

GENERAL

ALIAMASS ACF6000 Series uses the Coriolis effect as a technique for liquid mass flow measurement.

The ACF6000 can measure most of the liquids; the infrared light sensor makes it easy for you to set parameters & change the display data. The Double-C tube & Double-D Tube make it possible for the meter to be used in most liquid applications.

FEATURES

- Can be programmed by infrared light sensor without opening cover
- High turndown ratio of flow rate
- It comes any flanges such as ANSI, DIN, JIS... etc
- Excellent for high pressure application
- Simple for installation, commission and maintenance
- Self-diagnostic capabilities, cable faults, pipe vibration
- High accuracy of +/-0.2% of reading (or +/-0.1% of reading)
- With forward / reverse flow rate measurement function

STANDARD SPECIFICATION

- | | | | |
|-----------------------|---|------------------------|--|
| ● Sensor Type | : C tube (10-40mm) / U tube (50-150mm) | ● Display | : 2 lines LCD with illumination |
| ● Size | : 10mm ~ 200 mm (3/8" ~ 8") | ● Flow Rate Unit | : g/s, Kg/min, kg/Hr, T/Hr, 6 Digit |
| ● Flow Range | : 0 - 1000 Kg/Hr ~ 0 - 1106000 Kg/Hr | ● Density Unit | : Kg/m3, g/cm3, 6 Digit |
| ● Accuracy | : +/-0.2% +/-ZS of reading (Standard) | ● Totalizer Unit | : g, Kg, Ton, L, M3, 7 Digits |
| | : +/-0.1% +/-ZS of reading (Optional) | ● Temperature | : °C, °F, 4 Digits |
| ● Repeatability | : +/-0.03% +/-ZS of reading | ● Keypad | : Infrared light Sensor,
can be programmed without
Opening the cover |
| ● Density Range | : 200 - 2300 Kg/M3 (0.2 - 2.3 g/cm3) | ● Turndown Ratio | : 20 : 1 |
| | Accuracy : +/-0.002 g/cm3 | ● Damping | : 0.01 To 1.0 Seconds |
| ● Temperature Range | : -40 °C ~ +125 °C (Standard) | ● Low Flow Cutoff | : 0.0% ~ 9.0% |
| | : -40 °C ~ +250 °C (Optional, Separate Only) | ● Communication | : RS485 (Modbus Protocol) (Standard) |
| ● Material | | | : Hart Signal (Optional) |
| | Wetted Parts : Stainless Steel 316L | ● Current Output | : 4-20 mA (Isolated) |
| | Flange : Stainless Steel 316L | | Load : Max. 750 Ω |
| | Sensor Housing : Stainless Steel 304 | | Output Unit : Mass / Volume / Density / Temperature |
| | Junction Box : Aluminum Alloy (Epoxy Paint) | ● Pulse (Alarm) Output | : Open Collector |
| ● Process Connection | : Flange | | Rating : 3-30Vdc, 50mA Max. |
| ● Flange Type | : JIS 10K / JIS 20K / JIS 40K | ● Power Supply | : 90-260 VAC, 50/60 Hz or 24 VDC +/-10% |
| | : ANSI 150# / ANSI 300# / ANSI 600# | ● Power Consumption | : 30 - 40 W (Depend on sensor size) |
| | : DIN PN 10 / PN 16 / PN25 / PN 40 | ● Cable Entry | : Sensor to Converter- 3/4" G |
| ● Protection Class | : IP 67 | | : Signal output / Power supply- M20 |
| | : Explosion Proof Exde (ib) IIC T6 (Optional) | ● Ambient Temperature | : -40 °C to +60 °C |
| ● Installation | : Compact or Separate | ● Max. Pressure | : 63 Kg/cm2 |
| ● Signal Cable Length | : 10M - 100M | | |



