

GENERAL

ALIAVA The AVF250 Series flowmeter is commonly used in location that required on-site analog flow indication.

The meter accurately measures small volumes / wide ranges of liquids, gases and steam.

FEATURES

- ❑ 5 Digit Flowrate & 8 Digit Totalizer
- ❑ Local indication without auxiliary power
- ❑ 4-20 mA and scale pulse output
- ❑ Low pressure loss in gas and steam application
- ❑ Damper for Gas / Steam application
- ❑ Consistent overall length
- ❑ Heating jacket design
- ❑ Intrinsically safe & explosion proof for hazardous area

STANDARD SPECIFICATION

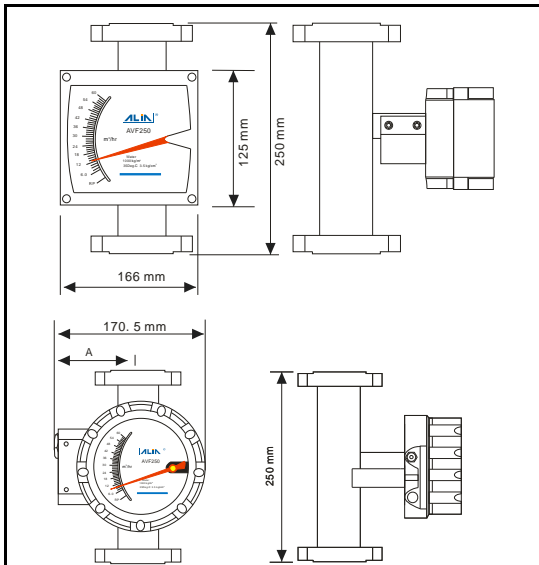
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|---------------------|---|-----------------------|--|
| ● Size | : 15,20,25,40,50,65,80,100,125,150,200 mm | ● Local Display | : Mechanical Indicator (Standard) |
| ● Measuring Range | : Liquid -1~200000 L/hr | Digit Display | : 5 Digit Flowrate |
| | : Gas -0.03~3000 m ³ /hr | | : 8 Digit Totalizer |
| ● Turndown Ratio | : 10:1 (20:1 Optional) | ● Current Output | : 4-20 mA (2 wires) |
| ● Accuracy | : +/-1.6% (Standard) | Load | : Max. 600 Ω |
| | : +/-1.0% (Optional) | ● Pulse Output | : Open collector (Scaled pulse) |
| ● Repeatability | : +/-0.5% FS | Rating | : 3-30 VDC, 100 mA Max. |
| ● Material | | ● Data Storage | : Operation parameters and totalizer figures are stored by EEPROM for more than 10 years |
| Tube & Float | : Stainless Steel 304 | ● Alarm Output | : 2 Point (Open collector) |
| | : Stainless Steel 316 | Rating | : 3-30 VDC, 100 mA Max. |
| | : Stainless Steel 316L | ● Keypad | : 3 Internal keys for programming and display control |
| | : Stainless Steel + PTFE Liner | ● Ambient Temperature | : -25~60 °C |
| ● Standard Pressure | : 40 kgf/cm ² (15-50 mm) | ● Protection Class | : IP65 |
| | : 16 kgf/cm ² (65-200 mm) | | : Intrinsically Safe, Eex ia IIC T5 |
| ● Temperature | : -25~200 °C (Standard) | | : Explosion Proof, Ex d IIC T6 |
| | : -25~100 °C (LCD Display) | ● Housing Material | : Aluminum Alloy |
| | : 0~80 °C (PTFE Liner) | ● Cable Entry | : Standard: M20 Option: 1/2" NPTF |
| | : -80~400 °C (Optional) | ● Pressure Loss | : 0.07-0.7 kgf/cm ² |
| ● Flange Type | : JIS 10K / JIS 20K / JIS 40K | ● Power Supply | : 12-36 VDC |
| | ANSI 150# / ANSI 300# / ANSI 600# | | : Ni-MH Battery (3 years working hours) |
| | DIN PN10 / PN16 / PN25 / PN40 | | |
| ● Fluid Viscosity | : 300 cP Max. | | |
| ● Communication | : RS485 (MODBUS Protocol) | | |
| | : HART signal (Compatible) | | |



