

RIF600W | Wall Mounted Ultrasonic Flowmeter

The RIF600W ultrasonic flow meter uses the proven clamp-on transit-Time correlation technique.

The ultrasonic transducers are simply clamped onto the outside of the pipe and never come in contact with the fluid. The Flowmeter is widely used to measure different kinds of liquids.

Transmitter and transducer install separately and the transmitter can be installed at indoor.

Applications

Measurement of liquid flows and consumption such as:

- Chemical addition
- Cooling and heating water
- Drinking water
- Broad range of refined hydrocarbons
- Potable water
- De-ionized and demineralized water
- Sanitary flow rate measurements
- Purified water

Features

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 differential transmission, receiving 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 64 times before and the flow. Automatic memory the meter working condition of 32 days before.
- **Support Temperature Sensor:** Connect with Temperature sensor, it can measure heat flow.
- **Support SD card memory:** Select SD card memory, it can realize mass storage by ultrasonic flowmeter



Ultrasonic transmitter



Ultrasonic transducer pair; screw terminals

Accessories:

Gel for ultrasonic clamp-on transmitters.









Clamp on temperature sensors are used for energy calculation in heating and cooling systems




Technical Parameters

	Principle	Ultrasonic transit-time principle, Four-byte IEEE754 floating-point arithmetic
	Accuracy	Better than $\pm 1\%$
	Display	LCD display with Italian, English language
Transmitter		One 4-20mA Current output, Impedance 0-1K, Accuracy 0.1%
	Output	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 Platinum 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	15~6000 mm
	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	$-30 \div 160^{\circ}\text{C}$
	Turbidity	10000 ppm and with little bubbles
	Velocity	$0 \dots \pm 10 \text{ m/s}$
Operating Environment	Temperature	Transmitter: $-20 \div 60^{\circ}\text{C}$; TransducerS: $-30 \div 160^{\circ}\text{C}$
	Humidity	Transmitter:85%RH; Transmitter protection grade: IP65; Clamp-on sensors grade: IP68 - Water Depth<2m
Power Supply		DC8-36V or AC85-264V
Consumption		1.5W





Measurement composition

	Flow Measurement	Heat/Cold Measurement	Feature
Clamp-on Type			<ul style="list-style-type: none"> • 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
Insertion Type			<ul style="list-style-type: none"> • Installation without drying up, no pressure loss • Stable and reliable during long-term operation • Mating clamp temperature sensor that can measure the temperature of the outside of tube to achieve heat measure
Pipe Type			<ul style="list-style-type: none"> • Installation require drying off the pipe • High accuracy,Stable and reliable during long-term operation • Mating clamp temperature sensor that can measure the temperature of the outside of tube to achieve heat measure

Transducers

	Picture	Specification	Model	Pipe size	Temperature	Dimensions
High temperature clamp-on type		Small	TS-2-HT	DN15÷DN100	-30÷160 °C	45X25X32 mm
		Medium	TM-1-HT	DN50÷DN700	-30÷160 °C	64x39x44 mm
		Large	TL-1-HT	DN300÷DN6000	-30÷160 °C	97x54x53 mm

Temperature Sensor

Picture	Specification	Model	Measurement Range	Temperature Range	Installation Requirements	Accuracy
	Three Wire PT100 Clamp Temperature Sensor	CT-1	≥ DN50	-40 ÷ 160 °C	No need cut flow	100 °C ± 0.8°C Temperature difference ≤ 0.1 °C after match accurately
	Three Wire PT100 Insertion Temperature Sensor	TCT-1	≥ DN50	-40 ÷ 160 °C	Need cut flow	
	Three Wire PT100 pressure installation insertion temperature sensor	PCT-1	≥ DN50	-40 ÷ 160 °C	No need cut flow	
	Small size three wire PT100 Insertion Type temperature sensor	SCT-1	< DN50	-40 ÷ 460 °C	Need cut flow	

Clamp on sensor components



1. Fasten belt slot
2. Steel wire slot
3. Steel belt slot
4. Top cover fasten bolts
5. Signal emission direction arrow



6. Sound wedge
7. High temperature powerful magnet
8. Anti-skid slot
9. Up e Down stream lable
10. Cable entry



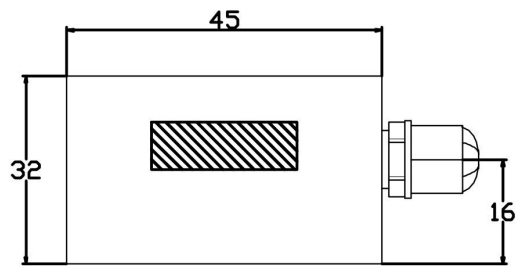
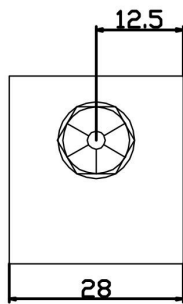
11. Installation position start measuring place
12. Product info label



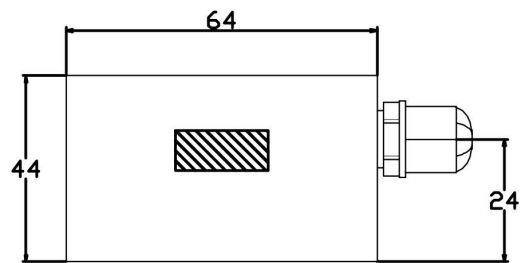
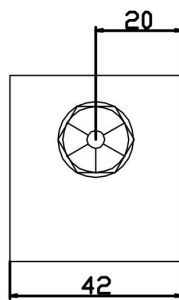
13. Positive pole wiring
14. Negative pole wiring
15. Grounding wiring
16. Terminal box

Transducers drawings

Small Size Transducer DN15÷DN100



Medium Size Transducer DN50÷DN700



Large Size Transducer DN300÷DN6000

