

GENERAL

ALIAMASS The ACF60CS Series uses the Coriolis effect as a technique for liquid mass flow measurement.

The ACF60CS 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 (5-40 mm) / U tube (50-250 mm) | ● Display | : 2 lines LCD with illumination |
| ● Size | : 15-250 mm (1/2"-10") | Flow Rate Unit | : g/s, kg/m, kg/hr, t/hr, lb/m, USgal/m (6 Digit) |
| ● Flow Range | : 0-240 kg/hr~0-2200 t/hr | Density Unit | : kg/m ³ , g/cm ³ (6 Digit) |
| ● Accuracy | : +/-0.2% +/-ZS of reading (Standard) | Totalizer Unit | : g, kg, Ton, L, m ³ , Nm ³ , lb, USgal (7 Digit) |
| | : +/-0.1% +/-ZS of reading (Optional) | Temperature | : °C, °F (4 Digit) |
| ● Repeatability | : +/-0.03% +/-ZS of reading | ● Keypad | : Infrared light Sensor, can be programmed without opening the cover |
| ● Density Range | : 200-2300 kgf/m ³ (0.2-2.3 g/cm ³) | ● Turndown Ratio | : 20:1 |
| Accuracy | : +/-0.002 g/cm ³ | ● Damping | : 0.01-1.0 Seconds |
| ● Temperature Range | : -40~125 °C (Standard) | ● Low Flow Cutoff | : 0.0-9.0% |
| | : -40~250 °C (Optional, Remote 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 | : 3-30 VDC, 50 mA 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 PN10 / PN16 / PN25 / PN40 | ● Cable Entry | : Sensor to Converter-3/4" G |
| ● Protection Class | : IP67 | | : Signal output / Power supply-M20 |
| | : Explosion Proof, Ex d e [ib] IIC T6 (Optional) | ● Ambient Temperature | : -40~60 °C |
| ● Installation | : Compact or Remote | ● Max. Pressure | : 63 kgf/cm ² |
| ● Signal Cable Length | : 10-100 m | | |



