ALIASONIC

Transit-Time Ultrasonic Flowmeter

Model AUF761 Series

GENERAL

ALIASONIC The AUF761 Series is a fixed-mounted, transit-time ultrasonic Flowmeter. It features factory-mounted transducers that allow it to be flow lab calibrated, reducing or eliminating the random or bias error that can be present in clamp-on style transducer mounting. The meter ensures an accurate, non-invasive measurement of clean homogeneous liquid process, and is widely used in process control and production measurement.

FEATURES

- 2 lines LCD display with flowrate, totalizer…
- Stores to 720 Hours / 365 Days / 36 Months / 10 Years of Totalizer value
- Pipe size from DN20-DN1000 mm
- High accuracy of +/-1% of reading
- Bidirectional measurement
- Various output types such as 4-20 mA, pulse, RS485, alarm
- With self-calibration function, real-time measurement calibration
- Accurate and stable measurement
- The sensor has anti-high temperature and long service life, It can reach to 200 °C in a short time

STANDARD SPECIFICATION

- Measuring Principle : Transit time difference
- Pipe Size : DN20-DN1000 mm
- Flow Velocity : 0.3 ~ +/-12 m/s
- Resolution : 0.001 m/s
- Accuracy : +/-1% of reading
- Repeatability : +/-0.2% of reading
- Response Time : Less than 1 second
- Process Temperatue : -40~70 °C
  : -40~160 °C
- Max. Pressure : 100 kgf/cm^2
- Process Connection : Thread (DN20-DN40)
  : Flange (DN20-DN1000)
- Flange Type : JIS 10K / JIS 20K / JIS 40K
  ANSI 150# / ANSI 300# / ANSI 600#
  DIN PN10 / PN16 / PN25 / PN40
- Body Material : S.S. 304 / S.S. 316
- Housing Material : Aluminum Alloy
- Ambient Temperature : -20~50 °C
- Protection Class : IP67
- Explosion Proof : Ex d IIC T4
  IR Remote Control : Intrinsically Safe, Ex ib IIC T6
- Installation : Compact or Remote
- Keypad : 4 Internal Keys / IR Remote Control
- Display : 2 Lines LCD with illumination
  Flowrate : 7 Digit with decimal point
  Totalizer : 8 Digit, Forward, Reverse & Net values.
  Engineering Unit : m^3, L, USgal, USbbl, ft^3
  Time Unit : sec, min, hour, day
  Other : Velocity, Date, Time, Signal condition
- Max. Cable Length : 100 m
- Power Consumption : Less than 2W
- Power Supply : 90-260 VAC 50/60 Hz and 24 +/-10% VDC
- Data Storage : Operation parameters and totalizer figures are stored by EEPROM for more than 10 years
- Current Output : 4-20 mA
  Load : Max. 800 Ω
- Pulse Output : Scaled Pulse (Open Drain)
  Rating : 3-35 VDC, 120 mA Max.
- Alarm Output : 2 Relays, Upper and Lower alarm (Option)
  Rating : 5A, 30 VDC / 5A, 250 VAC
- Communication : RS485 (MODBUS)
- Cable Entry : 1/2" NPT (Female) (Standrad)
  : M20 * 1.5 (Option)

