Portable ultrasonic flowmeter
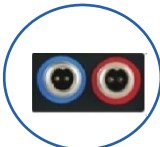
FLOWLINE TW

Application

Portable ultrasonic flowmeter measure flowrate without contacting liquid, simply install on the outside of the pipe. Small size, easy to carry, and measure precisely.

Huge application on water, heating, steel factory, chemical, mechanical, energy…etc industries to monitor production, flowrate calibration, test, balance adjust, environment control, which is a must-have tool.
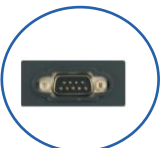
Feature

- High accuracy measuring: Accuracy: ±1%, linearity: 0.5%, repeatability: 0.2%.

- Wide measuring range: Several types of transducer for selection, measuring pipe size from DN15mm to DN6000mm.

- Large battery capacity: Built-in rechargeable Ni-MH battery, provide over 12hrs of continuous operation.

- Non-intrusive measuring: Non-intrusive, clamp-on transducer, no pressure drop, no pipe disturbance.

- Multiple language menu: English, Chinese, Italian. Other languages can be customize.

- Large LCD display: Display instant flow, accumulated flow (positive, negative and net),

- velocity, working status etc..

- Built-in data logger: Built-in 32kb data logger, store over 2000 lines measuring data.

Parts Detail

Transducer Interface

Display
4x16 character screen with backlight to display instant flow, accumulated flow (positive, negative and net), velocity, working status etc.
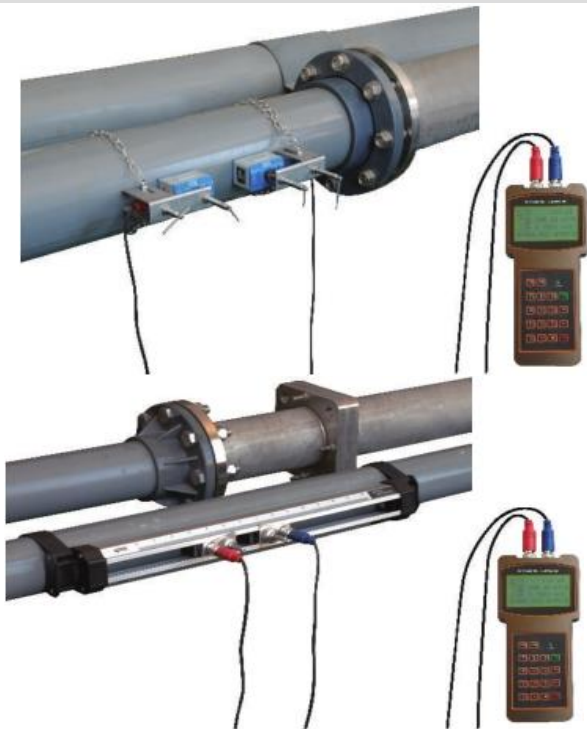
Communicate & Signal Output

32kb Data Storage
Simple interface with official software

Aluminum alloy carrying case
Easy carrying, anti-dust, and Water resistant.

Measurement Suggestion

Clamp on Transducer

- With magnetic clamp on transducer, no need to cut pipe or stop water, no pressure lost.
- Different spec as option to measure from DN15~ DN6000 and liquid temperature from -30~160℃.

Clamp on Mounting Bracket Transducer

- Bracket transducer can be easily and precisely installed within a short time.
- Bracket with magnetic on the pipe side, no pipe cutting, no pressure drop.
- Different spec of bracket transducer to choose from DN15 ~ DN700mm.

Optional Transducer

Type	Size	Model	Measurement Range	Temperature Range	Dimension
Clamp on	A	TS-2	DN15 ~ DN100	-30~90℃	45×25×32mm
	B	TM-1	DN50 ~ DN700	-30~90℃	64×39×44mm
	C	TL-1	DN300 ~ DN6000	-30~90℃	97×54×53mm
High Temp. clamp on	D	TS-2-HT	DN15 ~ DN100	-30~160℃	45×25×32mm
	E	TM-1-HT	DN50 ~ DN700	-30~160℃	64×39×44mm
	F	TL-1-HT	DN300 ~ DN6000	-30~160℃	97×54×53mm
Mounting bracket clamp on	G	HS	DN15 ~ DN100	-30~90℃	318×59×85mm
	H	HM	DN500 ~ DN300	-30~90℃	568×59×85mm
	I	EB-1	DN300 ~ DN700	-30~90℃	188×59×49mm
High Temp. mounting bracket clamp on	J	HS-HT	DN15 ~ DN100	-30~160℃	318×59×110mm
	K	HM-HT	DN50 ~ DN300	-30~160℃	568×59×110mm
	L	EB-1-HT	DN300 ~ DN700	-30~160℃	188×59×49mm

Datasheet

Convertor	Principle		Ultrasonic transit-time differences.4 byte IEEE 754 floating point.
	Accuracy		±1%
	Display		4×8 Chinese or 4×16 English or Italian. LCD backlight.
	Signal Output		1 set of OCT pulse output. (pulse width 6~1000ms, 200ms)
	Data Interface		Insulate RS232 serial interface, upload data via flowmeter software to PC.
Pipe Spec.	Material		Steel, Stainless steel, Cast iron, Cooper, Cement pipe, PVC, Aluminum, Glass steel…liner can be measured too
	Diameter		15~6000mm
	Straight		Transducer installation should be satisfied: upstream10D, downstream 5D, 30D from the pump
Measuring Medium	Type of liquid		Water, sea water, industrial waste water, chemicals, alcohol, any oil or liquid that can transit via ultrasonic.
	Temp.		-30~160℃
	Turbidity		10000ppm without much bubble
	Flowrate		0~±10m/s
Working Environment	Temperature		Convertor: -20~60℃ ; Flowrate transducer: -30~160℃
	Humidity		Convertor: 85%RH; Transducer IP level: IP67
Power Supply	Built-in 1.2V capacity for 2000mAH Ni-MH chargeable battery, working for 12hrs after fully charged. Also with AC90~260V power adapter		
Power consumption	1.5W		
Case Material	Flam-resistance ABS		

Ordering Code

TUF12-☐-☐-☐-☐

1st code: First transducer

2nd code: Second transducer

3rd code: Third transducer

4th code: Forth   (1)   5m×2（Standard）

                          (2)   10m×2

A	TS-2	DN15~DN100	-30~90℃
B	TM-1	DN50~DN700	-30~90℃
C	TL-1	DN300~DN6000	-30~90℃
D	TS-2-HT	DN15~DN100	-30~160℃
E	TM-1-HT	DN50~DN700	-30~160℃
F	TL-1-HT	DN300~DN6000	-30~160℃
G	HS	DN15~DN100	-30~90℃
H	HM	DN50~DN300	-30~90℃
I	EB-1	DN300~DN700	-30~90℃
J	HS-HT	DN15~DN100	-30~160℃
K	HM-HT	DN50~DN300	-30~160℃
L	EB-1-HT	DN300~DN700	-30~160℃

How to choose::

TUF12 -H-B-C-1 (3 sets of transducer)

Contains：Portable ultrasonic flowmeter x1, standard small bracket x 1, standard

medium clamp-on transducer x1, large clamp-on transducer x1, 5m cable x2.

TUF12 -C-0-0-2 (1set of transducer)

Contains: portable ultrasonic flowmeter x1, standard small bracket, 10m cable x2