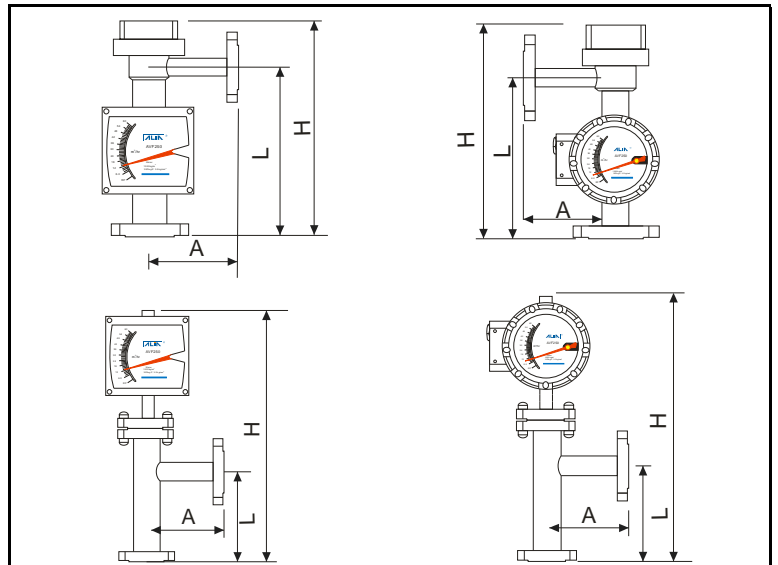
FLOW RANGE

Size				Float No.	S.S. 304 / 316 / 316L	S. S. + PTFE	S.S. 304 / 316 / 316L
					Water, 20 °C		Air, 0 °C, 1 ATM
					L/hr	L/hr	m ³ /hr
15 mm	1/2"	20 mm	3/4"	F15.0	1.0 - 10		0.03 - 0.3
				F15.1	1.6 - 16		0.07 - 0.7
				F15.2	2.5 - 25	1.6 - 16	0.11 - 1.1
				F15.3	4.0 - 40	2.5 - 25	0.18 - 1.8
				F15.4	6.3 - 63	4.0 - 40	0.28 - 2.8
				F15.5	10 - 100	6.3 - 63	0.4 - 4.0
				F15.6	16 - 160	10 - 100	0.7 - 7
				F15.7	25 - 250	16 - 160	1.0 - 10
				F15.8	40 - 400	25 - 250	1.6 - 16
25 mm	1"	40 mm	1-1/2"	F25.0	63 - 630		
				F25.1	100 - 1,000	63 - 630	3.0 - 30
				F25.2	160 - 1,600	100 - 1,000	4.5 - 45
				F25.3	200 - 2,000		
				F25.4	250 - 2,500	160 - 1,600	7.0 - 70
				F25.5	320 - 3,200		
				F25.6	400 - 4,000	200 - 2,000	12 - 120
				F25.7	500 - 5,000	250 - 2,500	
				F25.8	630 - 6,300	320 - 3,200	18 - 180
50 mm	2"	65 mm	2-1/2"	F50.0	500 - 5,000		
				F50.1	630 - 6,300	400 - 4,000	18 - 180
				F50.2	1,000 - 10,000	630 - 6,300	25 - 250
				F50.3	1,600 - 16,000	1,000 - 10,000	40 - 400
				F50.4	2,000 - 20,000	1,600 - 16,000	
80 mm	3"			F50.5	2,500 - 25,000		63 - 630
				F80.0	1,600 - 16,000		
				F80.1	2,000 - 20,000		
				F80.2	2,500 - 25,000	1,600 - 16,000	70 - 700
				F80.3	4,000 - 40,000	2,500 - 25,000	120 - 1,200
100 mm	4"	125 mm	5"	F80.4	6,300 - 63,000	4,000 - 40,000	180 - 1,800
				F100.0	4,000 - 40,000		
				F100.1	6,300 - 63,000	4,000 - 40,000	180 - 1,800
				F100.2	8,000 - 80,000	6,000 - 60,000	
150 mm	6"			F100.3	10,000 - 100,000		300 - 3,000
				F150.0	8,000 - 80,000		
				F150.1	10,000 - 100,000		300 - 3,000
200 mm	8"			F150.2	15,000 - 150,000		
				F150.3	20,000 - 200,000		
				F200.0	15,000 - 150,000		
				F200.1	20,000 - 200,000		