CE

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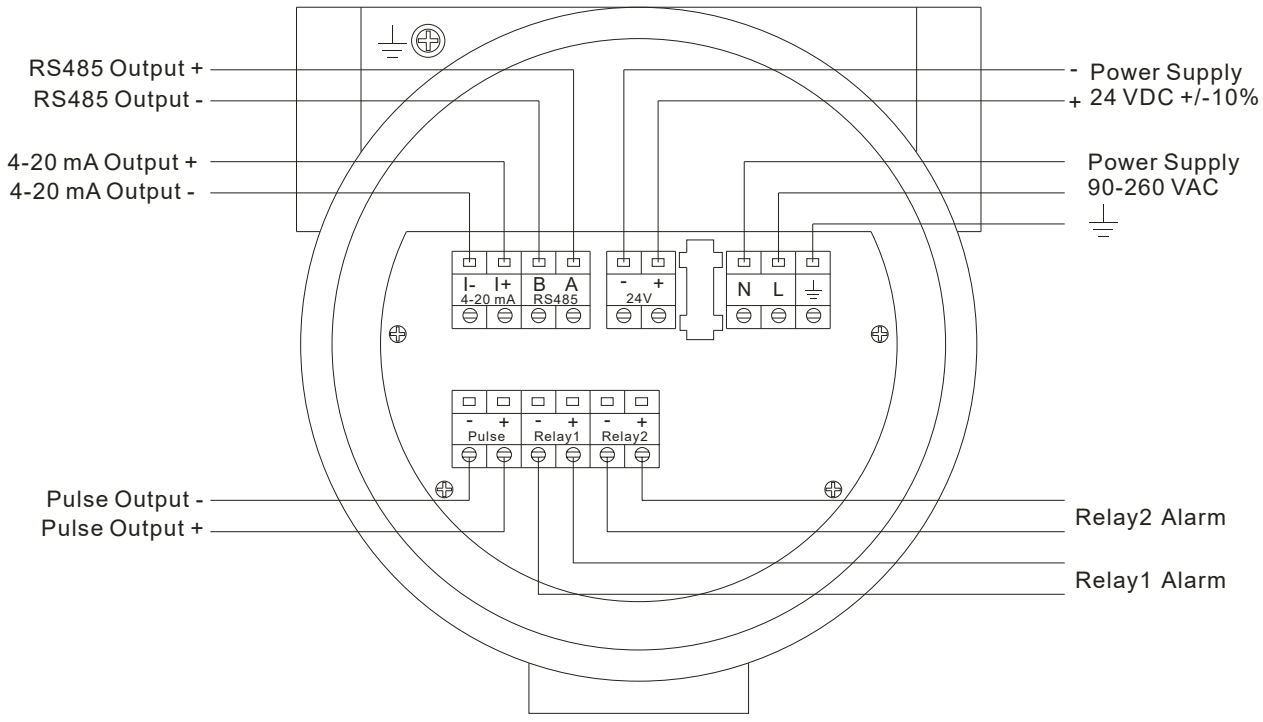
FLOW RANGE

Unit: m^3/hr

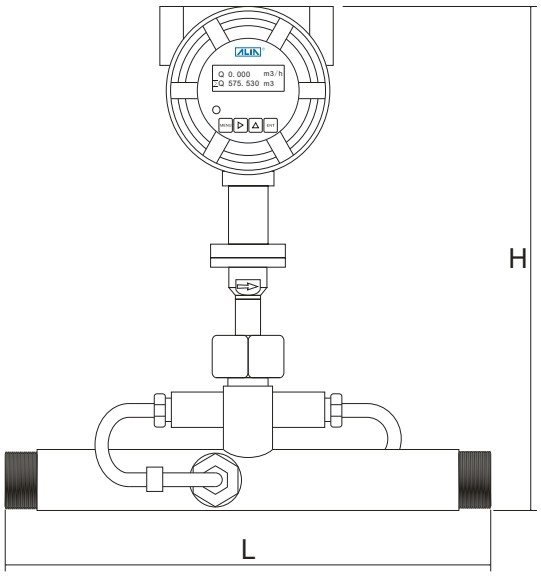
Normal Size		Flow Range & Velocity Table						
mm	Inch	Min. 0 - 0.3 m/s	1.0 m/s	2.0 m/s	3.0 m/s	5.0 m/s	10.0 m/s	Max. 0 - 12.0 m/s
20	3/4"	0 to 0.34	1.13	2.26	3.39	5.65	11.31	0 to 13.57
25	1"	0 to 0.53	1.77	3.53	5.30	8.84	17.67	0 to 21.21
32	1-1/4"	0 to 0.87	2.90	5.79	8.69	14.48	28.95	0 to 34.74
40	1-1/2"	0 to 1.36	4.52	9.05	13.57	22.62	45.24	0 to 54.29
50	2"	0 to 2.12	7.07	14.14	21.21	35.34	70.68	0 to 84.82
65	2-1/2"	0 to 3.58	11.95	23.89	35.84	59.73	119	0 to 143
80	3"	0 to 5.43	18.10	36.19	54.29	90.48	181	0 to 217
100	4"	0 to 8.48	28.27	56.55	84.82	141	283	0 to 339
125	5"	0 to 13.25	44.18	88.36	133	221	442	0 to 530
150	6"	0 to 19.08	63.62	127	191	318	636	0 to 763
200	8"	0 to 33.93	113	226	339	565	1131	0 to 1357
250	10"	0 to 53.01	177	353	530	884	1767	0 to 2121
300	12"	0 to 76	254	509	763	1272	2545	0 to 3054
350	14"	0 to 104	346	693	1039	1732	3464	0 to 4156
400	16"	0 to 136	452	905	1357	2262	4524	0 to 5429
450	18"	0 to 172	573	1145	1718	2863	5725	0 to 6871
500	20"	0 to 212	707	1414	2121	3534	7068	0 to 8482
600	24"	0 to 305	1018	2036	3054	5089	10179	0 to 12214
700	28"	0 to 416	1385	2771	4156	6927	13854	0 to 16625
800	32"	0 to 543	1810	3619	5429	9048	18095	0 to 21714
900	36"	0 to 687	2290	4580	6871	11451	22902	0 to 27482
1000	40"	0 to 848	2827	5655	8482	14137	28274	0 to 33928

