

### SALIENT FEATURES

- Full bore type
- Suitable for conductive liquids
- SS Coil Housing
- Power Supply 195 to 265V AC, 50Hz
- Empty pipe indication
- Material option depending upon process data
- Local Indication through LCD
- Maintenance free
- Simple, cost effective, 100% metallic construction



### DESCRIPTION

Electronet series **ELMAG-2516** 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 4-20 mA DC linearly proportional to volumetric flow. The instrument is based on Faraday's law of electromagnetic 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 $\mu$ s/cm
Viscosity	: 200 cp max
Line Size	: 15 NB to 200 NB
Excitation	: Pulsed DC coil
Type of Output	: 4 to 20mA DC
Display	: 16 x 2 LCD - 6 digit for Flow Rate & 9 digit for Totalizer Flow
Engineering Unit	: User Programmable (m <sup>3</sup> /hr by default)
Calibration Range	: As per requirement (Factory Calibrated for std. 2m/s velocity)
Accuracy	: +/- 0.5% of M.V. (for 20 to 100% flow)
Linearity	: +/- 0.5% of M.V.
Repeatability	: +/- 0.2% of M.V.
Temperature Coefficient	: +/- 0.05% per °C
Process Temperature	: 2 to 85° C max for Rubber Lining & 2 to 220°C for PTFE Lining
Process Pressure	: 10 kg/cm <sup>2</sup> max (higher on request)
Material of construction	: Lining - Neoprene Rubber / Hard Rubber / EPDM / PFA / PTFE Flange - MS / CS / SS316 Electrode - SS 316L/ Hastalloy C / Platinum / Tantalum Coil Housing - SS
Power Supply	: 195 - 265V AC, 50 Hz
Power Consumption	: < 10 VA
Isolation	: 1.4 KV between Input, Output & Power Supply
Response Time	: < 1 Sec
Electronics	: Local / Remote(10mtrs)
Transmitter Enclosure Protection:	IP66
Flow Tube Protection	: IP68
Process Connections	: ANSI150 flanged, as per table B 16.5 (Other On Requirement)
Mounting	: In-Line Horizontal / Vertical
Operating Conditions	: Temperature -20 to 75°C / Humidity 5 to 95% non condensing

Note :- For process conditions other than above please consult factory.

## DIMENSIONAL DETAILS

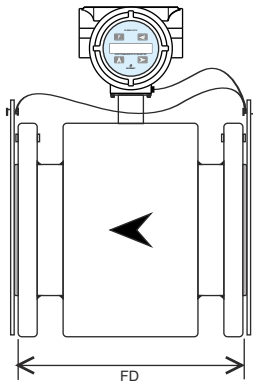


Fig. Front View

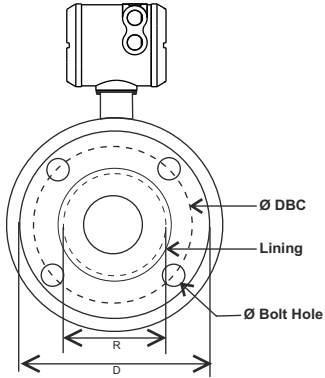


Fig. Side View

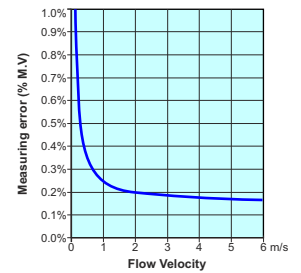
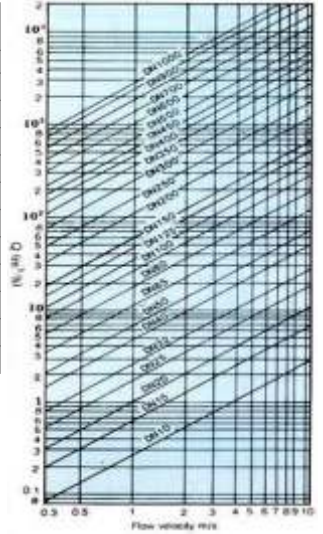
### DIMENSIONAL DETAILS OF FLANGE (AS PER ANSI150 # B-16.5):

