

GENERAL

ALIAMAG AMF900 Series is a flange type electromagnetic flowmeter ideal for conductive liquids. It comes in sizes from 1/4"(6 mm) to 80"(2000mm). AMF900 is widely used for tap-water, waste water, food & beverage pulp & paper and many other industrial fluid. AMF900 Series electromagnetic flowmeter could be used in compact or separate model with AMC Series converter of electromagnetic flowmeter.

FEATURES

- ❑ Various liner and electrode satisfy most industrial applications
- ❑ Flow Velocity range:0-12 m/s, precise in low flow applications
- ❑ It comes any flanges such as, ANSI, DIN, JIS... etc
- ❑ Excellent for high pressure application
- ❑ Protection class: IP68 available; sensor submersible
- ❑ FEP Liner is suitable for vacuum tube
- ❑ High accuracy of +/-0.4% value of reading (or +/-0.2% value of reading)
- ❑ With Forward/Reverse flowrate measurement function

STANDARD SPECIFICATION

- | | | | |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| ● Size | : 1/4",3/8",1/2",3/4",1",1-1/4",1-1/2",2"
2-1/2",3",4",5",6",8",10",12",14",16",18"
20",24",28",32",36",40",48",56",64",72"
80" | ● Electrode & Grounding | : Stainless Steel 316L
: Hastelloy B
: Hastelloy C
: Titanium
: Tantalum
: Platinum
: Tungsten Carbide |
| ● Measuring Range | : Velocity 0 - 0.8 ft/s(0.25 m/s) min.
0 - 39.4 ft/s(12 m/s) max. | ● Cable Entry | : Standard:PG11 Option:1/2"NPTF |
| ● Material | Measuring Tube : Stainless Steel 304
Flange : Carbon Steel (Standard)
: Stainless Steel 304 (Option)
: Stainless Steel 316,316L (Option)
Coil Housing : Carbon Steel (standard)
: Stainless Steel 304 (Option)
: Stainless Steel 316,316L (Option) | ● Ambient Temperature | : -13 to +140 °F (-25 to +60 °C) |
| ● Liner | : Polyurethane: 1"~24" (25-600 mm)
: Neoprene: 2"~80" (50-2000 mm)
: FEP: 1/4"~12" (6-300 mm)
: PTFE: 1"~32" (25-800 mm)
: PFA: 1/4"~12" (6-300 mm) | ● Process Connection | : Flange |
| ● Protection Class | : Junction box IP67, Body IP68
: IP 68 (Submersible) | ● Flange Type | : JIS 10K / JIS 20K / JIS 40K
ANSI 150# / ANSI 300# / ANSI 600#
DIN PN 10 / PN 16 / PN25 / PN 40 |
| ● Conductivity | : More than 5 uS/cm | ● Grounding Resistance | : Must be less than 10 Ω |
| ● Explosion Proof | : Exd(ib)ibqIBT5 (with AMC3100 only) | ● Accuracy | : +/-0.4% of reading(Velocity≥1.6 ft/s)
: +/-0.0025 m/s (Velocity < 1.6 ft/s)
: +/-0.2% of reading
(Suitable for AMC3100 converter only) |
| | | ● Temperature | : +14 to +140 °F (Polyurethane,PU)
: -4 to +158 °F (Neoprene)
: -40 to +356 °F (FEP)
: -40 to +356 °F (PTFE/PFA) |
| | | ● Max. Pressure | : 4978 psi |

