



SEMF Series Electromagnetic Flow Meter



Operating Principle

Following Faraday's law of magnetic induction, a voltage is induced in a conductor moving through a magnetic field. In the electromagnetic measuring principle, the following medium is the moving conductor. The voltage induced is proportional to the flow velocity and is supplied to the amplifier by means of two measuring electrodes. The flow volume is calculated by means of the pipe cross section area.

Special Features

No Pressure Drop

Free Maintenance

Accuracy: 0.5% of Rate

Output signal Pulse and 4 ...20 mA

Communication: Rs485

Connection: Flange/Wafer/Tri-clamp

Description

The magnetic flow meter is one of the most flexible and universally applicable flow measurement systems available. It is a volumetric flow meter which does not have any moving parts and is ideal for waste water applications or any dirty liquid which is conductive or water based. Magnetic flow meter is also ideal for the applications where low pressure drop and low maintenance are required.

Application

- Waster water industry: transport networks sewage treatment plants, sludges
- Chemical industry: acids alkalis, dosing applications, abrasive or corrosive mediums
- Metal & mining industry: mediums with a high solid content, like ore or excavator mud
- Water industry: Revenue metering, district metering water abstraction, leakage detection
- Pulp & paper industry: pulp, pastes, sludges & other caustic mediums, liquor, additives, bleaches, colourants
- Food & beverage industry: mixing, dosing and filling of drinks under hygienic conditions filling systems applications

Technical Data

Certificates	ISO9001:2008; CE
Diameter	PTFE: DN6-DN600
	Hard ruber: DN50-DN2200
Flow Direction	Positive; Negative
Repeatability Error	±0.1%
Accuracy	±0.5% of rate ; ±0.2% of rate
Medium Temperature	Hard rubber liner: -20...+60°C
	High-temp rubber liner: -20...+90°C
	PTFE liner: -20...+120 °C
	High-temp PTFE liner: -20...+160°C
Nominal Working Pressure	PFA: -20...+180°C
	DN10-DN25≤4.0Mpa
	DN32-DN150≤1.6Mpa
	DN200-DN600≤1.0Mpa
	DN700-DN2200≤0.6Mpa
Velocity	0.3-10m/s
Ambient Temperature	-20...+60 °C
Relative Humidity	5%~95%
Consumed Power	<20W

We Measure And Control Every Drop & Molecule

Flow Range

Diameter		Flow Rate (m ³ /h)		
		V=0.3m/s	V=6m/s	V=10m/s
(mm)	(Inch)	Min	Calibrated	Max
6	1/4"	0.03	0.6	1
10	3/8"	0.1	1.7	3
15	1/2"	0.2	4	6
20	3/4"	0.3	7	11
25	1"	0.5	11	18
32	1-1/4"	0.9	17	29
40	1-1/2"	1	27	45
50	2"	2	42	71
65	2-1/2"	4	72	120
80	3"	5	109	181
100	4"	8	170	283
125	5"	13	265	442
150	6"	20	382	636
200	8"	34	679	1131
250	10"	53	1060	1767
300	12"	76	1527	2545
350	14"	104	2078	3465
400	16"	136	2714	4524
450	18"	171	3435	5726
500	20"	212	4241	7069
600	24"	305	6107	10179
700	28"	415	8310	13850
800	32"	542	10860	18100
900	36"	662	13740	22900
1000	40"	848	16962	28270

WATER FLOW CALIBRATION SETUP

Smooth Flowmeters is having a well equipped Calibration Laboratory. The systems is designed in standard (ISO-RP-31) Gravimetric Method with master weighing Scale. The calibration is done on the most precise weighing scale having least count of 100 gms on the maximum scale of 2000 Kgs. 10gms on the maximum scale of 100 Kgs. Both Weighing Scales are Calibrated in NABL Accreditation LAB. The Weighing Scale accuracy is endorsed by the Weights & Measures Dept. of Govt. of Maharashtra. The setup is designed for calibration of size ranging from 10 mm to 150 mm. We do 100% Calibration of each unit at our precise calibration setup.

OTHER FLOWMETERS FROM SMOOTH



Turbine Flowmeters



Electromagnetic Flowmeters



Hydraulic Oil Tester



Screw Type PD Flowmeter



Ultrasonic Gas Flowmeter

Note: Development Dictates That From Time To Time The Data Shown Above Is Subject To Change Without Notice..pl Obtain A Offer.

Smooth Flowmeters

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