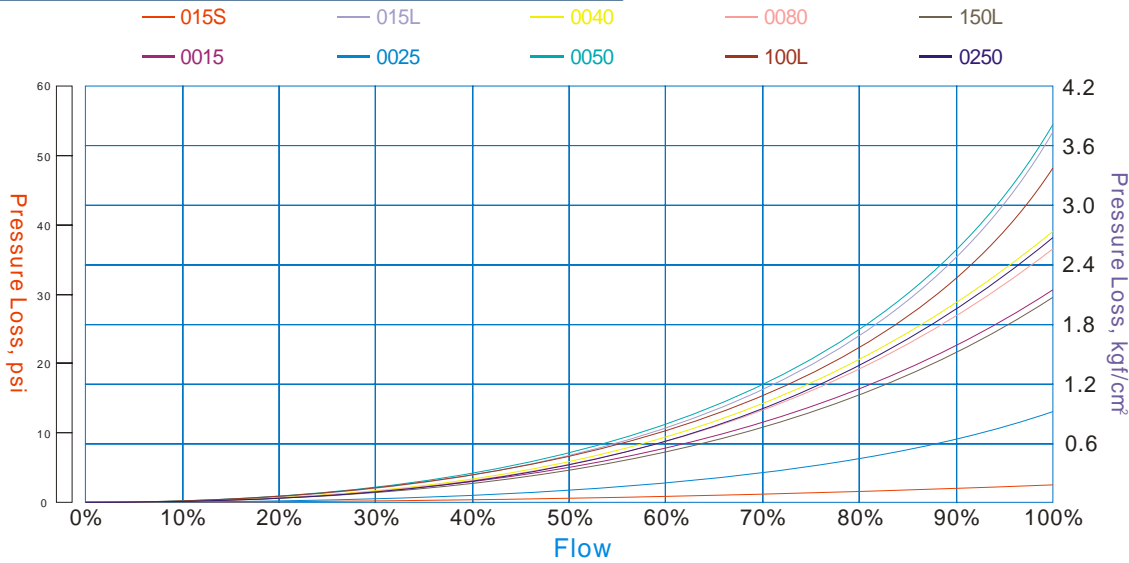
FLOW RANGE

Unit : kg/hr

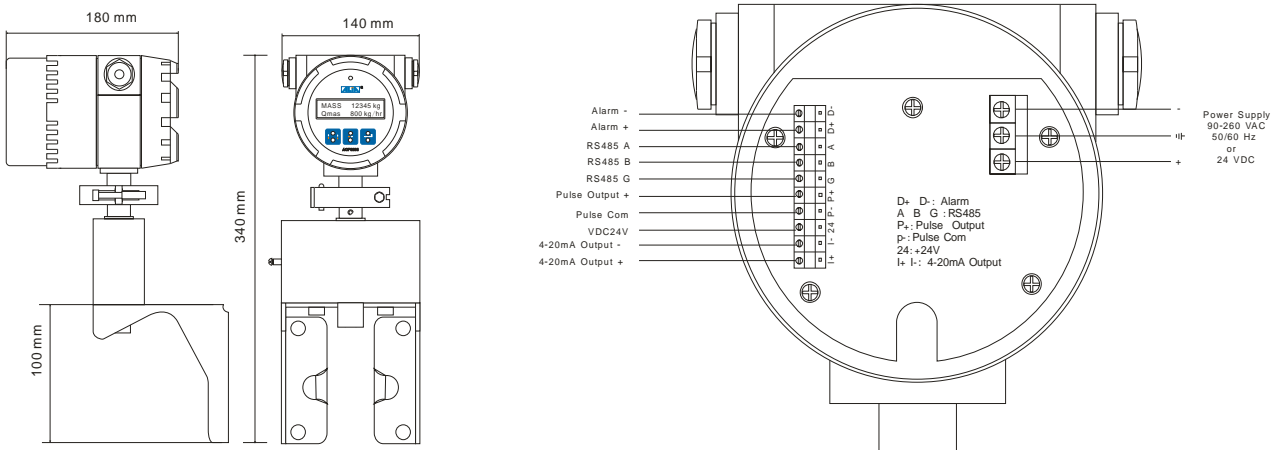
Normal Size		Flow Rate & Accuracy Table					
Model Code	Inch	Minimum	Normal	Maximum	Zero Stability	Temperature Effect %Flow Rate / °C	Pressure Effect %Flow Rate / kgf/cm ²
015S	1/2"(S)	24	240	480	0.045	+/-0.000125	-0.001
0015	1/2"	100	1,000	2,000	0.17		
015L	1/2"(L)	300	3,000	6,000	0.40		
0020	3/4"	300	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		
100L	4" (L)	36,200	362,000	724,000	48.0	+/-0.001	-0.058
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		
0200	8"	55,300	553,000	1,106,000	78.0		
200L	8"(L)	110,000	1,100,000	2,200,000	156.0	+/-0.0025	-0.035
0250	10"	110,000	1,100,000	2,200,000	156.0		

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

PRESSURE LOSS



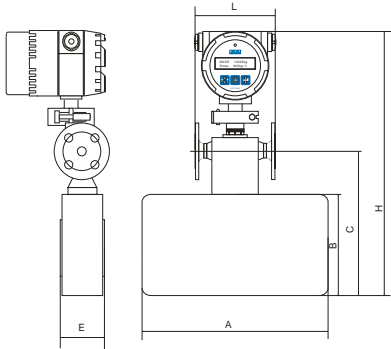
WIRING DIAGRAM



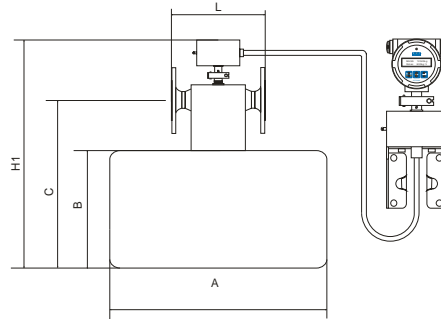
➤ DIMENSIONS

Normal Size		Standard Pressure kgf/cm ²	Dimensions (mm)							Sensor Weight Remote Type
mm	Inch		L	A	B	C	H	H1	E	kg
15S	1/2"	40	310	170	168	123	347	273	55	6.3
15	1/2"		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
200L / 250	8" - 10"		1206 / 1240	1000		1407	287		380	365

