

GENERAL

ALIATARGET ATF80 Smart Target flowmeters apply new capacitance sensors to the target flowmeters, process the detected sensor signal, through digital technique and micro-electric technology, to 4-20mA output which is proportional to flow.

Smart Target Flowmeters are suitable for low-velocity & high-temp. gas, steam flowrate. If there is an error of measuring range, you can only change target for satisfying correct application and it is no need to change the whole flowmeter.

FEATURES

- ❑ Can measuring the low velocity less then 0.1 m/s
- ❑ It's able to measure high-temp., low-press. and low-velocity flare gas.
- ❑ 4-20 mA output Hart communication
- ❑ Low Pressure lose
- ❑ The Max. temperature can be up to 450 °C
- ❑ Powerful Alia software can be online calibration
- ❑ For large pipeline, use Insertion Type or Hot-Tap Type

SPECIFICATION

- Size : 15,20,25,32,40,50,65,80,100,125,150
200,250,300.....6000(mm)
- Measuring Range : Steam: 0.002 ~ 3400000 Ton/Hr
: Gas: 1 ~ 3280000 NM3/Hr
: Liquid: 0.1 ~ 55800 M3/Hr
- Material : Stainless Steel 304 / 316
- Accuracy
Wafer / Flange Type : +/-0.75% of reading
Insertion Type : +/-1.6% of reading
- Repeatability : +/-0.05%FS
- Multi Flow Range : 1- 3 flow range
- Process Connection : Flange / Wafer / Insertion
- Flanges Type : JIS 10K / JIS 20K / JIS 40K
ANSI 150# / ANSI 300# / ANSI 600#
PN 10 / PN 16 / PN25 / PN 40
- Ambient Temperature : -25 to +70 °C
- Temperature Effect : ≤±1% per 50 °C
- Max. Pressure : 100 Bar
- Working Temperature
Flange / Wafer : -60 to 450 °C
Insertion : -60 to 450 °C
Hot Tap (Retractable) : -20 to 80 °C



- Local Display : 4 lines LCD (with backlight)
: 5 digit flowrate
: 8 digit Totalizer
- Current Output : 4-20 mA 2 wire
Load : Rohm=(Vdc-10)*50
- Alarm Function : High / Low Alarm
- Turndown Ratio : 15:1
- Communication : Hart Signal
- Data Storage : Operation Parameters and Totalization
figures are stored by EEPROM for more than 10 years
- Housing Material : Aluminum Alloy
- Cable Entry : 2 X M20 * 1.5
- Power Supply : 10-32 VDC
- Power Effect : ≤0.01% / V
- Keyboard : 3 keys from internal for Programming
and display control
- Low Flow Cutoff : 0 to 20%
- Damping : 0 to 32 Seconds
- Protection : IP 67
: Explosion Proof, Exd IIC T6
: Intrinsically Safe, E ex ia IIC T4

FLOW RANGE

Unit : AM3/Hr

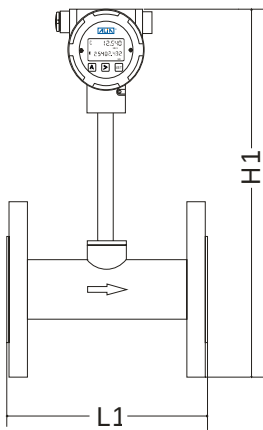
Normal Size		Flow Range									
mm	Inch	Water						Air			
		Min. Range			Max. Range			Min. Range		Max. Range	
		0.1m/s	to	1.5m/s	1m/s	to	15m/s				
15	1/2"	0.06	to	0.95	0.64	to	9.5	1.53	to	23.0	3.4 to 50.9
20	3/4"	0.11	to	1.7	1.1	to	17.0	1.40	to	21.0	6.0 to 90.5
25	1"	0.18	to	2.7	1.8	to	26.5	1.33	to	20.0	9.4 to 141
32	1-1/4"	0.29	to	4.3	2.9	to	43.4	1.27	to	19.0	15.3 to 232
40	1-1/2"	0.45	to	6.8	4.5	to	67.9	1.23	to	18.5	24.0 to 362
50	2"	0.71	to	10.6	7.1	to	106	1.20	to	18.0	37.5 to 565
65	2-1/2"	1.2	to	17.9	11.9	to	179	1.2	to	17.6	63.3 to 956
80	3"	1.8	to	27.1	18.1	to	271	1.8	to	27.1	95.9 to 1448
100	4"	2.8	to	42.4	28.3	to	424	2.8	to	42.4	150 to 2262
125	5"	4.4	to	66.3	44.2	to	663	4.4	to	66.3	234 to 3534
150	6"	6.4	to	95.4	63.6	to	954	6.4	to	95.4	337 to 5089
200	8"	11	to	170	113	to	1696	11	to	170	599 to 9048
250	10"	18	to	265	177	to	2651	18	to	265	937 to 14137
300	12"	25	to	382	254	to	3817	25	to	382	1349 to 20357
350	14"	35	to	520	346	to	5195	35	to	520	1836 to 27708
400	16"	45	to	679	452	to	6786	45	to	679	2398 to 36190
450	18"	57	to	859	573	to	8588	57	to	859	3034 to 45803
500	20"	71	to	1060	707	to	10603	71	to	1060	3746 to 56547