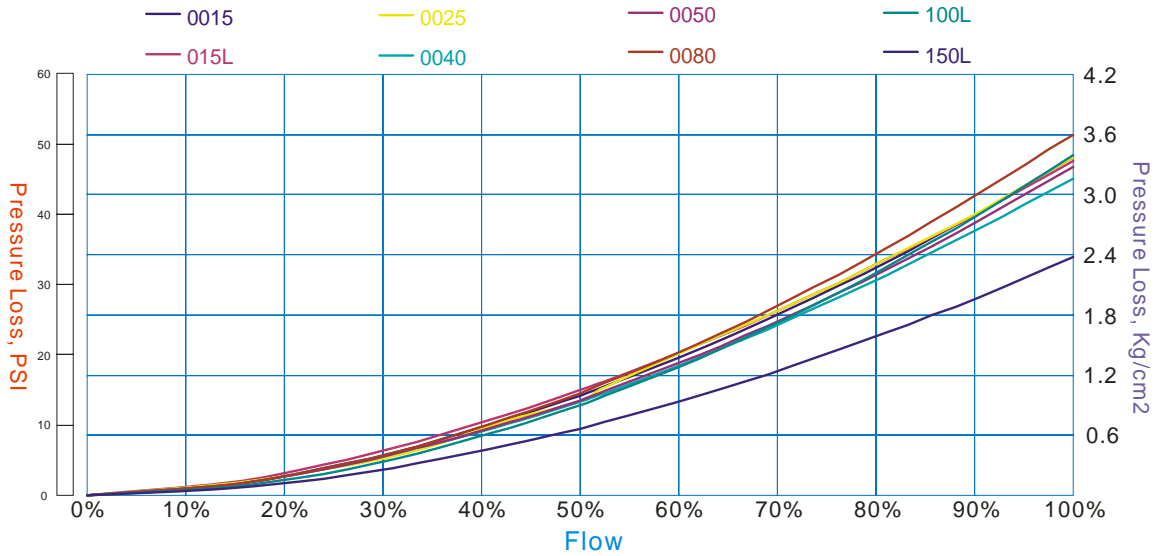
FLOW RANGE

Unit : Kg/Hr

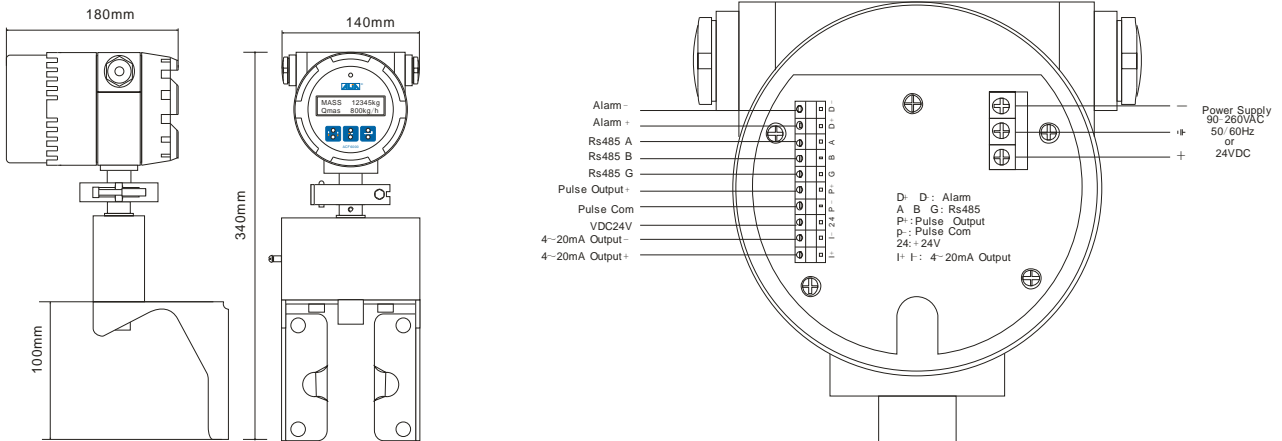
Normal Size		Flow Rate & Accuracy Table					
Model Code	Inch	Minimum	Normal	Maximum	Zero Stability	Temperature Effect %Flow Rate / °C	Pressure Effect %Flow Rate / Kg/cm2
0015	1/2"	100	1,000	2,000	0.17	+/-0.000125	-0.001
015L	1/2"(L)	300	3,000	6,000	0.40		
0020	3/4"	300	3,000	6,000	0.40		
0025	1"	630	6,300	12,600	0.90		
0040	1-1/2"	1,710	17,100	34,200	2.40		
0050	2"	6,330	63,300	126,600	8.30	+/-0.0005	-0.011
0065	2-1/2"	6,330	63,300	126,600	8.30		
0080	3"	16,100	161,000	322,000	19.0		
0100	4"	16,100	161,000	322,000	19.0		
100L	4" (L)	36,200	362,000	724,000	48.0		
0125	5"	36,200	362,000	724,000	48.0	+/-0.001	-0.058
0150	6"	36,200	362,000	724,000	48.0		
150L	6"(L)	55,300	553,000	1,106,000	78.0	+/-0.0025	-0.035
0200	8"	55,300	553,000	1,106,000	78.0		