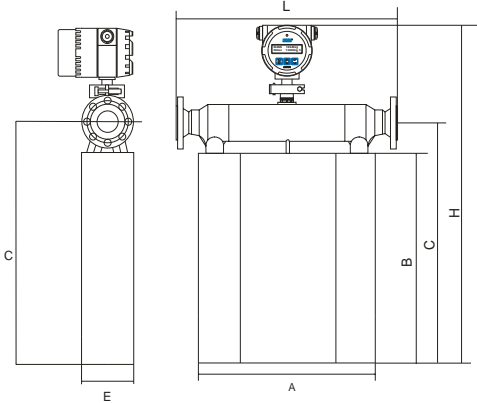
Note: Standard Dimension L only for DIN flange



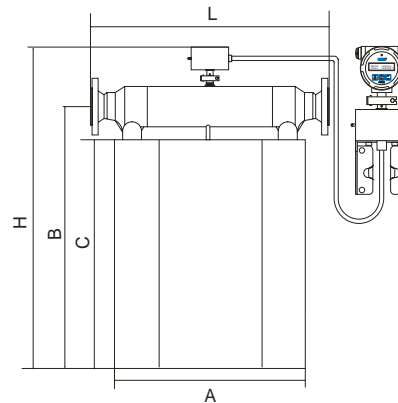
DN15-DN40



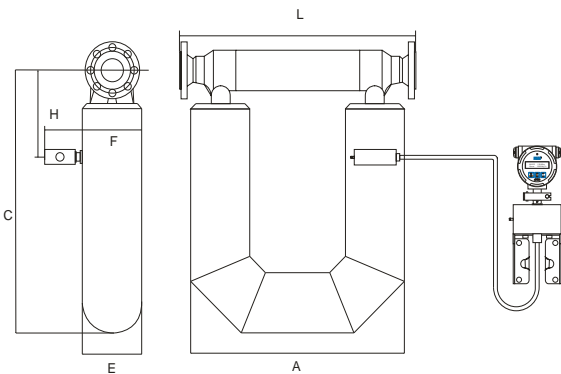
DN15-DN40



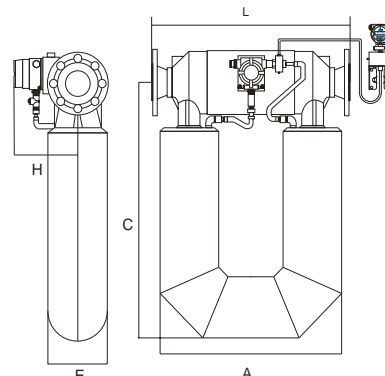
DN50-DN65



DN50-DN65



DN80



DN100-DN250

MODEL SELECTION GUIDE

ACF60CS Series								
Example: ACF60CS-0080-AH-020-H-AC-HT/EX/PT								
ACF60CS-	XXXX	-X	X-	XXX	-X	-XX	-XX	Description
Size	015S-0250							015S / 0015 / 015L / 0020 / 0025 / 0040 / 0050 / 0065 mm 0080 / 0100 / 100L / 0125 / 0150 / 150L / 0200 / 200L / 0250 mm
Process Connection		-1						PN10
		-2						PN16
		-3						PN25
		-4						PN40
		-A						ANSI 150#
		-B						ANSI 300#
		-C						ANSI 600# (Max. Pressure 63 kgf/cm ²)
		-J						JIS 10K
		-K						JIS 20K
		-L						JIS 40K
	-Z						Other	
Max. Temperature		N-						-40~125 °C
		H-						-40~200 °C (Remote Type Only)
		X-						-40~250 °C (Remote Type Only)
Installation & Cable Length			NNN					Compact Version (Size 15 / 20 / 25 / 40 / 50 / 65 mm only)
				010-100				Remote Version, Cable 10-100 m, 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, Ex d e [ib] IIC T6
						-HJ		Heating Jacket
						-PT		Cable Entry 1/2" NPTF

WORKING PRINCIPLE

