

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 |
|----------------------|--|

DIMENSIONAL DETAILS

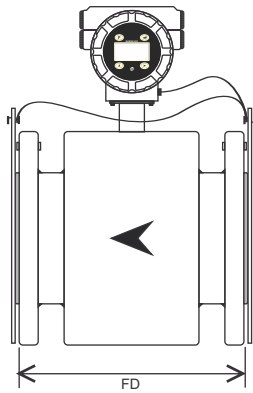


Fig. Front View

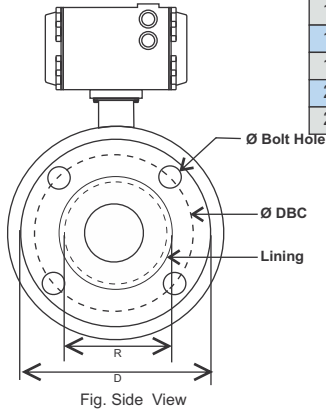


Fig. Side View

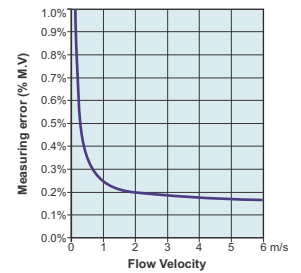
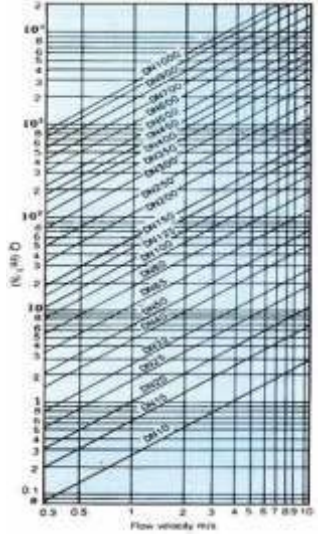
DIMENSIONAL DETAILS OF FLANGE (AS PER ASA150 # B-16.5):

| 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 0.3m/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 |

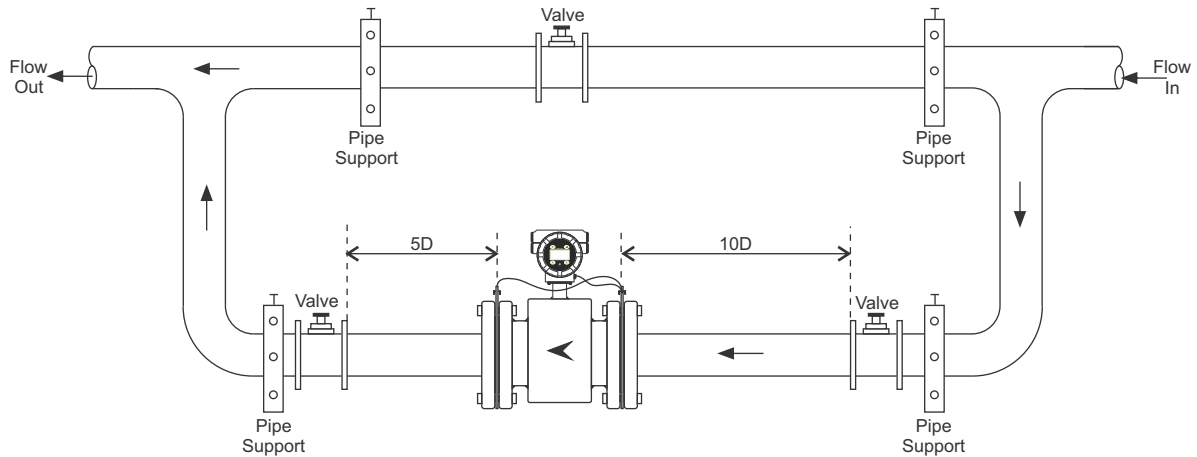
Note :

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

| | | | | 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 | | | | | | | |
| | 15NB To 600NB | 01 Local | 01 Aluminum | 01 Neoprene Rubber | 01 MS /CS | 01 ASA 150 | 01 MS | 01 SS 316L | 01 RS232 | 01 5mtr | | | | | | | | | |
| 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 | | | | | | | | |

* 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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