

GENERAL

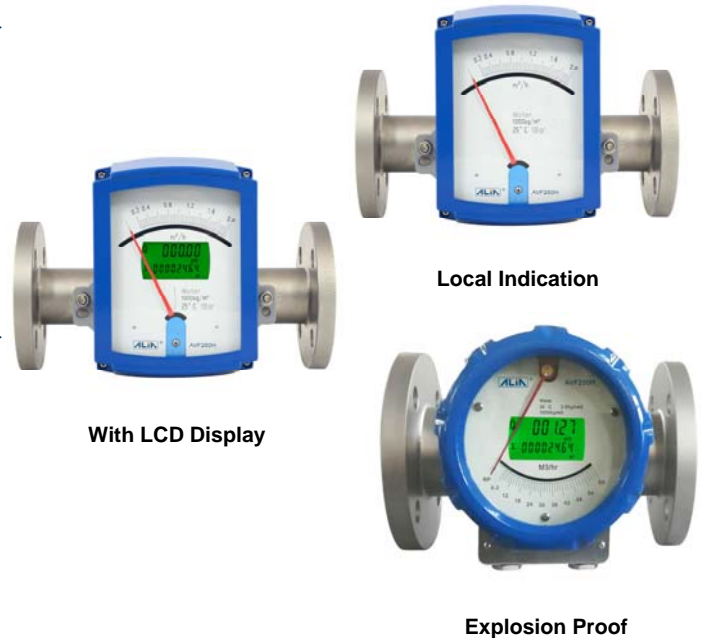
ALIAVA The AVF250H is a horizontally mounted metal tube variable area flowmeter. With its unique design, it can provide a mechanical pointer display without power supply, as well as intrinsically safe and explosion-proof to suit various operating conditions.

FEATURES

- ❑ Spring type horizontal mounted metal tube flowmeter
- ❑ 5 digit flowrate & 8 digit totalizer
- ❑ Local indication without auxiliary power
- ❑ 4-20 mA & scale pulse output
- ❑ Low pressure loss in gas and steam application
- ❑ Damper for Gas / Steam application
- ❑ Consistent overall length
- ❑ Intrinsically safe & explosion proof for hazardous area

