



ALIAMASS

Coriolis Mass Flowmeter

Model ACF6000 Series

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.

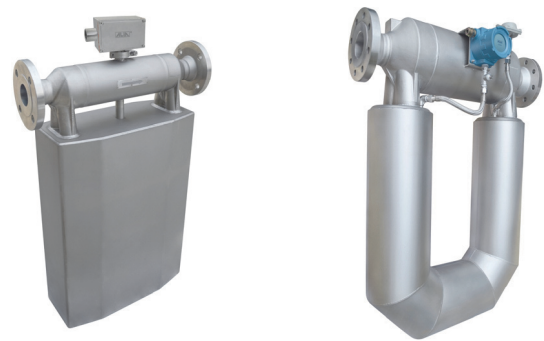


FEATURES

- ☐ 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 (3/8"-1.5") / U tube (1.969"-5.906")
- Size : (3/8" ~ 8")
- Flow Range : 0 - 1000 Kg/Hr ~ 0 - 1106000 Kg/Hr
- Accuracy : +/-0.2% +/-ZS of reading (Standard)
: +/-0.1% +/-ZS of reading (Optional)
- Repeatability : +/-0.03% +/-ZS of reading
- Density Range : 200 - 2300 Kg/M3 (0.2 - 2.3 g/cm3)
Accuracy : +/-0.002 g/cm3
- Temperature Range : -40 °F... +257 °F (Standard)
: -40 °F... +482 °F (Optional, Separate Only)
- Material
Wetted Parts : Stainless Steel 316L
Flange : Stainless Steel 316L
Sensor Housing : Stainless Steel 304
Junction Box : Aluminum Alloy (Epoxy Paint)
- Process Connection : Flange
- Flange Type : JIS 10K / JIS 20K / JIS 40K
: ANSI 150# / ANSI 300# / ANSI 600#
: DIN PN 10 / PN 16 / PN25 / PN 40
- Protection Class : IP 67
: Explosion Proof Exde (ib) IIC T6 (Optional)
- Installation : Compact or Separate
- Signal Cable Length : 32.81F - 328.1F



- Display : 2 lines LCD with illumination
Flow Rate Unit : g/s, Kg/min, kg/Hr, T/Hr, 5 Digit
Density Unit : Kg/m3, g/cm3, 5 Digit
Totalizer Unit : g, Kg, Ton, L, M3, 11 Digits
Temperature : °C, °F, 4 Digits
- Keypad : Infrared light Sensor,
can be programmed without
Opening the cover
- Turndown Ratio : 20 : 1
- Damping : 0.01 To 1.0 Seconds
- Low Flow Cutoff : 0.0% ~ 9.0%
- Communication : RS485 (Modbus Protocol) (Standard)
: Hart Signal (Optional)
- Current Output : 4-20 mA (Isolated)
Load : Max. 750 Ω
Output Unit : Mass / Volume / Density / Temperature
- Pulse (Alarm) Output : Open Collector
Rating : 3-30Vdc, 50mA Max.
- Power Supply : 90-260 VAC, 50/60 Hz or 24 VDC +/-10%
- Power Consumption : 30 - 40 W (Depend on sensor size)
- Cable Entry : Sensor to Converter- 3/4" G
: Signal output / Power supply- M20
- Ambient Temperature : -40 °F ... +140 °F
- Max. Pressure : 896.07067 PSI