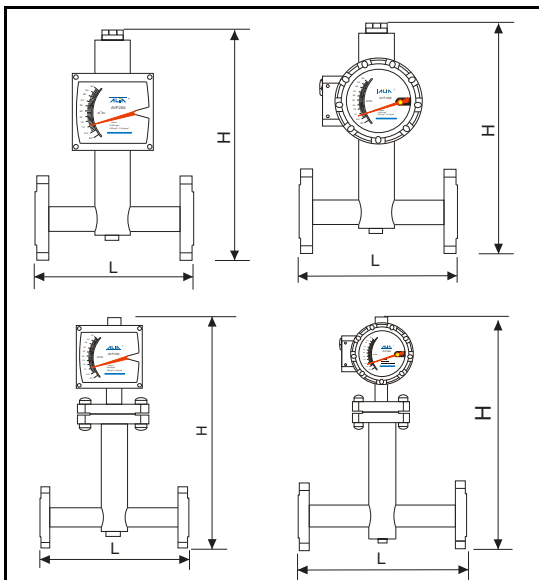
➤ DIMENSIONS



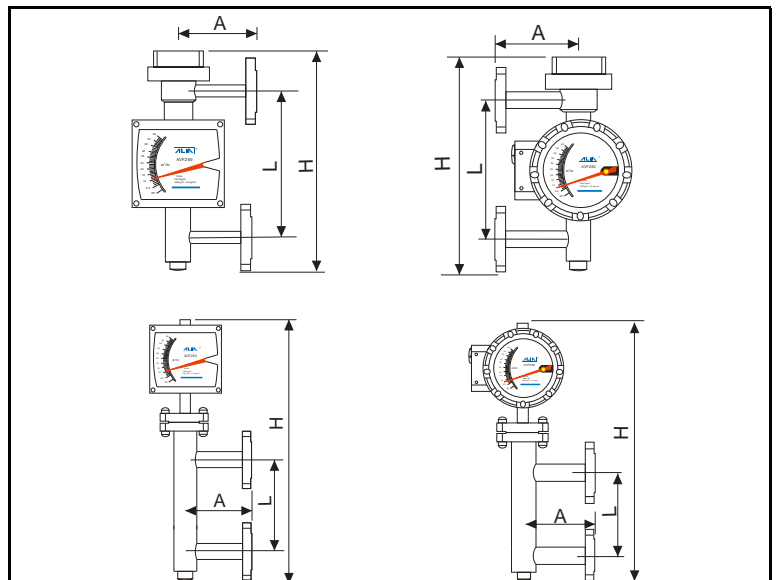
BT (Bottom-Top)			
Size mm	A mm	Weight kg	Δ P mbar
15	108	3.7	140
25	99	5.6	190
50	84	9.7	230
80	71	15	330
100	61	17	420
150	42	34	600
200	12	49	700



BR (Bottom-Top Side)					
Size mm	H mm	L mm	A mm	weight kg	Δ P mbar
15 mm	330	250	120	7.0	180
25 mm	340	250	120	8.0	220
50 mm	560	250	120	15	280
80 mm	575	250	150	25	350
100 mm	690	250	150	29	450
150 mm	690	300	180	53	580
200 mm	780	350	200	61	700



LR / RL (Horizontal)				
Size mm	H mm	L mm	weight kg	Δ P mbar
15	355	250	7.5	300
25	370	250	9	350
50	643	250	18	400
80	690	400	29	450
100	720	400	35	500
150	793	500	60	630
200	970	550	73	850



RR (Bottom Side-Top Side)					
Size mm	H mm	L mm	A mm	weight kg	Δ P mbar
15	380	250	120	7.2	200
25	400	250	120	8.7	280
50	643	250	120	16.6	360
80	675	250	150	28.2	450
100	700	250	150	33.5	580
150	832	300	180	58	630
200	950	350	200	68	700

MODEL SELECTION GUIDE

AVF250 Series									
Example: AVF250-050-S6ABT-B-IT-D									
AVF250-	XXX	-XX	X	XX	-X	-XX	-X	Description	
Size	015-200							15-200 mm (1/2"-8")	
Material		-S4						Stainless Steel 304	
		-S6						Stainless Steel 316	
		-SL						Stainless Steel 316L	
		-4P						Stainless Steel 304 + PTFE Liner	
		-6P						Stainless Steel 316 + PTFE Liner	
Process Connection			1					PN10	
			2					PN16	
			3					PN25	
			4					PN40	
			A					ANSI 150#	
			B					ANSI 300#	
			C					ANSI 600#	
			J					JIS 10K	
			K					JIS 20K	
			L					JIS 40K	
		Z					Others		
Flow Direction			BT					Bottom-Top	
			BR					Bottom-Top Side	
			RR					Bottom Side-Top Side	
			LR					Left-Right (Horizontal)	
			RL					Right-Left (Horizontal)	
Function			-A					Local Indication	
			-B					Local Indication + Rate 5 digit / Totalizer 8 digit + 4-20 mA	
			-C					Local Indication + Rate 5 digit / Totalizer 8 digit (Battery Power)	
			-D					Local Indication + One point Alarm (Reed Switch, 1 A, 30 VDC)	
			-E					Local Indication + Two point Alarm (Reed Switch, 1 A, 30 VDC)	
Protection Class					-NN			IP65	
					-IT			Intrinsically Safe, Eex ia IIC T5	
					-EX			Explosion Proof, Ex d IIC T6	
Option							-N	None	
							-C1	RS485 (MODBUS Protocol)	
							-C2	HART Signal (Compatible)	
							-D	Damper (For Steam & Gas Application)	
							-H	Heating Jacket	
							-P1	Pulse Output * 1 (With Function B Only)	
							-P2	Alarm Output * 2 (With Function B Only)	
							-T	Max. Temp. higher than 200 °C (100 °C for LCD Display)	
							-PT	Cable Entry 1/2" NPTF	