

SALIENT FEATURES

- Insertion type
- Suitable for conductive liquids
- Material option depending upon process data
- Local Indication through LCD
- Universal Power Supply 90 to 260V AC, Optional 24V DC
- Simple & cost effective construction
- Unit conversion facility
- Maintenance free
- Communication port (Optional)
- Inbuilt Relay Status output (High / Low / Batch)

DESCRIPTION

Electronet series **ELMAG-100** are micro-controller based full bore type electromagnetic flow meters specially used for various industrial applications. These flow meters accurately measure the flow rate of conductive liquids & slurries in closed pipes. Due to its simple & rigid design, the flow meter is an obstruction-less & maintenance-free instrument in place of conventional mechanical flow measuring devices. The use of 'Pulsed DC' technology offers highest ability & better measuring accuracy in the form of electrical signal 4-20mA DC linearly proportional to volumetric flow. The instrument is based on Faraday's law of electro-magnetic induction. A magnetic field is generated by the instrument in the flow tube. The fluid flowing through this magnetic field generates a voltage that is proportional to the flow velocity. Corresponding electrical output is provided with respect to measuring flow range.



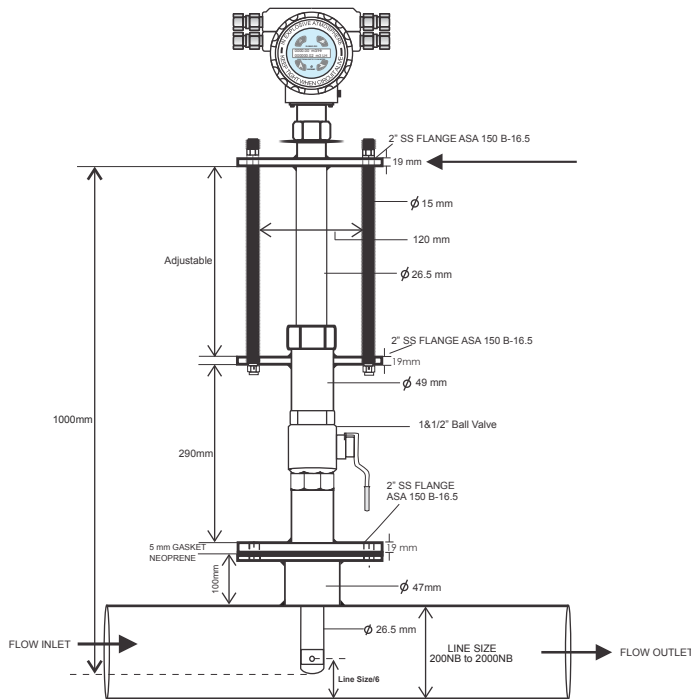
TECHNICAL SPECIFICATIONS

Media	: Liquids (Conductive)
Conductivity	: 5 μ s/cm
Viscosity	: 200 cp max
Line Size	: 200NB to 2000NB
Excitation	: Pulsed DC
Type of Output	: 1) 4 to 20mA DC 2) 4 to 20mA DC + HART 3) 4 to 20mA DC + Pulse output 4) 4 to 20mA DC + HART + Pulse output
Display	: 16 x 2 LCD - 6 digit for Flow Rate & 8 digit for Totalizer Flow
Calibration Range	: As per requirement
Accuracy	: \pm 0.5% of M.V. (for 20 to 100% flow)
Linearity	: \pm 0.5% of M.V.
Repeatability	: \pm 0.2% of M.V.
Temperature Coefficient	: \pm 0.05% per $^{\circ}$ C
Process Temperature	: 85 $^{\circ}$ C max
Process Pressure	: 10 kg/cm 2 max
Material of construction	: Electrode - SS 316L Retractable Assembly - MS / SS 304 Wetted Parts - SS 316
Power Supply	: Option1 : 90 - 260 V AC, 50 Hz Option2 : 24 V DC
Power Consumption	: < 10 VA
Response Time	: < 1 Sec
Transmitter Enclosure	: Die cast Aluminum IP66
Process Connections	: 2"ASA150 flanged, as per table B 16.5
Mounting	: Insertion type
Operating Conditions	: Temperature -20 to 75 $^{\circ}$ C / Humidity 5 to 95% non condensing

OPTIONAL :

- Communication output : 1) RS 485 supporting MODBUS RTU Protocol
2) GSM Connectivity

