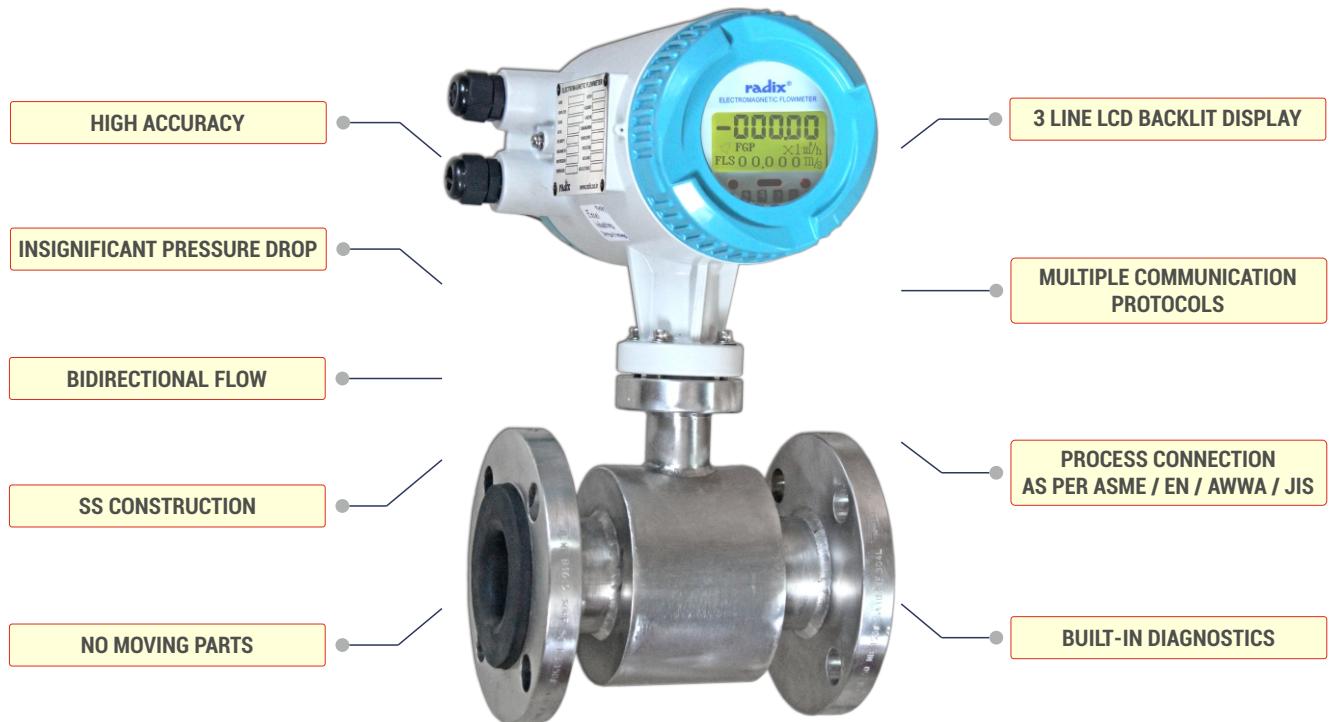


ELECTROMAGNETIC FLOW METER



The instrument works on the principle of Faraday's law of electromagnetic induction. A magnetic field is generated by the instrument in the flow measuring tube.

When a conductive liquid passes through this magnetic field, a voltage is generated which is proportional to the liquid flow velocity.

This voltage is captured by electrodes and the signal is sent to the flow transmitter. The flow transmitter calculates the flow rate, and gives a 4~20 mA output.



ABOUT EFM

The Radix make EFM series is ideal for all types of conductive liquids and has no moving parts.

The EFM series offers wide flexibility in the choice of liner material, electrodes and process connection.

There are two models :

EFM401 : with integral transmitter and display
EFM501 : with remote transmitter and display

APPLICATIONS

- Water & Wastewater : Water purifier, fluid metering, chemical dosing
- Chemical Industries : Chemical feed control
- Food & Beverage Industries : Water treatment, chemical dosing
- Pharmaceutical Industries : Process control
- Iron and Steel Industries : Chilled water control
- Oil & gas : Wastewater