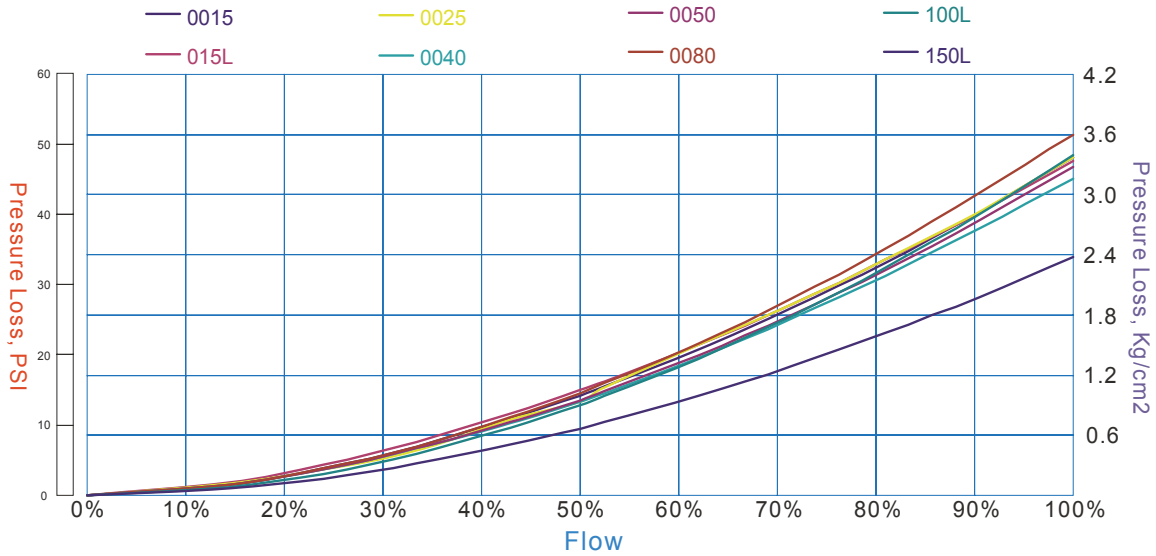
FLOW RANGE

Unit : Kg/Hr

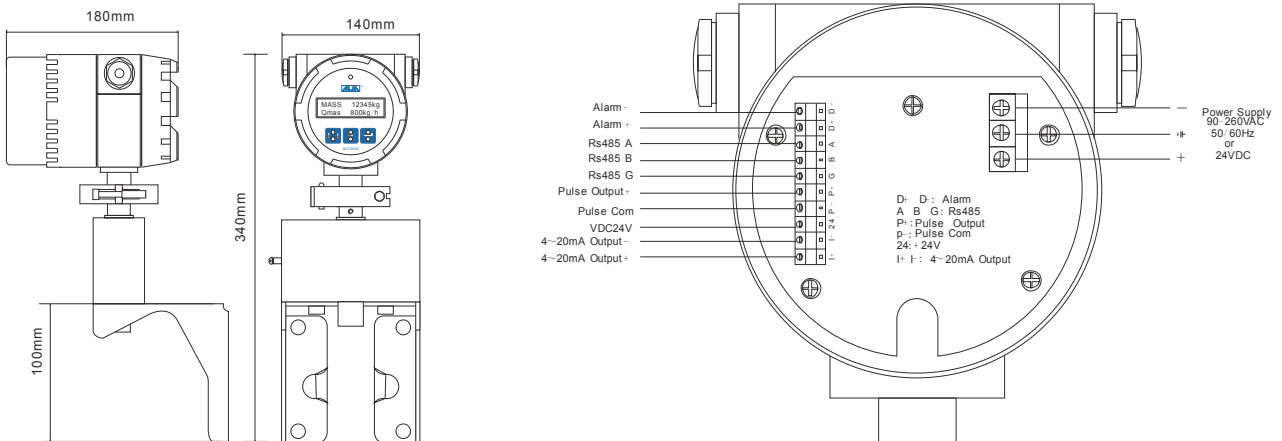
Normal Size		Flow Rate & Accuracy Table					
Model Code	Inch	Minimum	Normal	Maximum	Zero Stability	Temperature Effect %Flow Rate / °C	Pressure Effect %Flow Rate / Kg/cm2
0015	1/2"	100	1,000	2,000	0.17	+/-0.000125	-0.001
015L	1/2"(L)	300	3,000	6,000	0.40		
0020	3/4"	300	3,000	6,000	0.40		
0025	1"	630	6,300	12,600	0.90		
0040	1-1/2"	1,710	17,100	34,200	2.40	+/-0.0005	-0.003
0050	2"	6,330	63,300	126,600	8.30		
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	+/-0.001	-0.011
100L	4" (L)	36,200	362,000	724,000	48.0		
0125	5"	36,200	362,000	724,000	48.0		
0150	6"	36,200	362,000	724,000	48.0		
150L	6"(L)	55,300	553,000	1,106,000	78.0	+/-0.0025	-0.025
0200	8"	55,300	553,000	1,106,000	78.0		

