

FEATURES

- 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.



CONVERTOR

Principle	: Transit -time ultrasonic flowmeter
Accuracy	: $\pm 1\%$
Display	: 2 x 20 character LCD with backlight
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

SPECIAL CABLE

Twisted-pair cable, generally, the length under 50 meters; select the RS485, transmission distance can over 1000m.

PIPE INSTALLATION CONDITION

Pipe material	: Steel, Stainless steel, Cast iron, Copper, Cement pipe, PVC, Aluminum, Glass steel product, liner is allowed
Pipe diameter	: 25...6000mm
Straight pipe	: Transducer installation should be satisfied: upstream 10D, downstream 5D, 30D from the pump

MEASURING MEDIUM

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 (crude oil, lubricating oil, diesel oil, fuel oil, etc.); Chemicals (alcohol, etc.); Plant effluent; Beverage: Ultra-pure liquids, etc.
Temperature	: -30...160°C
Turbidity	: No more than 10000 ppm and less bubble
Flowrate	: 0...±7 m/s

WORKING ENVIRONMENT

Temperature	: Converter: -20...60°C; Flow Transducer: -30...160°C
Humidity	: Converter: 85% RH; Flow Transducer: can measure under water, water depth $\leq 2m$ (transducer sealed glue)

SPECIFICATIONS











Power supply	: Dc8-36V or Ac85-264V (optional)
Power consumption	: 1.5W
Dimension	: 132 x 150 x 85 mm (converter)

MEASURING DIAGRAM

	Flow Measurement	Heat Measurement	Features
Clamp on			<ul style="list-style-type: none"> • No need to cut off water, no pressure loss. • Connect clamp on temperature transducer, can finish the heat/ energy measurement. • Easy for installation.
Insertion			<ul style="list-style-type: none"> • 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			<ul style="list-style-type: none"> • Need to cut off pipe. • With high accuracy and stability. • Connect Pt100 temperature transducer, can finish the heat/energy measurement.

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~DN6000	-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~DN6000	-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		π 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	