STANDARD SPECIFICATION

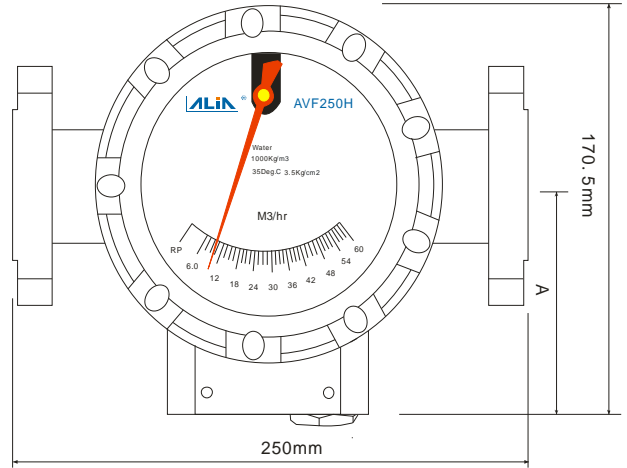
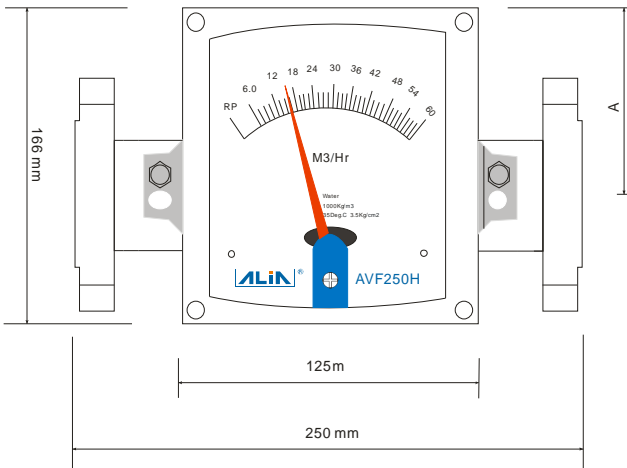
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|---------------------|--|-----------------------|---|
| ● Size | : 15,20,25,40,50,65,80,100,125,150,200 mm | ● Local Display | : Mechanical Indicator (Standard) |
| ● Measuring Range | : Liquid - 1 ~ 200000 Liter/Hr | Digit Display | : 5 Digit Flowrate |
| | : Gas - 0.03 ~ 3000 M3/Hr | | : 8 Digit Totalizer |
| ● Turndown Ratio | : 10:1 (20:1 Optional) | ● Current Output | : 4-20 mA (2 Wire) |
| ● Accuracy | : +/-2.5% (Standard) | Load | : Max. 600 Ω |
| | : +/-1.5% (Optional) | ● Pulse Output | : Open collector (Scale pulse) |
| ● Repeatability | : +/-0.8% FS | Rating | : 3 to 30 Vdc, 100 mA Max. |
| ● Material | | ● Alarm Output | : 2 point (Open collector) |
| Tube & Float | : Stainless Steel 304 | Rating | : 3 to 30Vdc, 100 mA Max. |
| | : Stainless Steel 316 | ● Keypad | : 3 internal keys for programming and display control |
| ● Standard Pressure | : 40 Kg/cm ² (15mm ~ 50mm) | ● Ambient Temperature | : 0 to +60 °C |
| | : 16 Kg/cm ² (65mm ~ 200mm) | ● Protection Class | : IP 65 |
| ● Temperature | : 0 ~ +100 °C (Standard) | | : Intrinsically Safe, Eex ia IIC T5 |
| ● Flange Type | : JIS 10K / JIS 20K / JIS 40K | | : Explosion Proof, Ex d IIB T6 |
| | ANSI 150# / ANSI 300# / ANSI 600# | ● Housing Material | : Aluminum Alloy |
| | DIN PN 10 / PN 16 / PN25 / PN 40 | ● Cable Entry | : Standard:M20 Option:1/2"NPTF |
| ● Fluid Viscosity | : 300 CP Max. | ● Pressure Loss | : 0.07 ~ 0.7 Kg/cm ² |
| ● Communication | : RS485 (MODBUS Protocol) | ● Power Supply | : 12 ~ 36VDC (2 wire 4-20 mA) |
| | : HART signal (Compatible) | | : Ni-MH Battery (3 years working hours) |
| ● Data Storage | : Operation parameters and totalizer figures are stored by EEPROM for more than 10 years | | |



FLOW RANGE

Size				Float No.	S.S.304 / 316	S.S.304 / 316
					Water, 20 °C	Air, 0 °C, 1 ATM
					Liter/hr	M3/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	0.11 - 1.1
				F15.3	4.0 - 40	0.18 - 1.8
				F15.4	6.3 - 63	0.28 - 2.8
				F15.5	10 - 100	0.4 - 4.0
				F15.6	16 - 160	0.7 - 7
				F15.7	25 - 250	1.0 - 10
				F15.8	40 - 400	1.6 - 16
25 mm	1"	40 mm	1-1/2"	F15.9	63 - 630	3.0 - 30
				F25.0	63 - 630	
				F25.1	100 - 1,000	3.0 - 30
				F25.2	160 - 1,600	4.5 - 45
				F25.3	200 - 2,000	
				F25.4	250 - 2,500	7.0 - 70
				F25.5	320 - 3,200	
				F25.6	400 - 4,000	12 - 120
50 mm	2"	65 mm	2-1/2"	F25.7	500 - 5,000	
				F25.8	630 - 6,300	18 - 180
				F50.0	500 - 5,000	
				F50.1	630 - 6,300	18 - 180
				F50.2	1,000 - 10,000	25 - 250
80 mm	3"			F50.3	1,600 - 16,000	40 - 400
				F50.4	2,000 - 20,000	
				F50.5	2,500 - 25,000	63 - 630
				F80.0	1,600 - 16,000	
100 mm	4"	125 mm	5"	F80.1	2,000 - 20,000	
				F80.2	2,500 - 25,000	70 - 700
				F80.3	4,000 - 40,000	120 - 1,200
				F80.4	6,300 - 63,000	180 - 1,800
150 mm	6"			F100.0	4,000 - 40,000	
				F100.1	6,300 - 63,000	180 - 1,800
				F100.2	8,000 - 80,000	
200 mm	8"			F100.3	10,000 - 100,000	300 - 3,000
				F150.0	8,000 - 80,000	
				F150.1	10,000 - 100,000	300 - 3,000
				F150.2	15,000 - 150,000	
				F150.3	20,000 - 200,000	
				F200.0	15,000 - 150,000	
				F200.1	20,000 - 200,000	