Line Size	Flange Diameter 'D'	Diameter of Raised Face 'R'	Diameter of Bolt Hole Circle 'DBC'	Diameter of Bolt Hole	No. of Holes	Flange Distance 'FD'	Flow Range (m/hr) at 0.03m/s to 6m/s		
							Minimum	Maximum	
½"	15	88.9	34.9	60.3	15.9	4	200	0.019	3.817
¾"	20	98.4	42.9	69.8	15.9	4	200	0.033	6.785
1"	25	107.9	50.8	79.4	15.9	4	200	0.053	10.602
1 ½"	40	127.0	73	98.4	15.9	4	200	0.135	27.143
2"	50	152.4	92.1	120.6	19.0	4	200	0.212	42.4115
2 ½"	65	177.8	104.8	139.7	19.0	4	200	0.358	71.675
3"	80	190.5	127.0	152.4	19.0	4	200	0.542	108.573
4"	100	228.5	157.2	190.5	19.0	8	250	0.848	169.646
5"	125	254.0	185.7	215.9	22.2	8	250	1.325	265.071
6"	150	279.4	215.9	241.3	22.2	8	300	1.9085	381.703
8"	200	342.9	269.9	298.4	22.2	8	350	3.3929	678.584

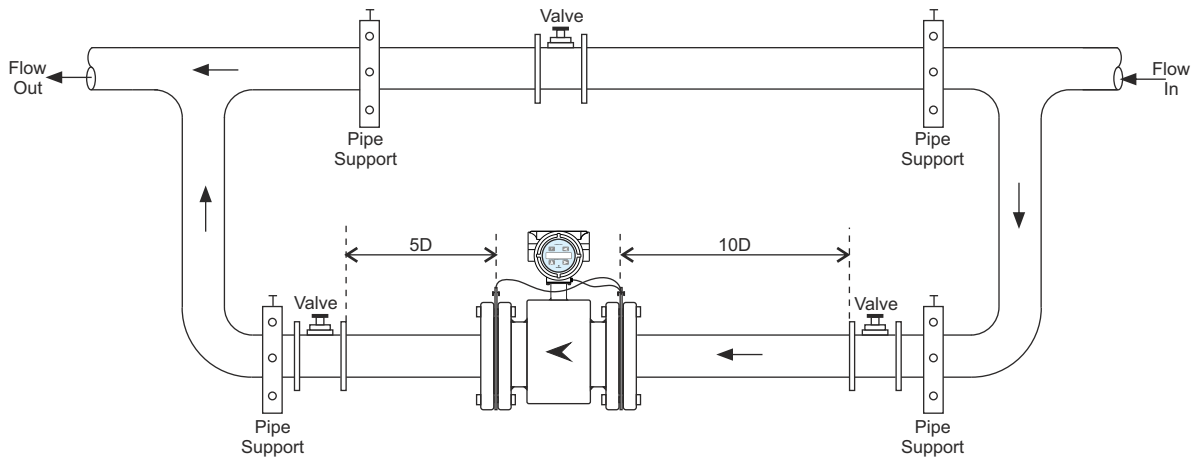
#### Note :

- Typical mounting dimensions for reference.
- Standard factory calibration for 0.2 to 2 m/s velocity.
- Flow meter should be selected with the help of Nomograph recommended full scale velocity.
- Flow indication of 6 digit max. up to 999999

### Flow Nomograph



## INSTALLATION DRAWING



## ORDERING INFORMATION

				08 Other																
				05 PTFE																
				04 PFA																
				03 EPDM																
				02 Remote	02 SS 304	02 Hard Rubber	02 SS 316	08 Other	02 Tantalum	03 Platinum	03 10mtr									
	15NB To 200NB	01 Local	01 Aluminium	01 Neoprene Rubber	01 MS/CS	01 ASA 150	01 SS 316L	01 Hyst. C	02 5mtr											
Series	Line Size	Electronics	Electronic Enclosure	Lining Material	Flange Material	Flange Rating	Electrode Material	Remote Cable Length												
ELMAG 2516	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.  
 \* Accuracy defined at lab conditions. \* For better accuracy consult factory.

### Authorised Dealer



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