WIRING DIAGRAM



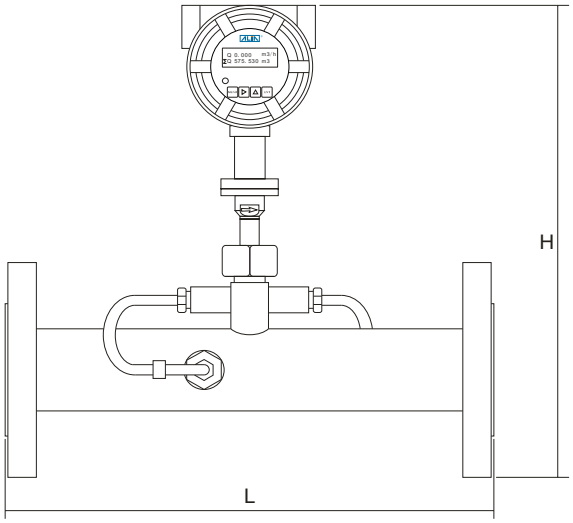
DIMENSION

• Thread Type Dimension

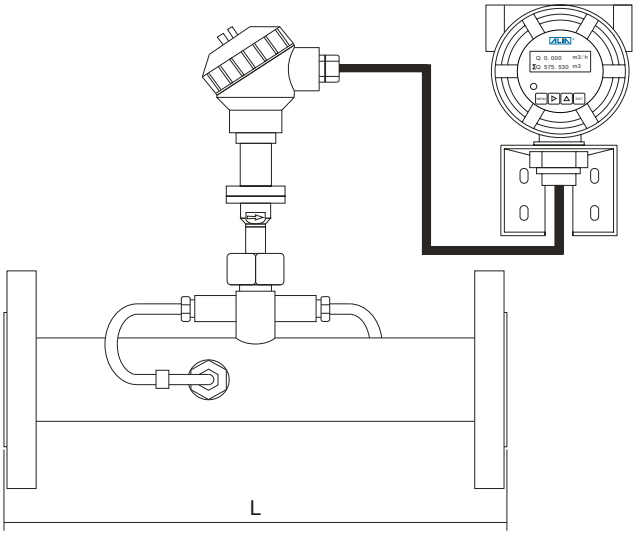


Size		Connection	Dimensions (mm)		Weight (kg)
mm	inch		L	H	
DN20	3/4"	1" BSPP	280	305	5.3
DN25	1"	1-1/4" BSPP	280	310	5.6
DN32	1-1/4"	1-1/2" BSPP	280	315	6.2
DN40	1-1/2"	2" BSPP	280	320	7.0

