

GENERAL

ALIAMAG The AMF9CS Series is a flange type electromagnetic flowmeter ideal for conductive liquids. It comes in sizes from 10A to 2000 mm. AMF9CS is widely used for sewage, industrial waste, chemical, solvent, food & beverage, pulp & paper and many other industrial fluid. AMF9CS Series electromagnetic flowmeter could be used in compact or remote 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
- ❑ It has electrode cleaning function

STANDARD SPECIFICATION

- | | | | |
|--------------------|--|-------------------------|---|
| ● Size | : 10A, 10, 15, 20, 25, 32, 40, 50, 65, 80, 100, 125, 150, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800, 900, 1000, 1200, 1400, 1600, 1800, 2000 mm | ● Electrode & Grounding | : Stainless Steel 316L
: Hastelloy B
: Hastelloy C
: Titanium
: Tantalum
: Platinum
: Tungsten Carbide |
| ● Measuring Range | : Velocity 0-0.25 m/s Min.
0-12 m/s Max. | ● Grounding Electrode | : DN10A / 10: use Grounding Ring * 1 pc
: DN15-2000: 3 Electrodes |
| ● 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) | ● Process Connection | : Flange |
| ● Liner | : Polyurethane (25-400 mm)
: Neoprene (100-2000 mm)
: FEP (10A-300 mm)
: PTFE (10A-2000 mm)
: PFA (10A-300 mm) | ● Flange Type | : JIS 10K / JIS 20K / JIS 40K
ANSI 150# / ANSI 300# / ANSI 600#
DIN PN10 / PN16 / PN25 / PN40 |
| ● Protection Class | : Junction box IP67, Body IP68
: IP68 (Submersible) | ● Grounding Resistance | : Must be less than 10 Ω |
| ● Conductivity | : More than 5 μS/cm | ● Accuracy | : +/-0.4% of reading (Velocity ≥ 0.5 m/s)
: +/-0.0025 m/s (Velocity < 0.5 m/s)
: +/-0.2% of reading
(Suitable for AMC32CS / 32CSE converter) |
| ● Explosion Proof | : Ex d ia [ia] q IIC T6
(with AMC32CS, AMC32CSDF only) | ● Temperature | : -10~60 °C (Polyurethane, PU)
: -20~70 °C (Neoprene)
: -40~120 °C (PTFE 3/8"-10")
: -40~140 °C (PTFE 3/8"-6", FEP 3/8"-12")
: -40~180 °C (PTFE 3/8"-3", PFA3/8"-12") |
| ● Cable Entry | Standard: M20 Option: 1/2" NPTF | ● Ambient Temperature | : -25~60 °C |
| | | ● Max. Pressure | : 350 kgf/cm ² |



ALIA TECHNOLOGY LLC

633 W. 5th Street, 26th Floor, Los Angeles, CA 90071, USA
TEL : + 1 - 213 - 533 - 4139 FAX : + 1 - 213 - 223 - 2317



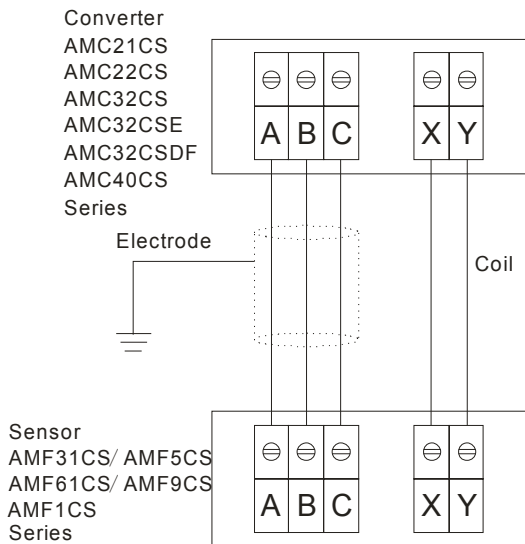
URL : www.alia-inc.com
E-mail : alia@alia-inc.com
AMF9CSV1.2.3.A4.en