DIMENSIONAL DETAILS

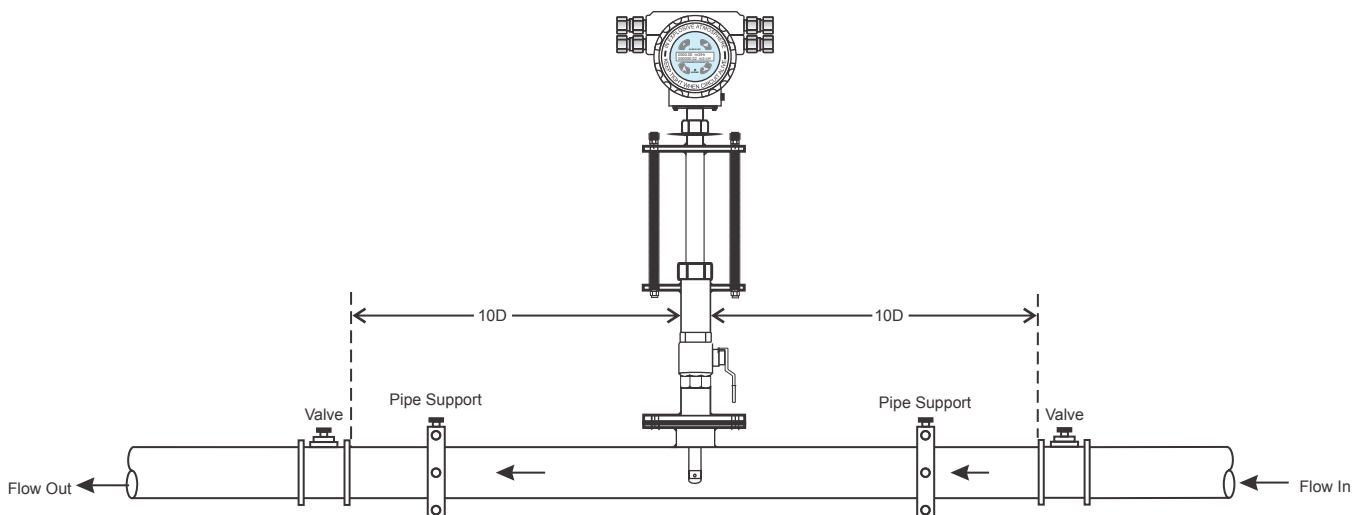


Line Size (NB)	Flow min (m ³ /hr)	Flow normal (m ³ /hr)	Flow max (m ³ /hr)	Flow (MLD)
200	5.66	113.10	565.50	2.714
250	8.84	176.71	883.55	4.241
300	12.72	254.47	1272.35	6.107
350	17.32	346.36	1731.80	8.313
400	22.62	452.39	2261.95	10.857
500	35.34	706.86	3534.30	16.965
600	50.89	1017.88	5089.40	24.429
700	69.27	1385.44	6927.20	33.250
800	90.48	1809.56	9047.80	43.429
900	114.51	2290.22	11451.10	54.965
1000	141.37	2827.43	14137.15	67.858
1200	203.58	4071.50	20357.50	97.716
1400	277.09	5541.76	27708.80	133.002
1600	361.91	7238.22	36191.10	173.717
1800	458.04	9160.88	45804.40	219.861
2000	565.49	11309.72	56548.60	271.433

Note :

- Typical mounting dimensions for reference
- Standard factory calibration for 0.2 to 2 m/s velocity

INSTALLATION DRAWING



ORDERING INFORMATION

							04	4-20mA+ HART + Pulse		04	25mtr				
							03	4-20mA + HART	03	GSM	03	10mtr			
		02	Remote	02	SS 304	02	SS 304	02	24V DC	02	4-20mA + Pulse	02	RS232	02	5mtr
	200NB To 2000NB	01	Local	01	MS	01	Aluminum	01	230V AC	01	4-20mA	01	RS485	01	0mtr
Series	Line Size	Electronics		Retractable Assembly		Electronic Enclosure		Power Supply		Output		Comm. Output		Remote Cable Length	
ELMAG 100	A 01	B	01	C	01	D	01	E	01	F	01	G	01	H	01

* Due to our continuous product improvisations, Design, Specifications and Model Number are subject to change without notice.
 * For GSM communication, SIM card & SCADA viewing software will be in customers scope.

* Accuracy defined at lab conditions.
 * For better accuracy consult factory.

Authorised Dealer



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