ELECTROMAGNETIC FLOW METER

SPECIFICATIONS

All specifications at ambient of 25°C (±5°C), 220 V AC, 50 Hz / 24 VDC

BASIC

Conductivity	20 μ s / cm (minimum)
Accuracy	± 0.5% of span
Flow velocity	1 to 5 m/s (for calibration) 1 to 10 m/s (working range)
Display	LCD with backlight
Temperature	Ambient : -16°C to +50°C Process : -20°C to +160°C
Ambient humidity	5 ~ 90% RH
Pressure	Max 20 bar

MECHANICAL

Line size	1" to 4"
Process connection	Flange type
Standard	a) Sandwich type
Optional	b) Tri-clamp type
Measuring tube MOC	SS304, SS304L SS316, SS316L
Liners	Hard Rubber PTFE PFA Neoprene Polyurethane
Electrodes	
Standard	a) SS316L b) Hastalloy
Optional	a) Titanium b) Tantalum c) Monel d) Platinum

OUTPUT

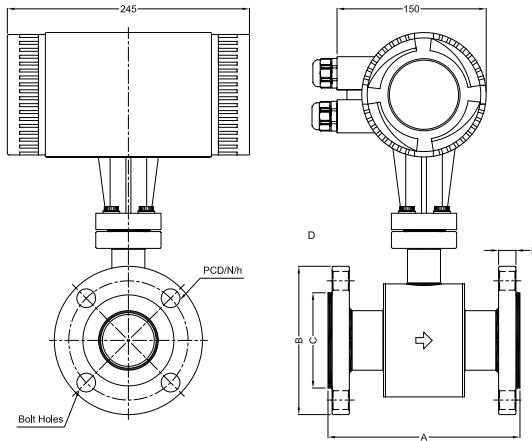
Flow output	4-20mA, isolated Pulse (1~5000 Hz)
Load resistance (Transmitter)	750 Ω
Communication	a) RS485/Modbus RTU b) HART c) Rs232
Alarms	High alarm / Low alarm Empty pipe
Measured parameters	Flow Velocity Totalizer
Other parameters	Test and diagnostics Self diagnostics
OTHER	
Sensor protection class	IP65
Transmitter housing Transmitter type	Epoxy painted die cast Al a) Integral b) Remote
Transmitter weight	~3.5 Kg (Total weight of the Flowmeter will depend on size)
POWER	
Supply	20 to 36 VDC 85 to 250 VAC, 50/60 Hz available on request
Power consumption	<20 W

ELECTROMAGNETIC FLOW METER

DIMENSIONS

Dimensions below are for flanged process connection.
For sandwich and tri-clamp, please contact us.

EFM401



DN		Pressure rating [psi/bar]	*Overall Length "A" [mm]	Flange OD "B" [mm]	Lining OD "C" [mm]	Flange Thickness "E" [mm]	PCD [mm]	No. Of Holes "N"	Hole Diameter "h" [mm]
[mm]	[inches]								
ASME B16.5 Class 150									
25	1"	150 psi	200 (-0,-3)	110	50.8	12.7	79.4	4	16
32	1.25"	150 psi	200 (-0,-3)	115	63.5	14.3	88.9	4	16
40	1.5"	150 psi	200 (-0,-3)	125	73	15.9	98.4	4	16
50	2"	150 psi	200 (-0,-3)	150	92.1	17.5	120.7	4	19
65	2.5"	150 psi	200 (-0,-3)	180	104.8	20.7	139.7	4	19
80	3"	150 psi	200 (-0,-3)	190	127	22.3	152.4	4	19
100	4"	150 psi	250 (-0,-3)	230	157.2	22.3	190.5	8	19
ASME B16.5 Class 300									
25	1"	300 psi	200 (-0,-3)	125	50.8	15.9	88.9	4	19
32	1.25"	300 psi	200 (-0,-3)	135	63.5	17.5	98.4	4	19
40	1.5"	300 psi	200 (-0,-3)	155	73	19.1	114.3	4	22
50	2"	300 psi	200 (-0,-3)	165	92.1	20.7	127	8	19
65	2.5"	300 psi	200 (-0,-3)	190	104.8	23.9	149.2	8	22
80	3"	300 psi	200 (-0,-3)	210	127	27	168.3	8	22
100	4"	300 psi	250 (-0,-3)	255	157.2	30.2	200	8	22

ORDERING INFORMATION

For ordering information please fill Inquiry form F3017 enclosed.

CAT#603R0/A

ENQUIRIES

Instruments: sales@radix.co.in
Sensors: sensors@radix.co.in
Gauges: gauges@radix.co.in
Automation: automation@radix.co.in
Level: level@radix.co.in

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