FLOW RANGE

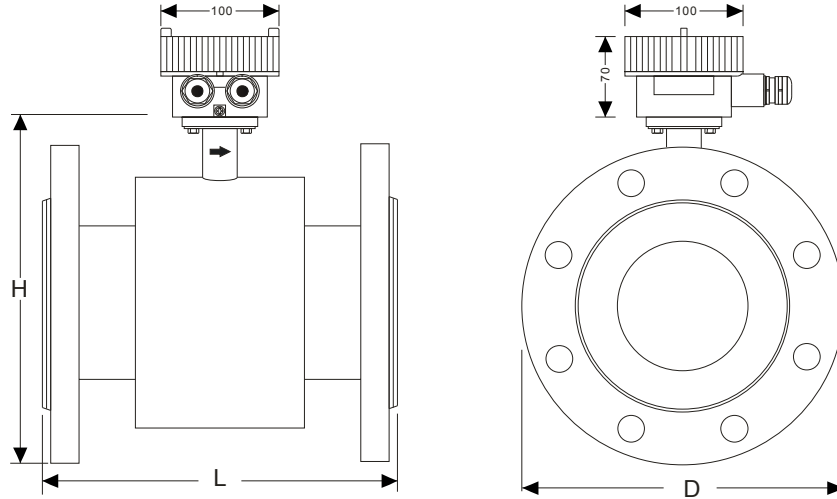
Unit: m³/hr

Normal Size		Flow Range & Velocity Table						
mm	Inch	Min. 0-0.25 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 m/s
10A	3/8"A	Applicable to 25-500 L/hr and accuracy +/-0.2~0.4% of reading (Depends on converter type)						
10	3/8"	0 to 0.071	0.28	0.57	0.85	1.41	2.83	0 to 3.39
15	1/2"	0 to 0.16	0.64	1.27	1.91	3.18	6.36	0 to 7.63
20	3/4"	0 to 0.28	1.13	2.26	3.39	5.65	11.3	0 to 13.6
25	1"	0 to 0.44	1.77	3.53	5.30	8.84	17.7	0 to 21.2
32	1-1/4"	0 to 0.72	2.90	5.79	8.69	14.5	29.0	0 to 34.7
40	1-1/2"	0 to 1.13	4.52	9.05	13.6	22.6	45.2	0 to 54.3
50	2"	0 to 1.77	7.07	14.1	21.2	35.3	70.7	0 to 84.8
65	2-1/2"	0 to 2.99	11.9	23.9	35.8	59.7	119	0 to 143
80	3"	0 to 4.52	18.1	36.2	54.3	90.5	181	0 to 217
100	4"	0 to 7.07	28.3	56.5	84.8	141.4	283	0 to 339
125	5"	0 to 11.0	44.2	88.4	133	220.9	442	0 to 530
150	6"	0 to 15.9	63.6	127	191	318.1	636	0 to 763
200	8"	0 to 28.3	113	226	339	565.5	1131	0 to 1357
250	10"	0 to 44.2	177	353	530	883.6	1767	0 to 2121
300	12"	0 to 63.6	254	509	763	1272	2545	0 to 3054
350	14"	0 to 86.6	346	693	1039	1732	3464	0 to 4156
400	16"	0 to 113	452	905	1357	2262	4524	0 to 5429
450	18"	0 to 143	573	1145	1718	2863	5725	0 to 6871
500	20"	0 to 177	707	1414	2121	3534	7068	0 to 8482
600	24"	0 to 254	1018	2036	3054	5089	10179	0 to 12214
700	28"	0 to 346	1385	2771	4156	6927	13854	0 to 16625
800	32"	0 to 452	1810	3619	5429	9048	18095	0 to 21714
900	36"	0 to 573	2290	4580	6871	11451	22902	0 to 27482
1000	40"	0 to 707	2827	5655	8482	14137	28274	0 to 33928
1200	48"	0 to 1018	4071	8143	12214	20357	40714	0 to 48857
1400	56"	0 to 1385	5542	11083	16625	27708	55417	0 to 66500
1600	64"	0 to 1810	7238	14476	21714	36190	72381	0 to 86857
1800	72"	0 to 2290	9161	18321	27482	45803	91607	0 to 109928
2000	80"	0 to 2827	11309	22619	33928	56547	113095	0 to 135714

WIRING DIAGRAM



➤ DIMENSIONS



Size (mm)	Standard Pressure kgf/cm ²	Liner Material				Dimensions (mm)			Weight kg
		FEP / PFA	Neoprene	Polyurethane	PTFE	L	D	H	
10A	40	☉			☉	120	90	145	3.5
10		☉			☉	120			3.5
15		☉			☉	150	95	155	3.5
20		☉			☉		105	160	4.5
25		☉		☉	☉		115	166	4.5
32		☉		☉	☉		140	180	6.5
40		☉		☉	☉	150	190	7.0	
50		☉		☉	☉	200	165	201	9.5
65		☉		☉	☉		185	220	12
80		☉		☉	☉		200	235	15
100	☉	☉	☉	☉	250		220	254	17
125	☉	☉	☉	☉		250	284	21	
150	☉	☉	☉	☉		300	285	314	28
200	10	☉	☉	☉	☉	350	340	369	36
250		☉	☉	☉	☉	400	395	430	49
300		☉	☉	☉	☉	450	445	480	61
350			☉	☉	☉		505	540	79
400			☉	☉	☉	500	565	600	99
450			☉		☉	600	615	640	121
500			☉		☉		670	700	143
600			☉		☉		780	800	187
700				☉	☉		700	895	910
800				☉		☉	800	1015	1020
900			☉		☉	900	1115	1120	420
1000			☉		☉	1000	1230	1230	503
1200	6		☉		☉	1200	1405	1405	666
1400			☉		☉	1400	1630	1630	1036
1600			☉		☉	1600	1830	1830	1333
1800			☉		☉	1800	2045	2045	1720
2000			☉		☉	2000	2265	2265	2190

Note: ☉ Standard

Weight & Dimension D & H only for DIN flange

MODEL SELECTION GUIDE

AMF9CS Series										
Example: AMF9CS-P0100-CAE84-010-T1										
AMF9CS-	X	XXXX-	X	X	X	X	X-	XXX	-X	Description
Liner	N									Chloroprene Rubber (Neoprene) (100-2000 mm, 4"-80")
	F									FEP (10A-300 mm, 3/8"A-12")
	P									PTFE (10A-2000 mm, 3/8"A-80")
	A									PFA (10A-300 mm, 3/8"A-12")
	O									Polyurethane (25-400 mm, 1"-16")
Size		10A-2000								10A-2000 mm
Electrode Material			-S							Stainless Steel 316L
			-T							Titanium
			-B							Hastelloy B
			-C							Hastelloy C
			-A							Tantalum
			-P							Platinum (DN15-DN2000)
			-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 Electrodes); Note: see page #1
			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							Remote Version, Cable 10-300 m
Option			-N							None
			-X							Explosion Proof, Ex d ia [ia] q IIC T6 (with AMC32CS, AMC32CSDF only)
			-T1							Max. Temp.: 120-140 °C
			-T2							Max. Temp.: 141-180 °C
			-PT							Cable Entry 1/2" NPTF
			-CD							Electrode Cleaning Device (Only for 2 Electrodes (316L), Size ≥4")
		-LR							Low-resistance coil (with AMC32CSDF only)	