

Thermal Vortex Flowmeter

Operating Principle

Heating vortex flowmeter uses the measurement principles of heating type flowmeter and vortex shedding flowmeter, and puts the two principles in one. The sensor part is divided in heating type measuring element and vortex shedding measuring body. The heating type can measure small flow rate, the vortex shedding has excellent linearity for big flow rate, and the heating type vortex shedding flowmeter integrates above two merits to wide measurement range rate, at the same time, it uses the accuracy of vortex shedding flowmeter when flow rate it is big to verify heating flowmeter automatically in program and guarantee the accuracy of heating flowmeter as measuring small volume. The final measurement range rate can reach 1: 100, even more than 1:500.

Structure: it is composed of two main parts, sensor and converter (totalizer, electronic header)

Main Technical Parameters

Sensor Nominal Diameter DN (mm)	Working Pressure (MPa)	Standard Flow Range m^3/h	Extended Flow Range m^3/h	Accuracy
20	1.6 2.5 4.0 6.4 10 16 25 32	0.3~80	0.16~80	Grade 1.5 Grade 1.0
25		0.5~100	0.2~100	
32		0.8~140	0.28~140	
40		1.2~240	0.48~240	
50		2~320	0.64~320	
80		3~640	0.3~640	
100		5~1100	2~1100	
150		11~2200	4~2200	
200		25~5000	10~5000	
250		40~8000	16~8000	
300		60~11000	22~11000	

Caliber DN (mm)	Length L (mm)	Center Height H (mm)
20	280	300
25	280	300
32	300	300
40	300	300
50	350	300

80	400	350
100	450	350
150	500	400
200	650	500
250	700	500
300	800	500
32	300	300

Ordering Models

Model	Connection and Getting Pressure Mode	Inside Nominal Diameter	Shell Material	Nominal Pressure	Permission Working Temperature	Illustration
LX						Wedge flowmeter
	A					Thread pressure getting double-clip type
	B					Thread pressure getting thread type
	C					Thread pressure getting welding type
	D					Thread pressure getting flange type
	E					Flange pressure getting flange type
	F					Integrated installation connecting type (temperature and pressure compensation)
	G					Integrated installation general type
		15~300				Inside nominal diameter 15~300mm
			I			Carbon steel
			II			Stainless steel
			III			Special material and special surface treatment
				0.25~5		Nominal pressure 0.5~5MPa
					A	-20~100℃
					B	100~250℃
					C	250~400℃