

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 : >5µs/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 (m³/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/cm² 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: 195 - 265V AC, 50 Hz

Power Consumption : < 10 VA

Power Supply

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)

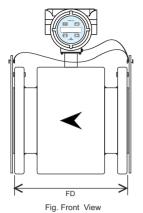
Mounting : In-Line Horizontal / Vertical

Operating Conditions : Temperature -20 to 75°C / Humidity 5 to 95% non condensing

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

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DIMENSIONAL DETAILS



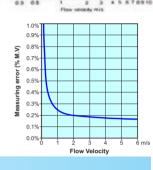
DIMENSIONAL DETAILS OF FLANGE(AS PER ANSI150 # B-16.5):

Line Size		Flange Diameter	Diameter of Raised Face		Diameter of Bolt	No. of	Flange Distance	Flow Range(m/hr) at 0.03m/s to 6m/s	
Inch	NB	'D'	'R'	Circle 'DBC'	Hole	Holes	'FD'	Minimum	Maximum
1/2"	15	88.9	34.9	60.3	15.9	4	200	0.019	3.817
3/4"	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

Flow Nomograph

Note:

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

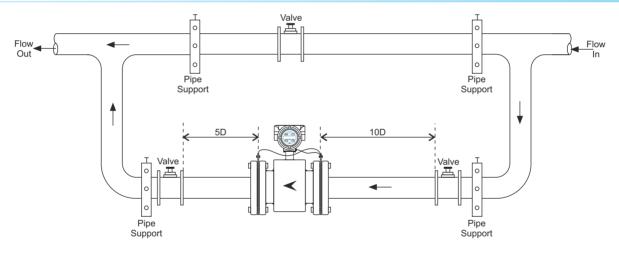


- Flow meter should be selected with the help of Nomograph recommended full scale velocity.
- Flow indication of 6 digit max. up to 999999

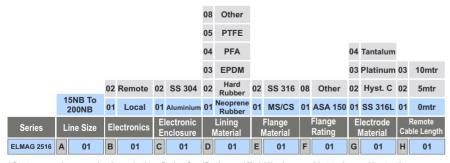
INSTALLATION DRAWING

Fig. Side View

Ø Bolt Hole



ORDERING INFORMATION



^{*} 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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