Unit : Kg/Hr

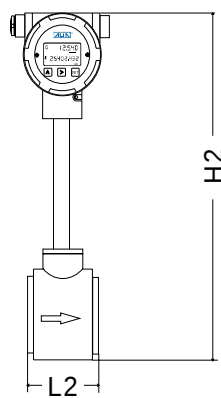
Normal Size		Saturated Steam											
mm	Inch	3 BarG					7 BarG						
		Min. Range		Max. Range			Min. Range		Max. Range				
15	1/2"	5.3	to	80.0	7.3	to	110	7.3	to	110	14.1	to	212
20	3/4"	4.7	to	71.0	13	to	196	6.5	to	97	25.0	to	377
25	1"	4.5	to	67.0	20	to	307	6.1	to	92	39.1	to	590
32	1-1/4"	4.3	to	65.0	33	to	503	5.8	to	87	64.0	to	966
40	1-1/2"	4.2	to	63.0	52	to	785	5.7	to	85	100	to	1509
50	2"	4.1	to	61.0	81	to	1227	5.5	to	83	156	to	2358
65	2-1/2"	4.0	to	60.0	137	to	2074	5.5	to	82	264	to	3985
80	3"	3.9	to	58.9	208	to	3141	7.5	to	113	400	to	6037
100	4"	6.1	to	92.0	325	to	4908	11.8	to	177	625	to	9432
125	5"	9.6	to	144	508	to	7669	18.4	to	276	976	to	14738
150	6"	13.8	to	207	732	to	11044	26.5	to	398	1406	to	21222
200	8"	24.5	to	368	1301	to	19633	47.2	to	707	2500	to	37728
250	10"	38.3	to	575	2032	to	30677	73.7	to	1105	3905	to	58951
300	12"	55.2	to	828	2927	to	44175	106	to	1592	5624	to	84889
350	14"	75.2	to	1127	3983	to	60127	144	to	2166	7655	to	115543
400	16"	98.2	to	1472	5203	to	78533	189	to	2830	9998	to	150914
450	18"	124	to	1864	6585	to	99394	239	to	3581	12654	to	191000
500	20"	153	to	2301	8129	to	122708	295	to	4421	15622	to	235803

➤ DIMENSIONS

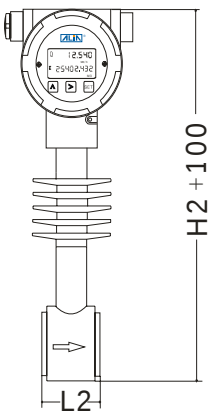
Normal Size		Unit:mm			
mm	Inch	L1	L2	H1	H2
15	1/2"	150	66	355	280
20	3/4"	150	66	360	285
25	1"	150	66	365	290
32	1-1/4"	150	66	372	297
40	1-1/2"	150	66	380	305
50	2"	150	66	390	315
65	2.6"	200	66	405	320
80	3"	200	66	420	345
100	4"	200	66	440	365
125	5"	200	66	465	390
150	6"	200	66	490	415
200	8"	200	66	540	465
250	10"	200	66	590	515
300	12"	200	66	640	565



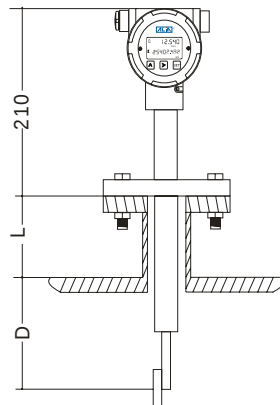
Flange Type



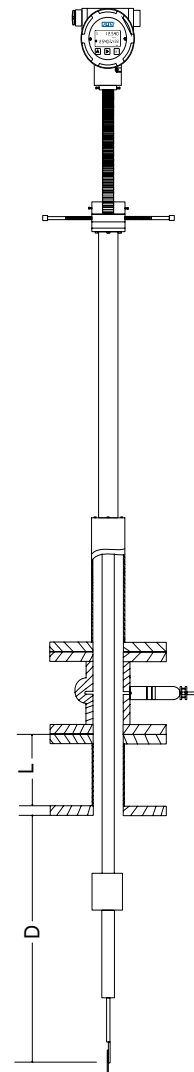
Wafer Type



High Temp. Type



Insertion Type



Hot Tap

Model Selection Guide

ATF80 Series														
Eaxmple:ATF80-F0150H-6A-H1NNN-HT														
ATF80-	X	XXXX	X	- X	X	- X	X	X	XX	- XX	Description			
Type	W										Wafer Type (DN15~DN300)			
	F										Flange Type(DN15~DN300)			
	I										Insertion Type(DN100~DN6000)			
Size		0015 ~ 6000									15 ~ 6000mm (0.5" ~ 240")			
Installation			H								Horizontal			
			V								Vertical			
Material			- 4								SUS 304 (Stainless Steel 304)			
			- 6								SUS 316 (Stainless Steel 316)			
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						
Max. Temperature			- L								-20 to +150 °C (Wafer / Flange / Insertion)			
			- M								-40 to +300 °C (Wafer / Flange / Insertion)			
			- H								-60 to 450 °C (Wafer / Flange / Insertion)			
			- R								-20 to +80 °C (Hot Tap)			
Multi Flow Range Calibrate						1- 3						One Range / Two Range / Three Range, (standard is 1)		
Protection							N						Intrinsically Safe, Eex ia IIC T4	
							X						Explosion Proof, Ex d IIC T6	
Installation & Cable length							NN						Compact	
							03- 10						Remote type with 3 - 10 Meter cable	
Option							- NN						None	
							- HT						Hart Signal	
							- HO						Hot Tap (Retractable Probe Mounting)	
							- BV						Ball Valve (for Insertion / Hot Tap Type)	
							- ZZ						Others	

For Insertion Type and Hot Tap type, you still need to provide following data

- Pipe Inside Diameter(ID)
- Pipe Outside Diameter(OD)
- Pipe Material
- Flange Size
- Extension Length (L)
- Fluid Name
- Op. Temperature
- Op. Pressure
- Flow Range

