



# F8000

## Variable-Area Flow Meter

### F8100 Specification

Instrument Version	F8100 Variable-Area Flow Meter
Flow Range	Water 2.5to100000L/h Air 0.07 to 400m <sup>3</sup> /h (See table below)
Turndown Ratio	Size≤4"(100mm):10:1 Size>4"(100mm):5:1
Accuracy	Standard Version :±2.5%FS ,Special Order: can be up to ±1.5%FS
Maximum Working Pressure	Size 15/25/40/50:580psi(40bar) Size 80/100/150:230psi(16bar)
Working Temperature	Normal Version T <sub>1</sub> :-40 to 212° F(-40 to 100°C), High Temperature Version T <sub>2</sub> :-112 to 482° F(-80 to 250°C)
Ambient Temperature	-13 to 131° F(-25 to +55°C)
Connection Options	Flange connection(ANSI,DIN,JIS,etc.) Thread connection
Explosion-proof Class	Exib II CT4 or Exd II BT4
Protection	IP65
Viscosity	Size 15: ≤5mPa · s,Size 25 to 150: ≤250mPa · s

### F8100 Flow Range

Diameter	Working Code	Flow Range			Pressure Drop kPa		
		Water L/h		Air m <sup>3</sup> /h	Water		Air
		General Version	Corrosion-proof Version	General type Corrosion-proof Version	General Version	Corrosion-proof Version	
1/2"(15mm)	1A	2.5 to 25	---	0.07 to 0.7	6.5	---	7.1
	1B	4.0 to 40	2.5 to 25	0.11 to 1.1	6.5	5.5	7.2
	1C	6.3 to 63	4.0 to 40	0.18 to 1.8	6.6	5.5	7.3
	1D	10 to 100	6.3 to 63	0.28 to 2.8	6.6	5.6	7.5
	1E	16 to 160	10 to 100	0.48 to 4.8	6.8	5.6	8.0
	1F	25 to 250	16 to 160	0.7 to 7.0	7.0	5.8	10.8
	1G	40 to 400	25 to 250	1.0 to 10	8.6	6.1	10.0
	1H	63 to 630	40 to 400	1.6 to 16.0	11.1	7.3	14.0
1"(25mm)	2A	100 to 1000	63 to 630	3 to 30	7.0	5.9	7.7
	2B	160 to 1600	100 to 1000	4.5 to 45	8.0	6.0	8.8
	2C	250 to 2500	160 to 1600	7 to 70	10.8	6.8	12.0
	2D	400 to 4000	250 to 2500	11 to 110	15.8	9.2	19.0
1 1/2"(40mm)	4A	500 to 5000	300 to 3000	12 to 120	10.8	8.6	9.8
	4B	600 to 6000	350 to 3500	16 to 160	12.6	10.4	16.5
2"(50mm)	5A	630 to 6300	400 to 4000	18 to 180	8.1	6.8	8.6
	5B	1000 to 1000	630 to 6300	25 to 250	11.0	9.4	10.4
	5C	1600 to 16000	1000 to 10000	40 to 400	17.0	14.5	15.5
3"(80mm)	8A	2500 to 25000	1600 to 16000	---	8.1	6.9	---
	8B	4000 to 40000	2500 to 25000	---	9.5	8.0	---
4"(100mm)	10A	6300 to 63000	4000 to 40000	---	15.0	8.5	---
6"(150mm)	15B	20000 to 100000	---	---	19.2	---	---

Water 68° F, Air 0.1013MPa,68° F

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## Variable-Area Flow Meter

VF8000-002.00-13/04

*F8300 Specification*

Normal flow range(water)	GPM	0.1 to 1	0.2 to 2	1 to 5	1 to 10	2 to 16	2 to 20	4 to 40	6 to 60	10 to 100	25 to 150
	LPM	0.5 to 4	1 to 7	2 to 18	5 to 35	4 to 60	10 to 70	15 to 150	25 to 250	50 to 350	190 to 550
Accuracy	±4%FS										
Repeatability	±0.25%FS										
Turndown Ratio	10:1	10:1	5:1(10:1)	10:1	8:1	10:1	10:1	10:1	10:1	10:1	10:1
Maximum Pressure	10bar/150psig										
Maximum Temperature	80°C / 176° F										
Body Material	PMMA(Lucite)										
Float Material	316L(Stainless steel)										
Guide Rod Material	316L(Stainless steel)										
Fastening Screw Material	C2800(Copper)										
Tube Connection Material	UPVC(Nonpoisonous).(Can be made of stainless steel or copper chromium)										
Upper and Lower Adapter Bearing	FEP										
O Shape Sealing Ring	Silicon Rubber										



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## Variable-Area Flow Meter

**F8100** -  -  -  -    -  -  -  -  -  -  -

Metalic Rotor Flow Meter

L:Liquid

G:Gas

S:Steam

P:PTFE/FEP

S4:SS304

S6:SS316

1:Linear Indicator

2:Nonlinear Indicator

3:Remote Indicator

4:Ex-remote Indicator

5:LCD Indicator

6:LCD+Remote Indicator

Size(mm):006,015,025,040,050,080,100,150

Temperature

L: Low Temp. -40 to 212 F (-40 to +100)°C

H: High Temp.-112 to 482 F (-80 to +250)°C

Pressure(MPa)

P1: 230PSI(16bar) (80 to 150)

P2: 360psi(25bar)(25 to100)

P4: 580psi(40bar)(15 to 50)

P6: 915psi(63bar)(25 to 50)

ES4:4 to 20mA Powerd by DC24V

Alarm

LA:Low Alarm

HA:High Alarm

Thermal Jacket

T:Thermal Jacket

Horizontal

RL:Horizontal from Right to Left

LR:Horizontal form Left to right

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## Variable-Area Flow Meter

### Model Selection

**F8200** -  -

Glass Rotameter

Size(mm):2,3,4,6,10,15,25,40,50,80,100

A:Anti-corrosion



**F8300** -  -  -  -  -

Organic Glass Rotameter

Size(mm):8,9,10,25,40,50,65,100

L:Liquid

G:Gas

M:Panel Type NPT

G:Piping Type NPT

S:Square Piping Type

V:Valve included

T:Thread connection

F:Flange connection



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