

# ADDMAS - T SERIES

## WALL MOUNTED ULTRASONIC FLOWMETER



clamp on



Insertion



Pipe

Water & Dust Resistant



### | Features |

- Measurement accuracy 1%.
- Converter protection class IP67, transducer protection class IP68.
- Wide measurement range, pipe size from DN15mm to DN6000mm.
- Three types installation method: wall mounted , DIN-rail mounted , explosion-proof box mounted.
- Connect the temperature transducer can finish the heat/energy measurement.

# Clamped Ultrasonic Flowmeter

## I Introduction

TUF-2000B flowmeter can be virtually applied to a wide range of in long-term online measurement. Converter protection class IP67, transducer protection class IP68. A variety of liquid applications can be accommodated: ultra-pure liquids, portable water, chemicals, raw sewage, reclaimed water, cooling water, river water, plant effluent. etc

## I Measuring Diagram I

Clamp



- No need to cut off water , no pressure loss.
- Connect clamp on temperature transducer, can finish the heat/energy measurement.
- Easy for installation.

Insertion



- No need to cut off water , no pressure loss.
- Stable and reliable for long term operation.
- Connect Pt100 temperature transducer, can finish the heat/energy measurement.

flange













- Need to cut off pipe
- With high accuracy and stability
- Connect Pt100 temperature transducer, can finish the heat/energy measurement

## Wall Mounted Ultrasonic Flowmeter

### Optional Transducers





Please choose the suitable transducer, according to different liquid pipe condition and installation method, (please refer to the measuring diagram).

Types	Picture	Spec.	Model	Measurement Range	Temperature	Dimension
Clamp on		Small Size	TS-2	DN25- DN100	-30 90°C	45 x 25 x 32mm
		Medium Size	TM-1	DN50 DN700	-30 90°C	64 x 39 x 44mm
		Large Size	TL-1	DN300 DN 6000	-30 -90°C	97 x 54 x 53mm
High temp clamp on		Small Size	Ts-2- HT	DN25 DN100	-30 160°C	45 x 25 x 32mm
		Medium Size	TM-1- HT	DN50 DN700	-30 160°C	64 x 39 x 44mm
		Large Size	TL-1-HT	DN300 DN 6000	-30 160°C	97 x 54 x 53mm
Insertion		Standard	TC-1	DN80-DN6000	-30 160°C	190 x 80 x 55mm
		Lengthen	Tc-2	DN80 DN6000	-30 160°C	335 x 80 x 55mm
Pipe		x type	G1	DN15 DN32	-30-160°C	SUS304 thread connection
		Standard	G2	DN40-DN1000	-30 160°C	carbon steel thread connection

Please refer to detailed pipe dimensions

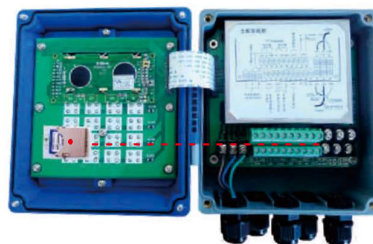
### Optional Temperature Transducers

Connect the temperature transducer can finish the heat/energy measurement

Picture	Specification	Model	Meas. Range	Temperature	Cut of water	Accuracy
	Clamp on temperature Transducer Pt100	CT-1	&DN50	40-160°C	No	100°C + 0.8°C
	Insertion temperature Transducer Pt100	TCT-1	@DN50	-40-160°C	Yes	
	Insertion Pt100 Installation with pressure	PCT-1	@DN50	40 160°C	No	
	Insertion Pt100 Small size pipe diameter	SCT-1	< DN50	-40 160°C	Yes	

### Optional SD card memory

Convenience for long-term and large data storage. Available to do the data processing like tabulation, statistical, data analysis, printing reports and production flow curve by using data analysis software.



-CI SD card optional

# Wall Mounted Ultrasonic Flowmeter

## Datasheet

Items		Performance & Parameter
<b>Convertor</b>	Principle	Transit-time ultrasonic flowmeter
	Accuracy	±1%
	Display	2×20 character LCD with backlight, support the language of Chinese, English, Italy, Turkish
	Signal Output	1 way 4~20mA output, electric resistance 0~1K, accuracy 0.1%
		1 way OCT pulse output (Pulse width ~1000ms, default is 200ms)
		1 way Relay output
	Signal Input	3 way 4~20mA input, accuracy 0.1% . acquisition signal such as temperature , press and liquid level
Connect the temperature transducer Pt100, can finish the heat/energy measurement		
Data Interface	Insulate Rs485 serial interface, upgrade the flowmeter software by computer, support the MODBUS	
<b>Special Cable</b>	Twisted-pair cable, generally, the length under 50 meters; Select the RS485, transmission distance can over 1000m	
<b>Pipe Installation Condition</b>	Pipe Material	Steel, Stainless steel, Cast iron, Copper, Cement pipe, PVC, Aluminum, Glass steel product, liner is allowed
	Pipe Diameter	15~6000mm
	Straight Pipe	Transducer installation should be satisfied: upstream 10D , downstream 5D, 30D from the pump
<b>Measuring Medium</b>	Type of Liquid	Single liquid can transmit sound wave, such as Water (hot water, chilled water, city water, sea water, waste water, etc.); Sewage with small particle content;
	Temperature	-30~160℃
	Turbidity	No more than 10000ppm and less bubble
	Flowrate	0~±7m/s
<b>Working Environment</b>	Temperature	Convertor: -20~60℃; Flow Transducer: -30~160℃
	Humidity	Convertor: 85% RH
<b>Power Supply</b>	Dc8~36V or Ac85~264V ( optional)	
<b>Power Consumption</b>	1.5W	
<b>Dimension</b>	132*150*85 mm(convertor)	

## Ordering Code

Flow Transducer	Diameter	Pipe Material	Pressure	Cable Length	Temperature Transducer	SD card Memory
<input type="checkbox"/> -DN <input type="checkbox"/> mm	-	<input type="checkbox"/> MPa	-	<input type="checkbox"/> m	-	<input type="checkbox"/>
TS-2		0 Carbon Steel			None	0 Yes
TM-1		1 Stainless Steel			CT-1	1 No
TL-1		2 Cast Iron			TCT-1	
TS-2-HT		3 Glass Fiber reinforced			PCT-1	
TM-1-HT		4 PVC			SCT-1	
TL-1-HT		5 Cement				
TC-1		6 Others				
TC-2						
G						

Example TM-1+DN300+0+1.6MPa+10m+PCT-1+0

PS: Standard configuration=TUF-2000B(convertor)+TM-1+5M cable + Steel belt(DN200) + Couplant(1 pc)