Accuracy Between Minimum - Maximum is +/- 0.2% (+/- 0.1%) of Reading

PRESSURE LOSS



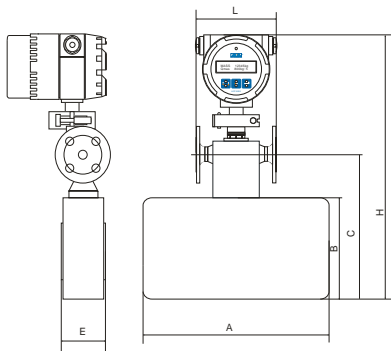
WIRING DIAGRAM



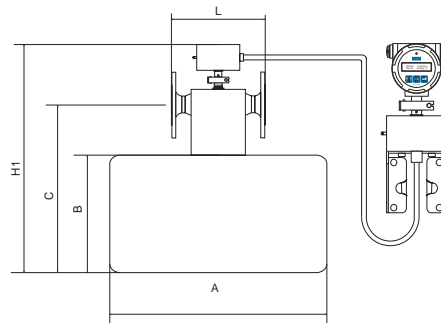
➤ DIMENSIONS

Normal Size		Standard Pressure kg/cm2	Dimensions (mm)							Sensor Weight Separate Type
mm	Inch		L	A	B	C	H	H1	E	KG
15	1/2"	40	162	320	170	223	436	357	76	6.5
15L	1/2"		162	370	190	250	458	379	94	7.5
25	1"		202	480	265	337	540	460	114	11
40	1.5"		274	615	295	383	563	513	146	21.5
50 / 65	2" - 2.5"		562 / 570	460	595	702	930	847	201	46
80 / 100	3" - 4"		850 / 864	774		937	310		214	89
100L / 150	4" - 6"		890 / 910	824		1135	285		264	208
150L / 200	6" - 8"		1090/1116	950		1050	285		290	248

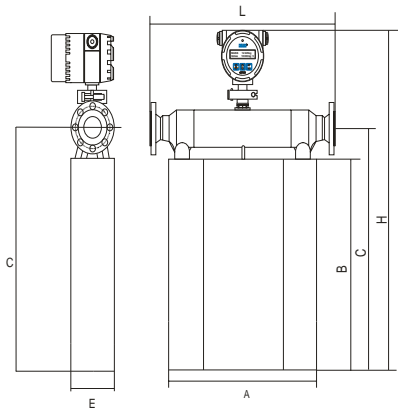
Note: Standard Dimension L only for DIN flange



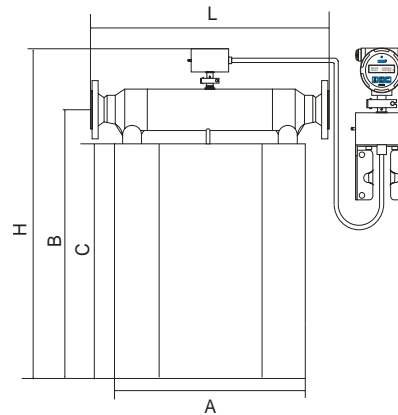
DN15-40



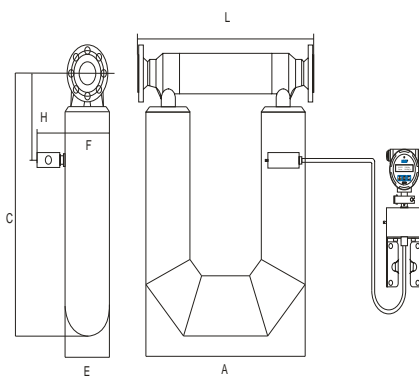
DN15-40



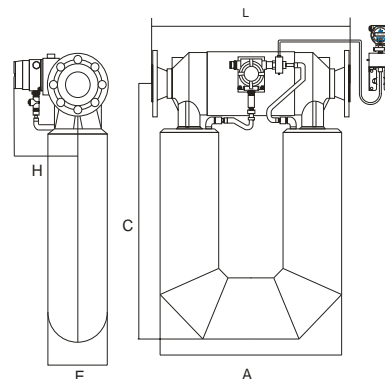
DN50 - DN65



DN50 - DN65



DN80



DN100 - DN200

MODEL SELECTION GUIDE

ACF6000 Series										
Example: ACF6000-0080-AH-020-H-AC-HT/EX/PT										
ACF6000-	XXXX	-X	X-	XXX	-X	-XX	-XX	Description		
Size	0015-0200							0015 / 015L / 0020 / 0025 / 0040 / 0050 / 0065 mm		
								0080 / 0100 / 100L / 125 / 150 / 150L / 200 mm		
Process Connection	-1							PN10		
	-2							PN16		
	-3							PN25		
	-4							PN40		
	-A							ANSI 150 #		
	-B							ANSI 300 #		
	-C							ANSI 600 # (Max. Pressure 63 Kg/cm2)		
	-J							JIS 10K		
	-K							JIS 20K		
	-L							JIS 40K		
-Z							Other			
Max. Temperature	N-							-40 °C ~ +125 °C		
	H-							-40 °C ~ 200 °C (Separate Type Only)		
	X-							-40 °C ~ 250 °C (Separate Type Only)		
Installation & Cable Length	NNN								Compact Version (Size 15 / 20 / 25 / 40 / 50 / 65mm Only)	
	010~100								Separate Version, Cable 10M ~ 100M, 2" Mounting Bracket	
Accuracy	-N								+/- 0.2% of reading	
	-H								+/- 0.1% of reading	
Power Supply	-AC								90 - 260 VAC, 50/60 Hz	
	-DC								24 VDC +/-10%	
Option	-NN								None	
	-HT								HART Signal	
	-EX								Explosion Proof, Exde (ib) IIC T6	
	-HJ								Heating Jacket	
	-PT								Cable Entry 1/2" NPTF	

WORKING PRINCIPLE

