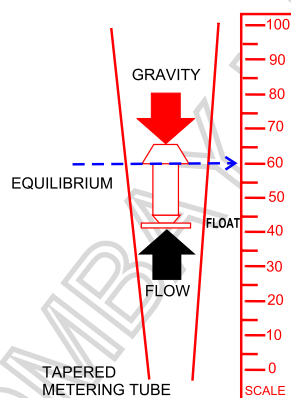


## DIGITAL VARIABLE AREA FLOWMETER (ROTAMETER)



### ORIGIN OF METAL TUBE ROTAMETER

It operates on the principle of variable area; the fluid in the metal tube raised a float in the taper tube increasing the area of passage of fluid.



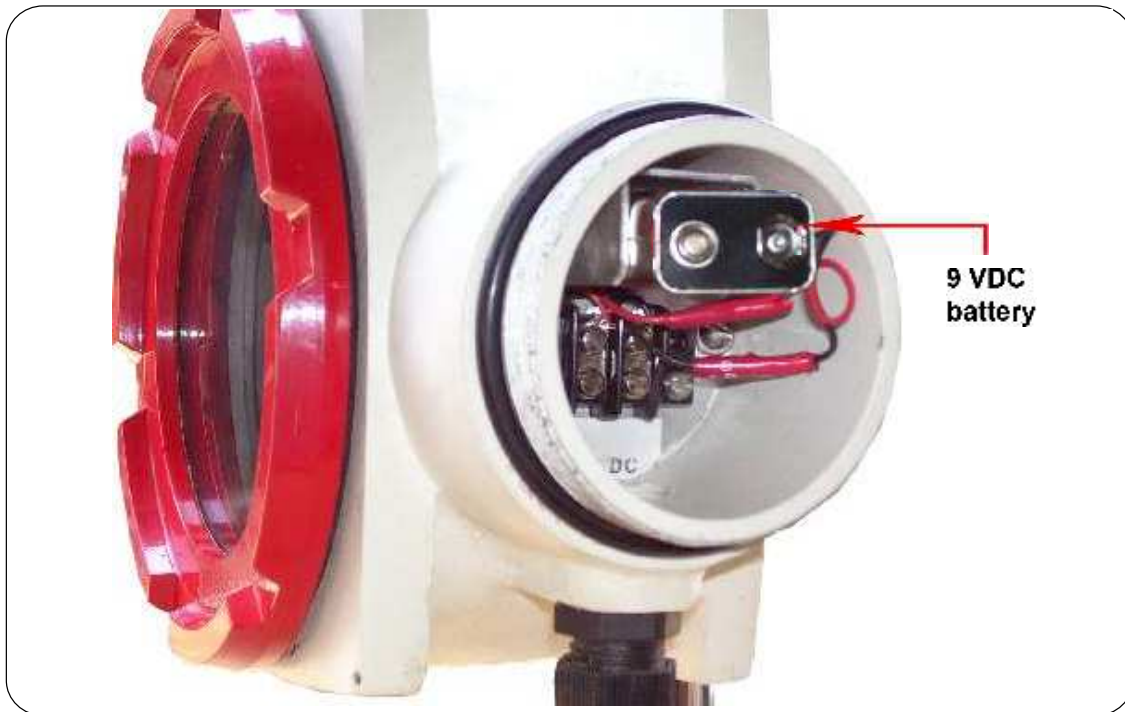
The float moves up in proportion to the rate of flow of fluid and get stabilized when the weight of the float is balanced by the upward hydraulic force. By a magnetic coupling the inner float movement through a series of linkages and counter weight. The tube and the float combination determine the flowrate.

**DIGITAL METER:** The inner float magnetic field is detected by the high sensitive magnetic field detection sensor, enable us to show the digital readout.

As such this flowmeter does not require any electrical connection, since it operates on battery. It has an inbuilt two wire transmitter provide 24 VDC and take 4 – 20 mA signal.

## BENEFITS OF BOMBAY INSTRUMENT MFG.CO. DIGITAL VARIABLE AREA FLOW METERS

- ▶ Local indication without the need for auxiliary power.
- ▶ Minimum pressure loss.
- ▶ Easy to read.
- ▶ Accurate measurement even at higher flow(150 m3/hr).
- ▶ Suitable for low flow (8LPH)
- ▶ Default inbuilt transmitter of 4 – 20 mA (Loop powered).
- ▶ No movement assembly reducing the maintenance.