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

PRESSURE LOSS



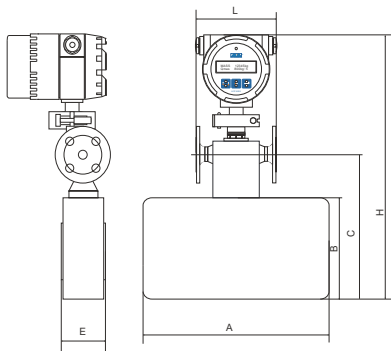
WIRING DIAGRAM



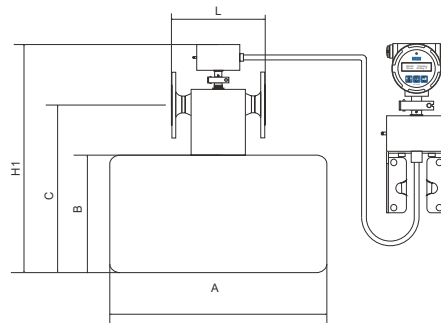
➤ DIMENSIONS

Normal Size		Standard Pressure	Dimensions (in)							Sensor Weight Separate Type
mm	Inch	psi	L	A	B	C	H	H1	E	lb
15	1/2"	568.934	6.37"	12.6"	6.693"	8.78"	17.17"	14.06"	2.992"	6.5
15L	1/2"		6.37"	14.57"	7.48"	9.843"	18.03"	14.92"	3.701"	7.5
25	1"		7.95"	18.9"	10.43"	13.27"	21.26"	18.11"	4.488"	11
40	1.5"		10.7"	24.21"	11.61"	15.08"	22.17"	20.2"	5.748"	21.5
50 / 65	2" - 2.5"		22.13" / 22.44"	18.11"	23.43"	27.64"	36.61"	33.35"	7.913"	46
80 / 100	3" - 4"		33.46" / 34.02"	30.47"		36.89"	12.2"		8.425"	89
100L / 150	4" - 6"		35.04" / 35.83"	32.44"		44.69"	11.22"		10.39"	208
150L / 200	6" - 8"		42.91"/43.94"	37.4"		41.34"	11.22"		11.42"	248

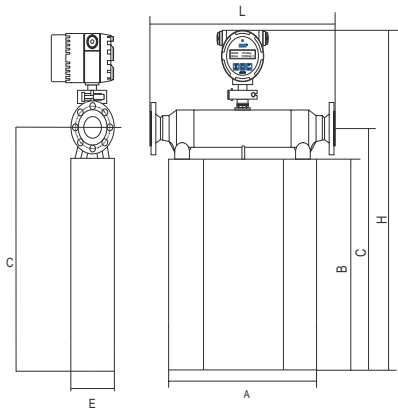
Note: Standard Dimension L only for DIN flange



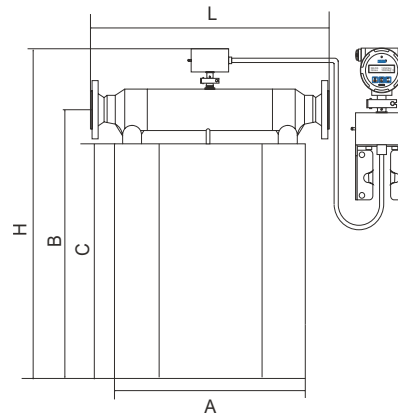
DN15-40



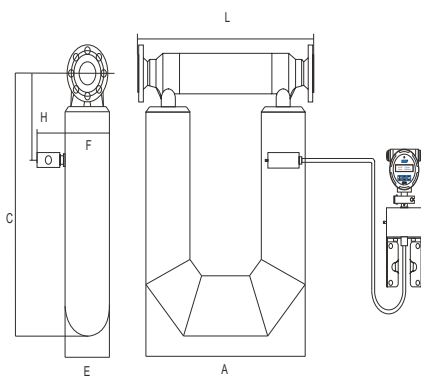
DN15-40



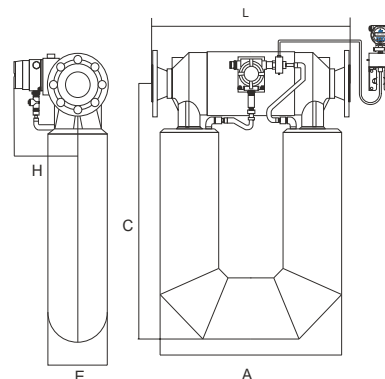
DN50 - DN65



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							1/2" / 015L / 3/4" / 1" / 1-1/2" / 2" / 2-1/2" in		
								3" / 4" / 100L / 3-1/2" / 6" / 150L / 8" in		
Process Connection	-1							PN10		
	-2							PN16		
	-3							PN25		
	-4							PN40		
	-A							ANSI 150 #		
	-B							ANSI 300 #		
	-C							ANSI 600 # (Max. Pressure 896.07067 PSI)		
	-J							JIS 10K		
	-K							JIS 20K		
	-L							JIS 40K		
-Z							Other			
Max. Temperature	N-							-40 °F... +257 °F		
	H-							-40 °F... 392 °F (Separate Type Only)		
	X-							-40 °F... 482 °F(Separate Type Only)		
Installation & Cable Length	NNN								Compact Version (Size 1/2" / 3/4" / 1" / 1-1/2" / 2" / 2-1/2" in Only)	
	010~100								Separate Version, Cable 32.81F ... 328.1F, 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