• Flange Type Dimension



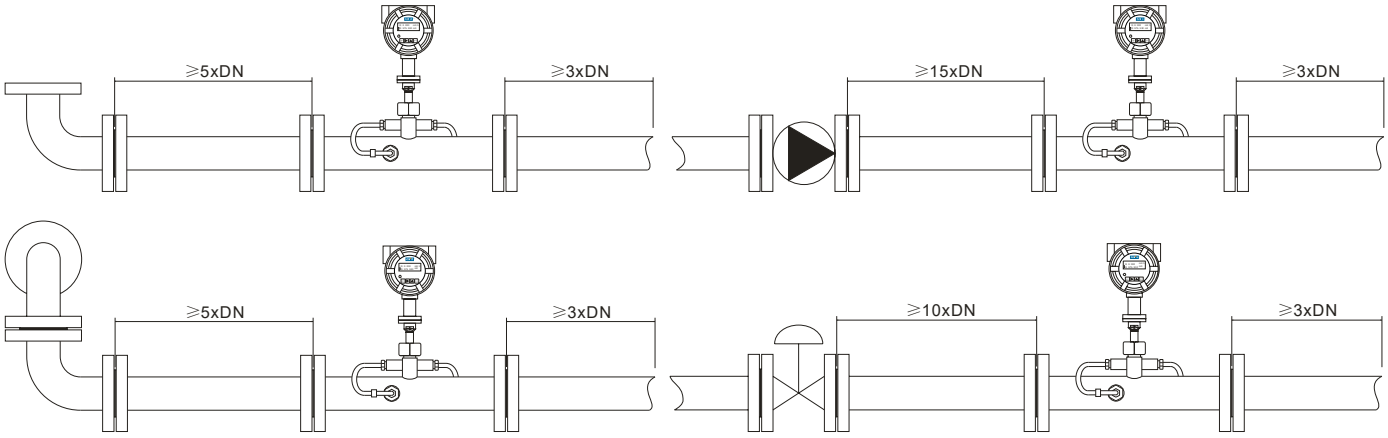
Compact Version



Remote Version

Size		Dimensions (mm)		Weight (kg)	Size		Dimensions (mm)		Weight (kg)
mm	inch	L	H		mm	inch	L	H	
DN20	3/4"	280	345	5.8	DN250	10"	400	490	55
DN25	1"	280	350	6.2	DN300	12"	450	520	72
DN32	1-1/4"	280	360	8	DN350	14"	550	545	98
DN40	1-1/2"	280	365	9	DN400	16"	600	575	130
DN50	2"	280	375	11	DN450	18"	700	600	168
DN65	2-1/2"	280	385	13	DN500	20"	800	625	235
DN80	3"	280	390	15	DN600	24"	1000	680	364
DN100	4"	280	400	17	DN700	28"	1100	720	426
DN125	5"	280	415	20	DN800	32"	1200	780	598
DN150	6"	300	435	27	DN900	36"	1200	830	825
DN200	8"	350	460	38	DN1000	40"	1300	880	937

CONDITIONS ON STRAIGHT PIPE



MODEL SELECTION GUIDE

AUF761 Series									
Example: AUF761-F0050-4AN-010-NN-NN									
AUF761-	X	XXXX	-X	X	X-	XXX	-XX	-XX	Description
Type	T								Thread Type (DN20-DN40)
	F								Flange Type (DN20-DN1000)
Size		0020-1000							0020-1000 (3/4"-40")
Material			-4						S.S. 304
			-6						S.S. 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
				T					Thread Type (See Page 3: Thread Type Dimension)
				Z					Other
Max. Temperature					N-				-40~70 °C
					H-				-40~160 °C
Installation & Signal Cable Length						NNN			Compact Version
						010-100			Remote Version, Signal Cable Length 010-100 m
Power Supply							-NN		90-260 VAC, 50/60 Hz and 24 +/-10% VDC
Option								-NN	None
								-M2	Cable Entry M20 * 1.5
								-EX	Explosion Proof, Ex d IIC T4
								-R2	Relay Alarm Output * 2 points
								-RC	IR Remote Control (Ex ib IIC T6)
								-XX	Thread Type Max. Pressure (16/25/40/63/100 kgf/cm^2)