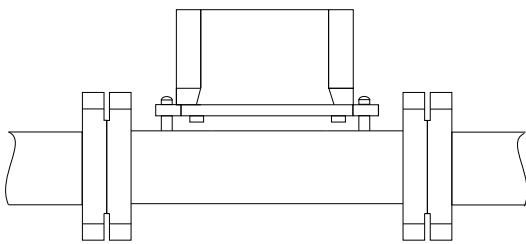
➤ DIMENSIONS



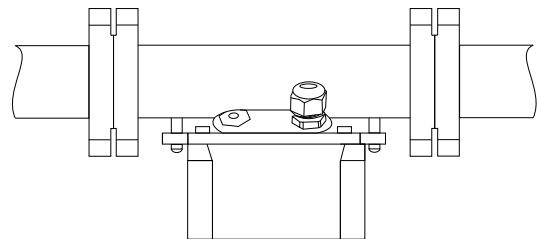
Left-Right/Right-Left			
Size mm	A mm	Weight kg	Δ P mbar
15	106	3.4	590
25	106	5.3	240
50	106	9.4	420
80	116	14.8	320
100	116	16.7	300
150	116	33.4	600
200	116	48.4	700

Left-Right/Right-Left			
Size mm	A mm	Weight kg	Δ P mbar
15	108	3.7	590
25	99	5.6	240
50	84	9.7	420
80	71	15.1	320
100	61	17.0	300
150	42	33.7	600
200	12	48.7	700

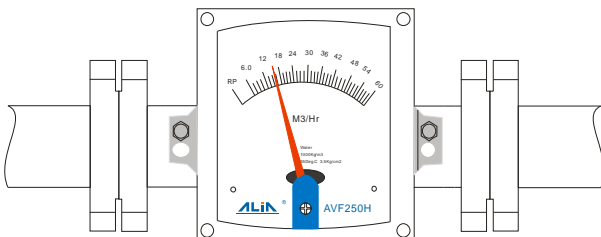
➤ INSTALLATION DIRECTION



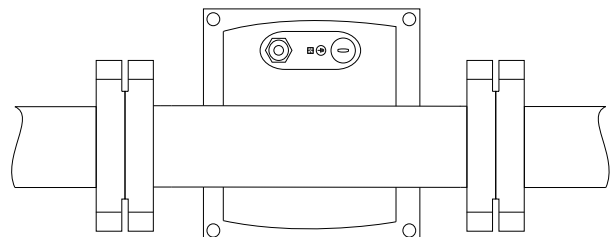
Top View



Bottom View



Front View



Back View

MODEL SELECTION GUIDE

AVF250H Series									
Example:AVF250H-050-S6ALR-B-IT-TV-C2									
AVF250H-	XXX	-XX	X	XX	-X	-XX	-X	-X	Description
Size	015 - 200								15 ~ 200mm (1/2" ~ 8")
Material		-S4							Stainless Steel 304
		-S6							Stainless Steel 316
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			LR						Left - Right
			RL						Right - Left
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, 1A, 30VDC)
				- E					Local Indication + Two point Alarm (Reed Switch,1A, 30VDC)
Protection Class					- NN				IP65
					- IT				Intrinsically Safe, Eex ia IIC T5
					- EX				Explosion Proof, Ex d IIB T6
Installation Direction							-TV		Top view (see page 3 for details)
							-BV		Bottom view (see page 3 for details)
							-FV		Front view (see page 3 for details)
							-KV		Back view (see page 3 for details)
							-ZZ		Other directions
Option							-N		None
							-C1		RS485 (Modbus Protocol)
							-C2		HART Signal (Compatible)
							-P1		Pulse Output * 1 (With Function B Only)
							-P2		Alarm Output * 2 (With Function B Only)
							-PT		Cable Entry 1/2" NPTF