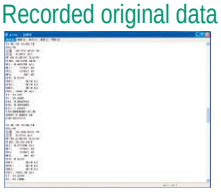
SD card can realize the mass storage for ultrasonic flowmeter

Measuring data can deal with use our company software"flow data analysis, statistical"

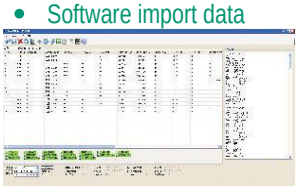


« SD card memorize & cassette

- Recorded original data



- Software import data



- Instantaneous flow curve formed by software

- Accumulated flow histogra formed by softwarem

TECHNICAL PARAMETERS

Type		Performance, specification
Transmitter	Principle	Ultrasonic transit-time principle,Four-byte IEEE754 floating-point arithmetic
	Accuracy	Better than ±1%
	Display	LCD display with Chinese,English Display
	Output	One 4-20mA Current output,Impedance0-1K,Accuracy 0.1%
		One OCT Pulse output(Width 6-1000ms,Default200ms)
		One Relays output
	Input	Three 4-20mA Current input,accuracy 0.1%,can collect temperature,pressure,level signals etc.
		Can connect with three-wire PT100 Plastnium resistance to measure heat flow.
	Data Interface	Isolated RS485 interface, can upgrade flowmeter through PC,support modbus
Cable		Normal below 50m;Select RS485 Communication,Transmission distance can over thousand meters.
Pipe Condition	material	Steel,Stainless steel,Cast iron,copper,PVC,aluminium,FRP etc.(liner allowed)
	Diameter	15~6000mm
	Installation	Upstream 10D,downstream 5D,30D away from the pump outlet(D for diameter)
Medium	Fluid	Water,sea water,acid liquid,beer,alcohol,oil and any other liquid that can spread sonic
	Temperature	-30~160 deg C
	Turbidity	10000ppm and with little bubbles
	Velocity	0~±10m s
Operating Environment	Temperature	Transmitter:-20~60 deg C;Transducer:-30~160 deg C
	Humidity	Transmitter:85%RH;transmitter protection grade:IP68;Water Depth<2m
Power Supply		DC8-36V or AC85-264V
Consumption		1. 5W

Model Selection

TDS 100F □ ----- □ -DN □ mm - □ -- □ MPa - □ m - □ ---------- □

- Transmitter: W Wall Mounted; S Panel mounted; D Ex-proof
- Transducer: S2; M2; L2; S2H; M2H; L2H; I2; I2L; G
- Diameter: DN
- Material: 0 carbon steel; 1 stainless steel; 2 cast iron; 3 FRP; 4 PVC; 5 cement; 6 others
- Nominal Pressure: MPa
- Cable Length: m
- Temperature Sensor: N No temperature sensor; C clamp on type; I insertion type; I2 insertion installation with pressure; S small size temperature sensor
- SD Card Data Storage: 0 with this function; 1 without this function

For Example:TDS-100F-W-S2-15-0-1-5-N-1

Explanation: Fixed Remote type ultrasonic flowmeter; Wall mounted transmitter, small size standard transducer, DN15, carbon steel material, nominal pressure 1.0Mpa, 5m cable, No temperature sensor without SD card data storage