

# DIGIMAG 250



## INTRODUCTION

**CBRO Electromagnetic flowmeter's accurately measures the flow rate of conducting liquids or slurries flowing in closed pipes. Due to simple and right design the flowmeter is an obstruction less & maintenance free instrument in place of conventional mechanical flow measuring device. The use of "Pulsed DC" technology offers highest ability & better measuring accuracy in form of 4-20mA DC linearly proportional to volumetric flow.**

## FEATURES

- \* **Size DIN 10 TO DIN 3000 NB pipe line.**
- \* **High Accuracy better than  $\pm 0.5\%$  of reading.**
- \* **Zero Pressure Drop.**
- \* **Suitable for High Viscosity Conductive Liquids.**
- \* **Digital Flow rate / Totalizer Indication / Batching system**
- \* **Isolated Transmitting Output 4-20 mA.**
- \* **No Grounding Rings require.**
- \* **Minimum Upstream & Downstream Stright Length.**
- \* **Compact & Rugged, IP 65 protection.**
- \* **Remote Flow indication Totalizer / Batching system**
- \* **Data Logging & Wireless Data Transfer System Through GSM MODEM**

## APPLICATIONS

- \* **Effluent Treatment Plants.**
- \* **Sewage Treatment Plants.**
- \* **Water Supply Schemes.**
- \* **Steel & Aluminium.**
- \* **Pulp & Paper.**
- \* **Chemical & Fertilizers.**
- \* **Food & Drug.**
- \* **Pumps & Valve Calibration Lab.**
- \* **Dairy Industry.**
- \* **Corrosive Liquids.**
- \* **Sugar Industry.**
- \* **Textile Industreis**
- \* **Dyeing and Printing Textiles**
- \* **Hotels & Resorts**
- \* **Water Parks**
- \* **Buildings & Infrastructure**
- \* **Municipal Corporation**



**REMOTE MOUNTING**

## SPECIFICATIONS

Coil housing	SS-304
M.O.C. of flow tube	SS 304
M.O.C. of Flange	M.S. (std) / SS304 & SS316 (Optional)
Flange connection	ASA 150# Flanged as per B 16.5.
Electrode	SS 316 / SS 316L / Hasteloy C / Titanium
Electrode type	Round head electrodes (Bullet nose)
Liner	PTFE / PFA ( other on request)
Electrical Conductivity	10 $\mu$ S/cm (5 $\mu$ S/cm for many liquids)
Accuracy	+ 0.5 - 0.2 % of F.S.
Operating Pressure	10Kg/cm <sup>2</sup> (more on request)
Operating temp.	250°C.
Insulation Class of Field Coils	H, temp of fluid 80°C (higher temp on request)
Mains Voltage	230 VAC, 50 Hz / 440 VAC, 50Hz (Optional)/ 24 V DC (optional)
Power Consumption	Up to 20 VA
Input Impedance	1000 M Ohms
Type	Pulsed DC excitation
Enclosure	Cast aluminium Ip65 / Flammeproof CMRI IIA IIB Signal Amplifier Box Size 220 X 120 X 85 mm with glass window.
Enclosure / Painting	IP 67 / Corrosive resistant two component coating (IP 68 optional)
Signal convertor	Head mount or remote.
Display	16 X 2 LCD
Computer Interface	RS-485/ RS-232 (Optional)
Flow unit	Selectable.
Cable Entry	2 off, suitable for 8mm diameter cable
Test Pressure	1.5 X Rated Pressure
Output	4-20 mA/ freq./ pulse (Optional)
Empty Pipe Detection	Available
Low cutt off	Available
Batching	Available (Optional)
Damping	Available (Optional)
Direction	Suitable for bi directional
Programming	Through Key/ Keypad on front facia .
Terminals	Shock Hazard Protected screw less terminals.
Interchange ability	Fully interchangeable with all sizes of flow sensors.
Power failure mode	Provision of RAM/PROM to store parameter entered and measured flow data during power failure

## SANITARY FLOWMETER FOOD GRADE



**FLOWMETER FOR SANITARY APPLICATIONS WITH UNION CONNECTION TRICLOVER TYPE**



**FLOWMETER FOR SANITARY APPLICATIONS WITH FLANGED END CONNECTION**

## SELECTION TABLE

Pipe Size		Max Flow	Nominal Flow	Min Flow	Creep (Cut-off)
		10 m/s	5 m/s	0.3 m/s	0.04m/s
Inch	Mm	Lps		Lps	Lps
1	25	5.09	2.50	0.15	0.016
1 ¼	32	8.00	4.0	0.25	0.03
1 ½	40	12.00	6.0	0.41	0.05
2	50	19.80	10.0	0.58	0.08
2 ½	65	33.18	16.0	1.00	0.13
3	80	43.61	22.0	1.50	0.20
4	100	75.10	38.0	2.41	0.33
5	125	125.0	63.0	3.66	0.50
6	150	170.43	85.0	5.50	0.69
8	200	295.11	147.0	9.70	1.38
10	250	465.18	232.0	15.20	2.08
12	300	667.18	333.0	22.0	2.77
14	350	798.18	399.0	23.95	3.20
16	400	1166	583	38.0	5.55
18	450	1500	750	50.0	7.0

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