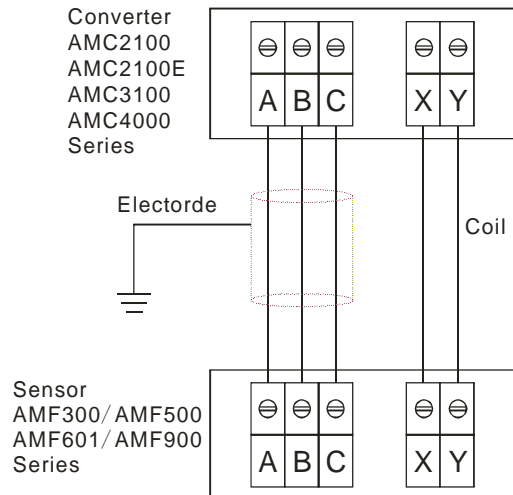


FLOW RANGE

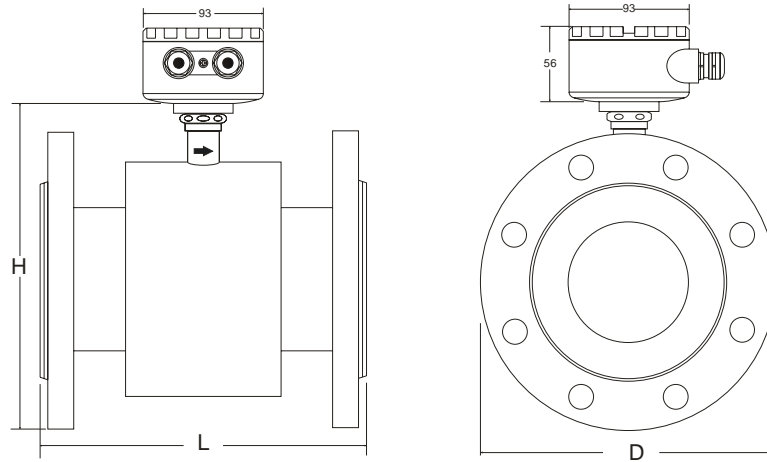
Unit USGPM

Normal Size		Flow Range & Velocity Table							
mm	Inch	Min. 0 - 0.8ft/s(0.25m/s)	3.3 ft/s (1.0 M/S)	6.6 ft/s (2.0 M/S)	9.8 ft/s (3.0 M/S)	16.4 ft/s 5.0 M/S	32.8 ft/s 10.0 M/S	Max. 0 - 39.4ft/s(12m/s)	
6	1/4"	0 to 0.11	0.45	0.90	1.34	2.24	4.48	0 to 5.37	
10	3/8"	0 to 0.31	1.24	2.49	3.73	6.22	12.44	0 to 14.93	
15	1/2"	0 to 0.70	2.80	5.60	8.40	14.00	27.99	0 to 33.59	
20	3/4"	0 to 1.24	4.98	9.95	14.93	24.88	49.76	0 to 59.71	
25	1"	0 to 1.94	7.78	15.55	23.33	38.88	77.75	0 to 93.30	
32	1-1/4"	0 to 3.18	12.74	25.48	38.22	63.70	127	0 to 153	
40	1-1/2"	0 to 4.98	19.90	39.81	59.71	99.52	199	0 to 239	
50	2"	0 to 7.78	31.10	62.20	93.30	156	311	0 to 373	
65	2-1/2"	0 to 13.14	52.56	105	158	263	526	0 to 631	
80	3"	0 to 19.90	79.62	159	239	398	796	0 to 955	
100	4"	0 to 31.10	124	249	373	622	1244	0 to 1493	
125	5"	0 to 48.60	194	389	583	972	1944	0 to 2333	
150	6"	0 to 69.98	280	560	840	1400	2799	0 to 3359	
200	8"	0 to 124	498	995	1493	2488	4976	0 to 5971	
250	10"	0 to 194	778	1555	2333	3888	7775	0 to 9330	
300	12"	0 to 280	1120	2239	3359	5598	11196	0 to 13436	
350	14"	0 to 381	1524	3048	4572	7620	15240	0 to 18287	
400	16"	0 to 498	1990	3981	5971	9952	19905	0 to 23886	
450	18"	0 to 630	2519	5038	7558	12596	25192	0 to 30230	
500	20"	0 to 778	3110	6220	9330	15551	31101	0 to 37321	
600	24"	0 to 1120	4479	8957	13436	22393	44786	0 to 53743	
700	28"	0 to 1524	6096	12192	18287	30479	60958	0 to 73150	
800	32"	0 to 1990	7962	15924	23886	39809	79619	0 to 95543	
900	36"	0 to 2519	10077	20154	30230	50384	100768	0 to 120921	
1000	40"	0 to 3110	12440	24881	37321	62202	124404	0 to 149285	
1200	48"	0 to 4479	17914	35828	53743	89571	179142	0 to 214971	
1400	56"	0 to 6096	24383	48767	73150	121916	243833	0 to 292599	
1600	64"	0 to 7962	31848	63695	95543	159238	318475	0 to 382171	
1800	72"	0 to 10077	40307	80614	120921	201535	403071	0 to 483685	
2000	80"	0 to 12440	49762	99524	149285	248809	497618	0 to 597142	

