



Datasheet

Variable area flowmeter

LZ-SUP

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Variable area flowmeter

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The variable area flowmeter is measured according to the height of the metal tube float in the conical tube, and the pressure difference generated when the fluid passes through the gap between the float and the pipe wall is used to balance the weight of the float. The greater the flow, the higher the float is held, so that it has Larger annulus area. The metal tube rotameter adopts 304/316 stainless steel structure, which can be used to measure the flow of liquid, gas, and steam. It is especially suitable for flow measurement of low flow rate, micro flow range, high temperature, high pressure, corrosive, conductive or non-conductive medium. It also widely used in petroleum, chemical, food, water treatment and other industries

Features

- Suitable for small diameter and low velocity medium flow measurement
- With data recovery, data backup and power failure protection
- Wide range ratio 10:1
- Cumulative/instantaneous flow display
- Two-wire with upper and lower limit relay alarm function
- Optional DC, AC or battery power supply
- All metal structure, suitable for high temperature, high pressure and strong corrosive media

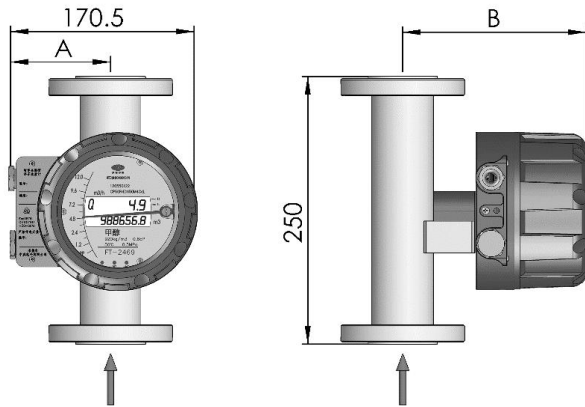


Variable area flowmeter

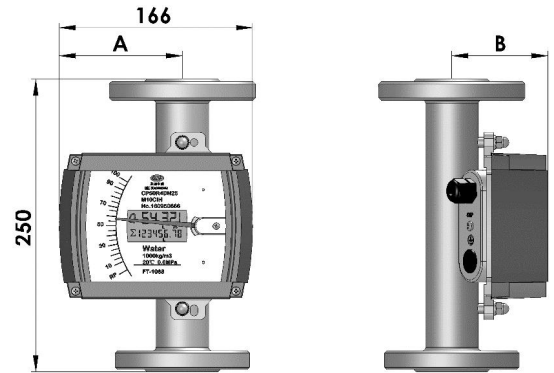
Parameter

Comprehensive parameters	
Range	Water (20°C) (01~150000) L/h Air (20°C, 1013MPa) (0.05~3000) m³/h
Range ratio	Standard 10:1 Optional 20:1
Accuracy	Standard: 1.5% Optional: 1%
Pressure	Standard: DN15~DN50≤4.0MPa DN80~DN200≤1.6MPa Optional: DN15~DN50≤32MPa DN80~DN200≤16MPa
Connection	Flange, Clamp, Thread, Sanitary thread
Medium temp	Standard: -30°C~120°C PTFE ≤80°C High temp: 120°C~350°C low temp: -80°C~-20°C
Environment temp	Remote type: -40°C~85°C Pointer type/local alarm type -40°C~100°C
Power supply	Standard type: 24VDC two-wire system (4-20) mA (12VDC~32VDC) Alarm type: 24VDC multi-wire system (4-20) mA (12VDC~32VDC) AC type: (100~240) VAC 50Hz~60Hz Battery type: 3.6V@9AH lithium battery
Load resistance	RL max: 600Ω
Alarm Output	Upper and lower limit instantaneous flow alarm Local alarm type: upper limit, lower limit or upper and lower limit instantaneous flow alarm (Contact capacity 1A@30VDC) Upper limit and lower limit alarm hold range is a maximum of 60% of range, and the minimum interval between upper and lower limit alarms is 10% of range
Pulse output	Internal 24VDC power supply, maximum current 8mA)
Ingress protection	IP65

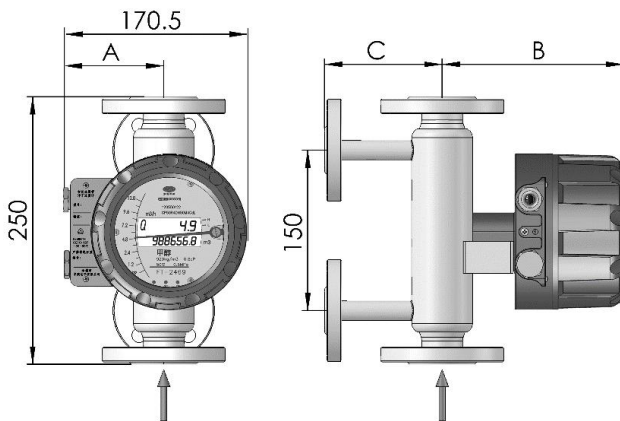
Dimensions



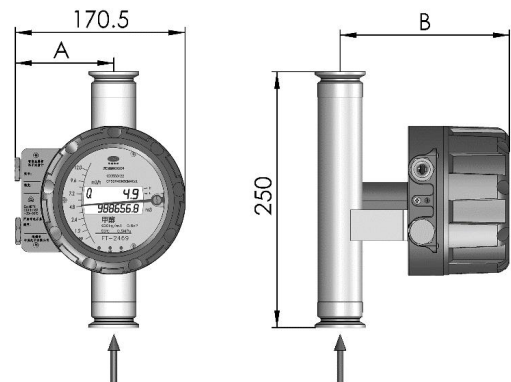
DN15 ~ DN200 (standard)



