

ULTRASONIC FLOW METER

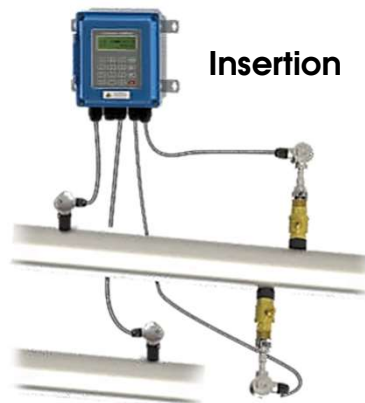
KWF-2000B SERIES

KWF-2000B Series flow meter can be virtually applied to a wide range of 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, etc.

- Measurement Accuracy 1%.
- Converter Protection Class IP67
- Transducer Protection Class IP68
- Measurement Range DN15mm to DN6000mm
- Installation Wall, DIN-rail, Explosion-Proof Box
- Connect Temperature Transducer for
- Heat/Energy Measurement



Clamp On



Insertion



Pipe

Measuring Diagrams

Clamp On



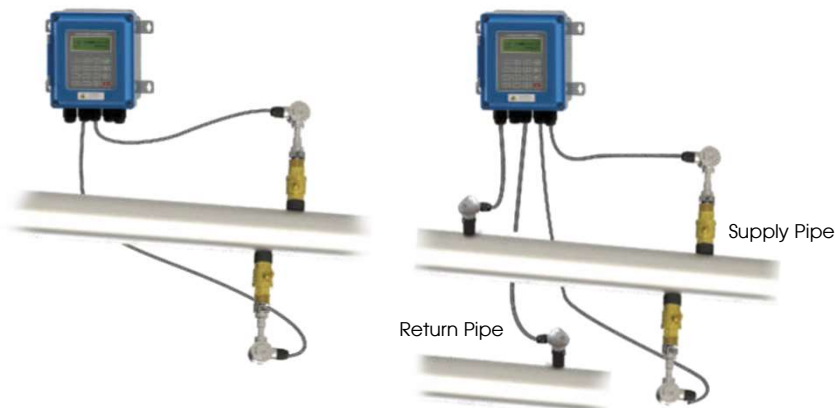
Flow Measurement

Heat Measurement

Features

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

Insertion



Flow Measurement

Heat Measurement

Features

- 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.

Pipe



Flow Measurement





Heat Measurement

Features

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





Flow Transducers

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

Type	Picture	Spec.	Model	Measuring Range	Temperature	Dimension
Clamp on		Small	TS-2	DN15...DN100	-30...90 °C	45 x 25 x 32 mm
		Medium	TM-1	DN50...DN700	-30...90 °C	64 x 39 x 44 mm
		Large	TL-1	DN300...DN6000	-30...90 °C	97 x 54 x 53 mm
High Temp. Clamp On		Small	TS-2-HT	DN15...DN100	-30...160 °C	45 x 25 x 32 mm
		Medium	TM-1-HT	DN50...DN700	-30...160 °C	64 x 39 x 44 mm
		Large	TL-1-HT	DN300...DN6000	-30...160 °C	97 x 54 x 53 mm
Insertion		Standard	TC-1	DN80...DN6000	-30...160 °C	190 x 80 x 55 mm
		Extended	TC-2	DN80...DN6000	-30...160 °C	335 x 80 x 55 mm
Pipe		π Type	G1	DN15...DN32	-30...160 °C	SUS304 Thread Connection *** Please refer to detailed pipe dimensions ***
		Standard	G2	DN40...DN1000	-30...160 °C	Carbon Steel Thread Connection *** Please refer to detailed pipe dimensions ***

Temperature Transducers

Connect the temperature transducer can finish the heat/energy measurement.

Type / Spec.	Picture	Model	Measuring Range	Temperature	Cut of Water	Accuracy
Clamp On P100		CT-1	\geq DN50	-40...160 °C	No	100 °C \pm 0.8 °C
Insertion P100		TCT-1	\geq DN50	-40...160 °C	Yes	100 °C \pm 0.8 °C
Insertion P100 with Pressure		PCT-1	\geq DN50	-40...160 °C	No	100 °C \pm 0.8 °C
Insertion P100 Small Size Pipe Diameter		SCT-1	< DN50	-40...160 °C	Yes	100 °C \pm 0.8 °C

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.

SD Card Optional



Specifications

Items	Performance & Parameter	
Convertor	Principle	Transit-time ultrasonic flowmeter.
	Accuracy	±1%
	Display	2x20 character LCD with backlight, support the language of Chinese, English, Italy, Turkish.
	Signal Output	1way 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.
Special Cable	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
Pipe Installation Condition	Insulate Rs485 serial interface, upgrade the flowmeter software by computer, support the MODBUS.	
Measuring Medium	Twisted-pair cable, generally, the length under 50 meters, select the RS485, transmission distance can over 1000m.	
	Pipe Material	Steel, stainless steel, cast iron, copper, cement pipe, PVC, aluminum, glass steel product, liner is allowed.
	Pipe Diameter	25...6000mm
Working Environment	Straight Pipe	Transducer installation should be satisfied: upstream 10D, downstream 5D, 30D from the pump.
	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, oil (curd oil, lubricating oil, diesel oil, fuel oil, etc).
		Chemicals (alcohol, etc).
		Plant effluent, beverage.
Power Supply	Temperature	Ultra-pure liquids, etc.
	Turbidity	- 30...160 °C
	Flow Rate	No more than 10000 ppm and less bubble
	Humidity	0...±7m/s
Power Consumption	Temperature	Convertor: - 20...60 °C; Flow Transducer: - 30...160 °C
	Humidity	Convertor: 85 %RH; Flow Transducer: can measure under water, water depth ≤ 2m (Transducer sealed glue)
Dimension	DC8...36V or AC85...264V (Optional)	
	1.5W	
	132 x 150 x 85mm (Convertor)	

Ordering Code

Series	KWF-2000B		
Flow Transducers	- TS-2	Clamp on, Small	
	- TM-1	Clamp on, Medium	
	- TL-1	Clamp on, Large	
	- TS-2-HT	High Temp. Clamp On, Small	
	- TM-1-HT	High Temp. Clamp On, Medium	
	- TL-1-HT	High Temp. Clamp On, Large	
	- TC-1	Insertion, Standard	
	- TC-2	Insertion, Extended	
	- G1	Pipe, π Type	
	- G2	Pipe, Standard	
Diameter	- XX	DN (mm)	
Pipe material	- 0	Carbon Steel	
	- 1	Stainless Steel	
	- 2	Cast Iron	
	- 3	Glass Fiber Reinforced	
	- 4	PVC	
	- 5	Cement	
Pressure	- 6	Other	
	- 2	Mpa (Mega Pascal)	
Cable Length	- XX	m (Meter)	
Temperature Transducers	- CT-1	Clamp On Pt100	
	- TCT-1	Insertion Pt100	
	- PCT-1	Insertion Pt100 with Pressure	
	- SCT-1	Insertion Pt100 Small Size Pipe Diameter	
SD Card Memory	- 0	Yes	
	- 1	No	
Example Order Code :	KWF-2000B	- TM-1	- 200
		- 0	- 2
		- 10	- CT-1
		- 0	