WIRING DIAGRAM



➤ DIMENSIONS



Size (Inch)	Standard Pressure psi	Liner Material				Dimensions (Inch)			Weight Pounds	
		FEP / PFA	Neoprene	Polyurethane	PTFE	L	D	H		
1/4"	569	⊙				5.906"	3.543"	5.709"	8.8	
3/8"		⊙					3.740"	6.102"	8.8	
1/2"		⊙					4.134"	6.299"	9.9	
3/4"		⊙					4.528"	6.535"	11.2	
1"		⊙			⊙		⊙	5.512"	7.087"	12.1
1-1/4"		⊙			⊙		⊙	5.906"	7.480"	15.4
1-1/2"		⊙			⊙		⊙	5.906"	7.480"	17.0
2"		⊙	⊙	⊙	⊙		⊙	6.496"	7.913"	20.9
2-1/2"		⊙	⊙	⊙	⊙		⊙	7.874"	8.661"	25.4
3"		⊙	⊙	⊙	⊙		⊙	7.874"	9.252"	28.7
4"	228	⊙	⊙	⊙	⊙	9.843"	8.661"	10.000"	35.3	
5"		⊙	⊙	⊙	⊙		9.843"	11.181"	46.3	
6"		⊙	⊙	⊙	⊙		11.811"	12.362"	59.5	
8"	142	⊙	⊙	⊙	⊙	13.780"	13.386"	14.528"	99.2	
10"		⊙	⊙	⊙	⊙	15.748"	15.551"	16.929"	116.8	
12"		⊙	⊙	⊙	⊙	17.717"	17.520"	18.898"	158.7	
14"		⊙	⊙	⊙	⊙		19.882"	21.260"	165.3	
16"		⊙	⊙	⊙	⊙	19.685"	22.244"	23.622"	218.3	
18"		⊙	⊙	⊙	⊙	23.622"	24.213"	25.197"	456.4	
20"		⊙	⊙	⊙	⊙		26.378"	27.559"	522.5	
24"		⊙	⊙	⊙	⊙		30.709"	31.496"	701.1	
28"		⊙	⊙	⊙	⊙	27.560"	35.236"	35.827"	789.2	
32"		⊙	⊙	⊙	⊙	31.496"	39.961"	40.157"	899.5	
36"	⊙	⊙	⊙	⊙	35.433"	43.898"	44.094"	1007.5		
40"	⊙	⊙	⊙	⊙	39.370"	48.425"	48.425"	1344.8		
48"	85	⊙	⊙	⊙	⊙	47.244"	55.315"	55.315"	3218.7	
56"		⊙	⊙	⊙	⊙	55.118"	64.173"	64.173"	6018.6	
64"		⊙	⊙	⊙	⊙	62.992"	72.047"	72.047"	7627.9	
72"		⊙	⊙	⊙	⊙	70.866"	80.512"	80.512"	10714.4	
80"		⊙	⊙	⊙	⊙	78.740"	89.173"	89.173"	12786.7	

Note: ⊙ Standard

Weight & Dimension D & H only for DIN flange

MODEL SELECTION GUIDE

AMF900 Series										
Example:AMF900-P0100-CAE84-010-T1										
AMF900-	X	XXX-	X	X	X	X	X-	XXX	-X	Description
Liner	N									Chloroprene Rubber (Neoprene): 2" ~ 80" (50 ~ 2000mm)
	F									FEP: 1/4" ~ 12" (6 ~ 300mm)
	P									PTFE: 1" ~ 32" (25 ~ 800mm)
	A									PFA: 1/4" ~ 12" (6 ~ 300mm)
	O									Polyurethane: 1" ~ 24" (25 ~ 600mm)
Size	6 ~ 2000									6 ~ 2000mm
Electrode Material	-S									Stainless Steel 316L
	-T									Titanium
	-B									Hastelloy B
	-C									Hastelloy C
	-A									Tantalum
	-P									Platinum
	-U									Tungsten Carbide
	-Z									Others
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
	Z									Others
Grounding	N									None
	E									Grounding Electrode (3 Electrode)
	R									Grounding Ring (Stainless Steel 316)
	A									Grounding & Protection Ring (Stainless Steel 316)
Protection Class	8									Junction box IP67, Body IP68
	9									IP68 (Submersible, Separate with Converter Only)
Flange & Housing	0-									Carbon Steel (Standard)
	4-									S.S.304 Flange
	6-									S.S.316 Flange
	8-									S.S.304 Flange & Housing
	9-									S.S.316 Flange & Housing
Installation & Cable Length	NNN									Compact Version
	010~300									Separate Version, Cable 10M(33ft) ~ 300M(984ft)
Option	-N									None
	-X									Explosion Proof, Exd(ib)ibqIBT5 (with AMC3100 Only)
	-T1									Max. Temp.:+248 to +284 °F (+120 to +140 °C)
	-T2									Max. Temp.:+285.5 to +356 °F (+141 to +180 °C)
	-PT									Cable Entry 1/2" NPTF