DN15 ~ DN100(standard)



DN15 ~ DN200



DN15 ~ DN100

DN/Size	Pin model M5 shell overall dimensions and weight loss									
	B		C	D	H	H1	L	WEIGHT		$\Delta P / KPa$
	Standard	High temp						51	51 jacketed	
DN15	154	194	100	120	330		250	7	8.6	20
DN25	173	194	110	120	340		250	8	10	20
DN50	173	194	120	120		560	250	15	17.5	11
DN80	173	194	140	150		575	250	25	28	19
DN100	173	194	150	150		590	250	29	32.5	26
DN150	173	194	185	180		690	300	53	57	58
DN200	173	194	210	200		780	350	61	66	80

Ordering code

LZ-SUP-DNXX-B-I1-SQ1-J7-IF1-M5-F1-DT0-N-P3-D0-IP1										Description		
LZ-SUP	-	-	-	-	-	-	-	-	-	-		
Diameter	15	-	-	-	-	-	-	-	-	-	DN15(1/2")	
	20	-	-	-	-	-	-	-	-	-	DN20(3/4")	
	25	-	-	-	-	-	-	-	-	-	DN25(1")	
	32	-	-	-	-	-	-	-	-	-	DN32(1.25")	
	40	-	-	-	-	-	-	-	-	-	DN40(1.5")	
	50	-	-	-	-	-	-	-	-	-	DN50(2")	
	65	-	-	-	-	-	-	-	-	-	DN65(2.5")	
	80	-	-	-	-	-	-	-	-	-	DN80(3")	
	1C	-	-	-	-	-	-	-	-	-	-	DN100(4")
	1E	-	-	-	-	-	-	-	-	-	-	DN125(5")
	1G	-	-	-	-	-	-	-	-	-	-	DN150(6")
	2C	-	-	-	-	-	-	-	-	-	-	DN200(8")
Process connection	B0	-	-	-	-	-	-	-	-	-	G thread	
	H2	-	-	-	-	-	-	-	-	-	HG/T20592 PN40	
	H1	-	-	-	-	-	-	-	-	-	HG/T20592 PN16	
	H4	-	-	-	-	-	-	-	-	-	HG/T20592 PN100	
	H3	-	-	-	-	-	-	-	-	-	HG/T20592 PN63	
	I0	-	-	-	-	-	-	-	-	-	ISO2852 clamps	
	XX	-	-	-	-	-	-	-	-	-	Others	
Measuring tube and float material	M1	-	-	-	-	-	-	-	-	-	304SS	
	M3	-	-	-	-	-	-	-	-	-	316LSS	
	N6	-	-	-	-	-	-	-	-	-	liner: PTFE	
	T1	-	-	-	-	-	-	-	-	-	Titanium	
	MG	-	-	-	-	-	-	-	-	-	Hastelloy C	
	XX	-	-	-	-	-	-	-	-	-	Others	
Measuring tube structure	X1	-	-	-	-	-	-	-	-	-	Bottom- inlet and top-outlet	
	X2	-	-	-	-	-	-	-	-	-	Bottom-inlet and top-horizontal-outlet	
	X3	-	-	-	-	-	-	-	-	-	Bottom-inlet and top-horizontal-outlet	
	Y1	-	-	-	-	-	-	-	-	-	Right-in, left-out	
	Z1	-	-	-	-	-	-	-	-	-	Left-inlet, right-outlet	
	S1	-	-	-	-	-	-	-	-	-	Horizontal spring type	
	S2	-	-	-	-	-	-	-	-	-	Top-inlet, bottom-outlet	
		-	-	-	-	-	-	-	-	-	-	
Accuracy	M	-	-	-	-	-	-	-	-	-	Level 1.5	
	P	-	-	-	-	-	-	-	-	-	Level 2.5	
	X	-	-	-	-	-	-	-	-	-	Others	
Indicator type		-	-	-	-	-	-	-	-	-	Aluminum alloy round housing, pointer	
		-	-	-	-	-	-	-	-	-	Aluminum alloy round housing, pointer + LCD	

	X		Others
Output and power supply	00		none
	AF		Two-wire 4-20mA
	AH		4-20mA, 24VDC
	AG		Two-wire 4-20mA+HART
	AJ		4-20mA+RS485, 24VDC
	AL		4-20mA+pulse, 24VDC
	XX		Others
Alarm	0		none
	2		Single group SPDT
	4		Double SPDT
Electrical interface and protection level		3	M20×1.5 cable gland, IP67
		8	deadlock
Additional structure		5	Standard
		1	Gas damping type
		2	High temperature type (medium temperature 120°C-450°C)
		X	Others