

ELECTROMAGNETIC FLOW METER

- 1.Pipe size: DN15 - DN2200 mm
- 2.Power supply: 24VDC or 220VAC, Battery
- 3.With 4-20mA, pulse, RS485, HART output
- 4.Used for water, sewage, acid, milk, food grade liquid
- 5.Connection Type: Flange (DIN, JIS, ANSI)

Product description

The electromagnetic flowmeter is a kind of measuring instrument based on Faraday law of electromagnetic induction, which can measure the volume flow of electrically conductive liquid, seriflux and so on. It is widely used in industrial sectors such as chemical industry, environmental protection, metallurgy, pharmaceutical, paper making, water supply and removal etc.

such as clear water, sewage, acid, alkali, slurry, beer, milk, food grade liquid, salt solution, liquid.

Parameters

Pipe size	DN15~DN2200mm
Medium	conductive liquid, slurry
Conductivity	$\geq 5 \mu\text{S/cm}$
Accuracy	$\pm 0.5\%$
Repeatability	$\pm 0.1\%$
Rated Pressure	0.25, 0.6, 1.0, 1.6, 2.5MPa (or specified by customer)
Display	Instantaneous flowrate, total flow, velocity, flowrate percentage with back light
Signal output	4~20mA current output, pulse output, RS-485, Hart, Profibus-DP
Power supply	220VAC, 24VDC, Battery
Convert type	Compact, remote
Protection grade	IP65 (Compact) / IP68 (Remote)
Explosion proof	Ex deibmb IIC T3~6
Velocity	0.3 ~ 10 m/s (0.1 ~ 15m/s as required)
Liner	Chloroprene rubber, PTFE, FEP, PFA
Flowing direction	Forward, Reverse
Electrode material	316L, Pt, Ta, Ti, HB, HC, WC
Electrode type	Standard fixed type, blade type
Electrode numbers	4 ~ 6 pcs
Flange material	Carbon Steel
Alarm (normal open)	Empty, excitation, upper / lower limit
Ambient	-25 ~ +60oC, Humidity: 5 ~ 90%
Communication	RS-485 / Hart / Profibus-DP



Connection

Standard configuration with
4-20mA/pulse/RS485

Circuit board

High precision surge protection device



PTFE / Corrosive acid base salt liquid
Ti Electrode / Built-in three electrode



LCD display

Cumulative flow+Instantaneous flow
+ Forward flow+Reverse flow



Remote



Battery



Compact

Flow rate

Electromagnetic flow meter range (m3/h)			
Size	0.3 m/s	5 m/s	10 m/s
DN15	0.19	3.18	6.36
DN20	0.33	5.65	11.31
DN25	0.53	8.83	17.67
DN32	1.12	15.20	30.40
DN40	1.35	22.61	45.23
DN50	2.12	35.35	70.68
DN65	3.58	59.72	119.45
DN80	5.42	90.47	180.95
DN100	8.48	141.37	282.74
DN125	13.25	220.85	441.71
DN150	19.08	318.08	636.17
DN200	33.92	565.48	1130.97
DN250	53.01	883.57	1767.14
DN300	76.34	1272.34	2544.69
DN350	103.91	1731.8	3463.6
DN400	135.71	2261.94	4523.89
DN450	171.76	2862.77	5725.55
DN500	212.05	3534.29	7068.58
DN600	305.36	5089.38	10178.76
DN700	415.63	6927.21	13854.42
DN800	542.86	9047.78	18095.57
DN900	686.96	11449.35	22898.7
DN1000	848.1	14135	28270
DN1200	1221.26	20354.4	40708.8
DN1400	1662.27	27704.6	55409.2
DN1600	2171.13	36185.6	72371.2

Order table

Name	Specification code	Explanation
Model	FMA	Intelligent electromagnetic flow meter
Diameter code	FMA-xxx	For example:100 represents DN100
Converter Type	C	Compact
	R	Remote
Power Supply	A	90 – 245VAC, 50Hz
	D	20 – 36VDC
	B	Battery
Electrode material	E1	Stainless steel(316L)
	E2	Platinum Pt
	E3	Hastelloy B(HB)
	E4	Tantalum Ta
	E5	Titanium Ti
	E6	Hastelloy C(HC)
Lining material	L1	FEP
	L2	PTFE
	L3	PFA
	L4	Chloroprene rubber
Rated pressure (MPa)	1.6(2.5)	DN15-150
	1.0(1.6)	DN200-600
	1.0	DN700-1000
	0.6	DN1200-2000
	0.25	DN2200
Operating temperature	L1	<150℃
	L2	<120℃
	L3	<180℃
	L4	<80℃
Connection Type	A	ANSI Flange
	D	DIN Flange
	J	JIS Flange

Dimension and Weight

Size DN	L mm	H mm	Weight (kg)		Size DN	1.6MPa					2.5MPa				
						D	d ₁	d ₂	n	b	D	d ₁	d ₂	n	b
15	200	147	10	7	15	95	65	14	4	16	95	65	14	4	16
20	200	154	12	9	20	105	75	14	4	18	105	75	14	4	18
25	200	156	14	11	25	115	85	14	4	18	115	85	14	4	18
32	200	166	15	12	32	135	100	18	4	18	135	100	18	4	20
40	200	172	16	13	40	145	110	18	4	20	145	110	18	4	22
50	200	191	17	14	50	160	125	18	4	22	160	125	18	4	24
65	250	200	25	22	65	180	145	18	4	24	180	145	18	8	24
80	250	218	29	26	80	195	160	18	8	24	195	160	18	8	26
100	250	242	31	28	100	215	180	18	8	26	230	190	23	8	28
125	250	277	36	33	125	245	210	18	8	28	270	220	26	8	30
150	300	302	41	38	150	280	240	23	8	28	250	250	26	8	30

Size DN	L mm	H mm	Weight (Kg)	Size DN	1.6MPa					1.0 MPa				
					D	d ₁	d ₂	n	b	D	d ₁	d ₂	n	b
200	350	362	45	200	335	295	23	12	30	335	295	23	8	24
250	450	412	50	250	405	355	26	12	32	390	350	23	12	26
300	500	472	60	300	460	410	26	12	32	440	400	23	12	28
350	500	522	92	350	520	470	26	16	34	500	460	23	16	28
400	500	572	180	400	580	525	30	16	38	565	515	26	16	30
450	500	626	215	450	640	585	30	20	42	615	565	26	20	30
500	550	676	245	500	705	650	34	20	45	670	620	26	20	32
600	600	776	335	600	840	770	41	20	50	780	725	30	20	36

Size DN	L mm	H mm	Weight (kg)
700	700	866	435
800	800	966	545
900	900	1076	655
1000	1000	1200	810
1200	1200	1406	875
1400	1400	1632	1235
1600	1600	1832	1555
1800	1800	2036	2085
2000	2000	2236	2610

Size DN	Pressure MPa	D	d ₁	d ₂	n	b
700	1.0	895	840	30	24	36
800		1010	950	34	24	38
900		1110	1050	34	28	42
1000		1220	1160	36	28	44
1200	0.6	1400	1340	34	32	36
1400		1620	1560	34	36	40
1600		1820	1760	34	40	45
1800		2045	1970	41	44	45
2000		2265	2180	48	48	50

