

SALIENT FEATURES

- Full bore type
- Suitable for conductive liquid
- Battery Operated
- Data Logging facility for 5 Years
- Local Indication through Graphics LCD
- Communication port (Optional)
- Empty pipe indication(Optional)
- Maintenance free
- Simple & cost effective construction
- Inbuilt Data Logger



DESCRIPTION

Electronet series **ELMAG-600**, battery-powered Electromagnetic flow meters are ideal when connecting to a power is difficult or expensive. When no mains power is available, the battery powered ELMAG-600 gives the flexibility to install a reliable flow meter, virtually anywhere, without distorting accuracy & performance. ELMAG-600 is provided with 2 years continuous battery operation. The flow meter is extremely easy to use, simple to install & requires no regular maintenance. The product is engineered for various industrial as well as domestic applications such as Municipal & Industrial Water applications, Cooling tower, Water treatment, etc. The graphic display provides indication for flow rate & totalized flow with key selection. The display auto shuts off after 10 minutes, which saves the battery life. The display can be turned ON by pressing the 'enter' key.

TECHNICAL SPECIFICATIONS

Media	: Liquids (Conductive)
Conductivity	: > 5 $\mu\text{s}/\text{cm}$
Viscosity	: 200 cp max
Line Size	: 15 NB to 600 NB
Excitation	: Pulsed DC
Display	: COG Graphic LCD display- 5 digit for Flow Rate & 8 digit for Totalizer Flow
Calibration Range	: As per requirement (Factory Calibrated)
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 $^{\circ}\text{C}$
Process Temperature	: 85 $^{\circ}\text{C}$ max for Rubber Lining & 220 $^{\circ}\text{C}$ for PTFE Lining
Process Pressure	: 10 kg/cm 2 max (higher on request)
Material of construction	: Lining - Neoprene Rubber / Hard Rubber / EPDM / PFA / PTFE Flange - MS /CS / S316 Electrode - SS 316L/ Hastalloy C / Platinum / Tantalum Coil Housing - MS / SS 316
Power Supply	: Inbuilt Battery 3.6 V, 19 Ah (2 nos)
Low Bat indication	: Provided
Battery Life	: 2 to 10 years depending on sampling time.
Response Time	: <10 Sec
Transmitter Enclosure	: Electronics : IP66, Flow Tube : IP68
Process Connections	: ASA150 flanged, as per table B 16.5 (Other On Requirement)
Mounting	: In-Line Horizontal / Vertical
Operating Conditions	: Temperature -20 to 75 $^{\circ}\text{C}$ / Humidity 5 to 95% non condensing
Data Logging	: For 5 years (per day 1 sample)

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

OPTIONAL :

Communication Output	: 1) RS 232 2) GSM connectivity 3) Pulse
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DIMENSIONAL DETAILS

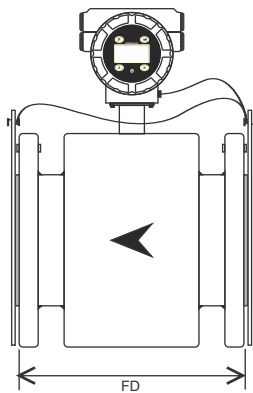


Fig. Front View

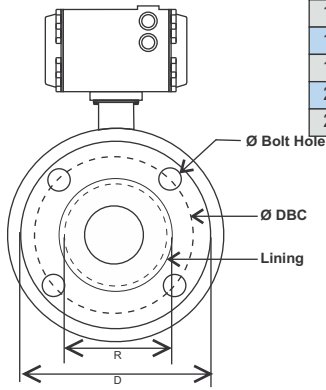


Fig. Side View

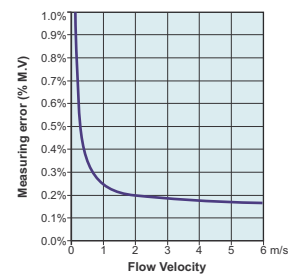
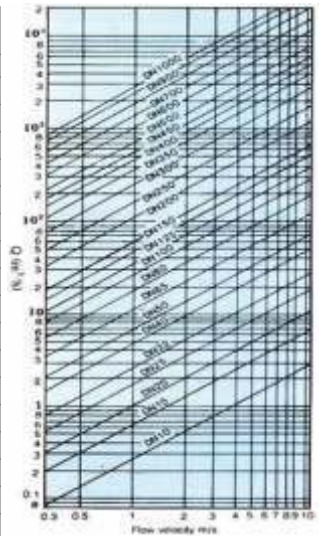
DIMENSIONAL DETAILS OF FLANGE (AS PER ASA150 # B-16.5):

