

ELECTROMAGNETIC FLOW METER

Model : ELMAG FULL BORE ELECTROMAGNETIC FLOW SENSOR



WAVETEK Full Bore Electromagnetic flow sensors are suitable for measurement of flow of conductive liquids, which is based on Faraday's law of Electromagnetic induction, according to which a voltage is induced in an electrically conducting body moving in a magnetic field and this voltage is proportional directly to the velocity.

Where to use

- ◆ High percentage of solids like Sludges, slurries, minerals, paper, sewage flows with high levels of solids which cannot be measured other types of meters.
- ◆ Obstruction less measurement: Nothing projects into the flow stream, no head loss, no parts to maintain.
- ◆ Very corrosive liquids like acids, caustics and corrosive chemical additives are isolated from the meter by inert linings and electrodes.



Applications:

- Chemical and process industries
- Water and Sewerages Boards
- Pharmaceutical and Drug industry
- Petrochemicals
- Mining and aluminum Complexes
- Pulp Paper, Viscous and Rayon industry
- Fertilizers
- Effluent treatment plants
- Dairy and food industry
- Steel plants

TECHNICAL SPECIFICATIONS

Electrical Conductivity	20 μ S/cm (5 μ S/cm for many liquids)
Ambient Temperature	Upto 50 °C
Insulation Class of Field Coils	H, temp of fluid 80 °C (higher temp on request)
Mains Voltage	230 VAC, 50 Hz, optional battery operated
Power Consumption	upto 20 VA
Input Impedance	1000 M Ohms
M.O.C. of Flange	C.S. (std) / SS304 & SS316 (Optional)
Enclosure M.O.C.	M.S. with cast aluminium IP65 Signal Amplifier Box Size 200 X 120 X 80 mm (SS optional)
Measuring Pipe M.O.C.	SS304
Enclosure / painting	IP 65 / Corrosive resistant two component coating (IP 68 optional)
Cable Entry	2 off, suitable for 10mm diameter cable
Test Pressure	1.5 X Rated Pressure
Output	4-20 mA, 500 Ω load connectable to Rate Indicator / Totalizer Unit [RS232 Interface and wireless Transmission optional]
Accuracy	+ 0.5 %

Ordering Information :

PROTECTION	P1			P2			P3			P4						
	IP65.M S Epoxy Painted			IP68.M S Epoxy Painted			IP65 , All SS 304			IP68 , All SS 304						
JOINTS	J1	J2	J3	J4	J5	Flanges	JF6	JF7	JF8	JF9						
	Male Threaded	Water Installed	Lateral Insertion	DIN 11851	clamp		BS 4504	DIN 2501	ANSI	ISO 7005						
ELECTRODE	E1		E2		E3		E4		E5		E6					
	SS316		Hastalloy C		Platinum		Titanium		Monel		Tantalum					
LINERS	L1			L2			L3			L4			L5			
	PTFE -40 to 150°C			Neoprene -40 to 100°C			Ebonite -40 to 80°C			Polypropylene -40 to 60°C			Special			
DN (mm)	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12	N13	N14	N15	N16
	10	15	25	40	50	65	80	100	125	150	200	250	300	350	400	450

Features :

- Compact design signal converter housing mounted on flow meter
- Automatic zero point correction using D.C. pulsed technique.
- Measurement is independent of fluid properties, density, viscosity, temperature and solid content
- PCB's replaceable at site without need for recalibration.
- Smooth inner tube no pressure losses.
- Low power consumption
- Easy to install and connect up.
- Extra thick liner ensures long life

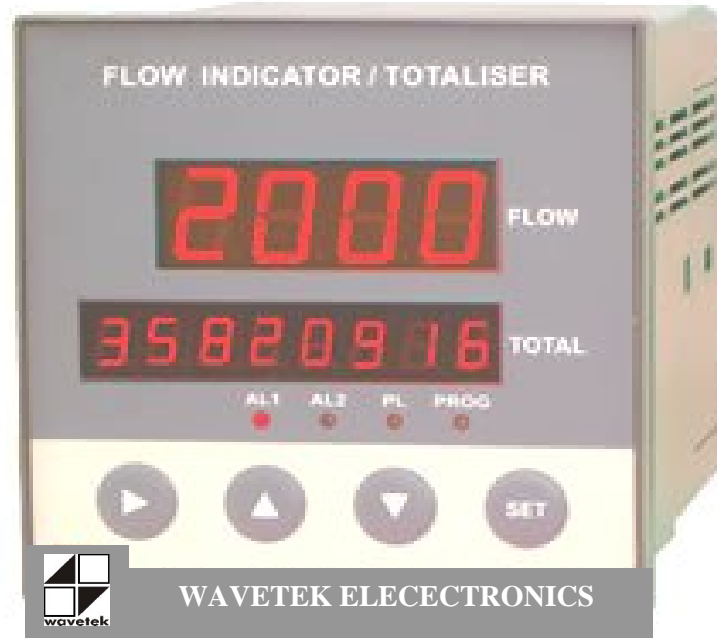
FLOW RATE INDICATOR TOTALISER

MODEL : FIT 06



Salient Features:

- 4 & 8 Digit LED Display
- Variety of inputs, voltage pulses, proximity Switches, mA, Frequency, etc
- Up / Down, Remote Reset inputs.
- Auto reset / Latch relay output
- Password security for access and calibration of the instrument
- Reset Remote & Local.
- Non – volatile Memory
- Genuine membrane keypad
- Serial RS 232/485 Interface for data logging
- Two relay for high lo alarm. Option
- Multi port scanning & logging (option)



Specifications:

- Display: 0.3" x 8 & 0.56" x 4 Red LED Display.
- Keyboard: Tactile, 4/5 key membrane keypad
- Non – volatile Memory
- Data Storage [Optional]
- Count Input:
 - a) Contact closure potential free
 - b) Voltage pulses
 - c) Proximity switches
 - d) 4 – 20 mA / 0 – 5 VDC
- Counting Accuracy: 0.1 % for Full scale / + 1 Digit
- Display function: current count and rate count
- Outputs: 2 relay (230 VAC, 5 A), Frequency
- Accuracy : 0.5% Batching Possible.
- Enclosure size: 96 mm x 96 mm x 150 mm [Panel type]
120 mm X 200 mm X 55 mm [Field type] ABS material
- Supply: 230 V AC
- Output Ports: [RS 232/ RS 485 for Data Logging [Optional]
- Jumbo Display : 4", 8" LED RED Display to Remote location.

Also Available : Flow meters

Models	Particulars	Pipe sizes
ELMAG	Full Bore Electromagnetic	15 mm , 450mm NB
ELMAG-IN	Insertion type	200 mm to 1.5mtr NB
CMF 06	Insertion Type Mass flow meter	150mm to 300mm NB
DFM IV	Doppler Flow meter	12.7mm to 4.5mtr NB

WAVETEK ELECTRONICS