Line Size Inch	NB	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 0.3m/s to 6m/s	
								Minimum	Maximum
1/2"	15	88.9	34.9	60.3	15.9	4	200	0.19	3.817
3/4"	20	98.4	42.9	69.8	15.9	4	200	0.33	6.785
1"	25	107.9	50.8	79.4	15.9	4	200	0.53	10.602
1 1/2"	40	127.0	73	98.4	15.9	4	200	1.35	27.143
2"	50	152.4	92.1	120.6	19.0	4	200	2.12	42.4115
2 1/2"	65	177.8	104.8	139.7	19.0	4	200	3.58	71.675
3"	80	190.5	127.0	152.4	19.0	4	200	5.42	108.573
4"	100	228.5	157.2	190.5	19.0	8	250	8.48	169.646
5"	125	254.0	185.7	215.9	22.2	8	250	13.25	265.071
6"	150	279.4	215.9	241.3	22.2	8	300	19.085	381.703
8"	200	342.9	269.9	298.4	22.2	8	350	33.929	678.584
10"	250	406.4	323.8	361.9	25.4	12	450	53.014	1060.28
12"	300	482.6	381.0	431.8	25.4	12	500	76.340	1526.81
14"	350	533.4	469.9	476.2	28.6	12	500	103.908	2078.16
16"	400	596.9	533.4	539.7	28.6	16	600	135.716	2714.33
18"	450	635.0	584.2	577.8	31.7	16	600	171.766	3435.33
20"	500	698.5	692.1	635.0	31.7	20	600	212.057	4241.15
24"	600	812.8	692.1	749.3	34.9	20	600	305.362	6107.25

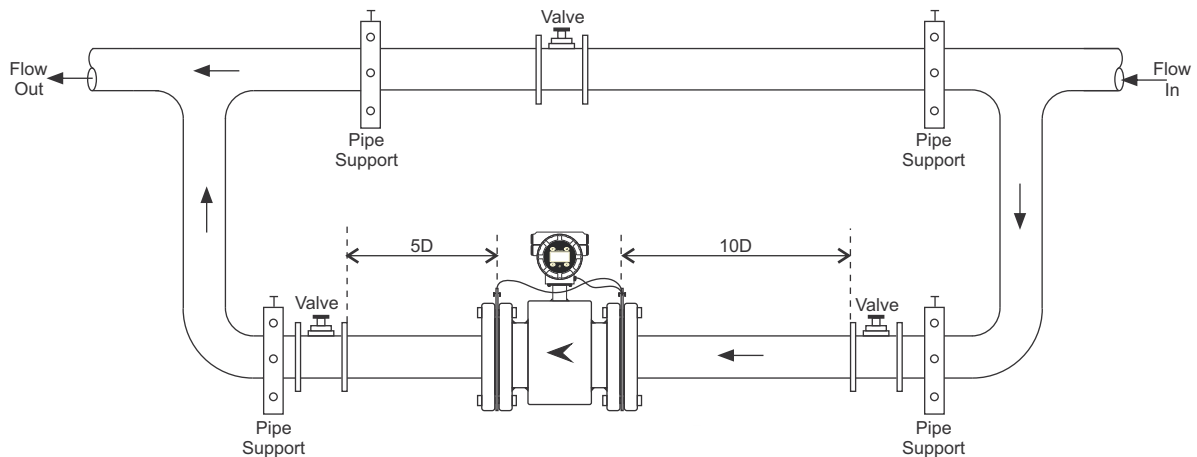
Note :

For Line size above 600NB consult factory.
 Typical mounting dimensions for reference.
 Standard factory calibration for 0.3 to 2 m/s velocity.
 Flow meter should be selected with the help of Nomograph
 recommended full scale velocity.
 Flow indication of 5 digit max. up to 99999

Flow Nomograph



INSTALLATION DRAWING



ORDERING INFORMATION

Series	Line Size	Electronics	Electronic Enclosure	Lining Material	Flange Material	Flange Rating	Coil Housing	Electrode Material	Comm. Output	Remote Cable Length
ELMAG 600	A 150NB	B 01	C 01	D 01	E 01	F 01	G 01	H 01	I 01	J 01

08 Other	05 PTFE	04 PFA	03 EPDM	02 Remote	02 SS 304	02 Hard Rubber	02 SS 316	08 Other	02 SS 316	02 Hyst. C	02 GSM	02 10mtr
01 Local	01 Aluminum	01 Neoprene Rubber	01 MS /CS	01 ASA 150	01 MS	01 SS 316L	01 RS232	01 5mtr	01 Tantalum	03 Platinum	03 Pulse	

* Due to our continuous product improvisations, Design, Specifications and Model Number are subject to change without notice.
 * GSM output is without SIM card & SCADA viewing software. * For better accuracy consult factory.

* Accuracy defined at lab conditions.

Authorised Dealer



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