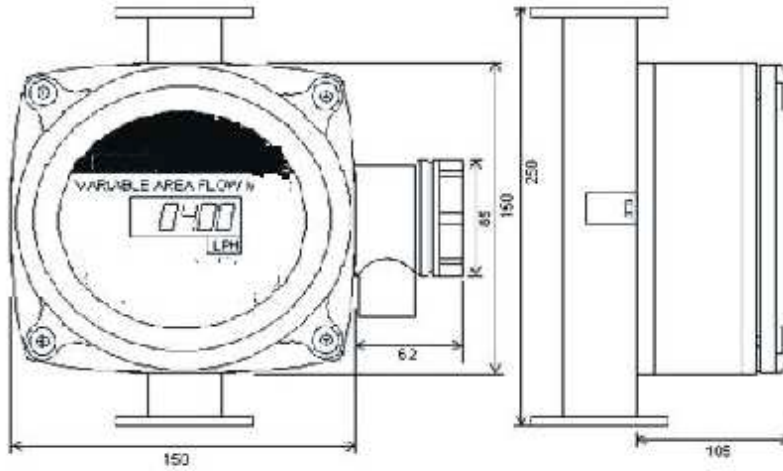


### TECHNICAL SPECIFICATION

Accuracy	: +/- 1.5% of FSR.
Rangeability	: 10:1
Repeatability	: +/- 0.25% of FSR
Temperature Rating	: -50 to 120 °C.
Pressure Rating	: 80 kg/cm2
Flow Direction	: Bottom to Top
End connection	: Flanged to suit customer's requirement.
Wetted Part	: To suitable specific liquid or gases.
Mounting position	: Vertical.
Indication	: Digital flow rate
Transmission	: 2 wire loop powered
Enclosure	: Flameproof / Weatherproof.
Power supply	: 9 VDC Battery

### MAXIMUM FLOW AND PRESSURE LOSS

LINE SIZE NB	20° C WATER FLOW m3/hr	0° C 1 atm AIR FLOW Nm3/hr	APPROX PRESSURE LOSS MM WC
15	0.2 - 1.2	6 - 35	200 - 225
20	0.4 - 2.0	8 - 60	220 - 230
25	1 - 5	30 - 150	200 - 270
40	2.5 - 10	70 - 300	200 - 250
50	3.5 - 17	100 - 500	225 - 280
85	6 - 30	200 - 900	225 - 240
80	10 - 45	300 - 1200	225 - 280
100	20 - 100	600 - 3000	350 - 850
125	30 - 120	900 - 4000	300 - 850
150	30 - 150	900 - 4500	350 - 950



<b>MODEL CODE</b>		<b>R 300/D</b>	
LOCAL INDICATOR LCD 1/2" DISPLAY AND BATTERY OPERATED		0001	
LOCAL INDICATOR AND TOTALISER (16X2 LINE) WITH LOOP POWERED		0002	
LOCAL INDICATOR WITH LED 1/2" DISPLAY 230VAC INPUT AND 4-20 mA OUTPUT		0003	
LOCAL INDICATOR WITH 1" LED DISPLAY 230VAC INPUT AND 4-20 mA OUTPUT.		0004	
LOCAL INDICATOR WITH TOTALISER AND BATCH CONTROLLER (16X4 LINE) LCD DISPLAY, 230VAC INPUT.		0005	
LOCAL INDICATOR WITH TOTALISER AND DENSITY CORRECTION FACILITY		0006	
LOCAL INDICATOR WITH HIGH/LOW SWITCH		0007	
<b>MATERIAL OF CONSTRUCTION (WETTED PARTS)</b>			
SS 304			<b>304</b>
SS 304 WITH TEFLONLINED			<b>316</b>
SS 316			<b>PP</b>
SS 316 WITH TEFLONLINED			<b>PVC</b>
PP			<b>304PTFE</b>
PVC			<b>316PTFE</b>
INDICATOR HOUSING: DIE-CAST ALUMINUM			<b>AL</b>
INDICATOR HOUSING: SS 304			<b>SP</b>
<b>MATERIAL FOR FLOAT</b>			
SS 316			<b>1</b>
TEFLON			<b>2</b>
PVC			<b>3</b>
<b>ADDITIONAL ACCESSORIE</b>			
JACKETING			<b>J</b>
REMOTE TOTALISER 230 VAC			<b>IN</b>
REMOTE TOTALISER AND CONTROLLER 110 VAC			<b>INC</b>
<b>EXAMPLE</b>	<b>R-300/D/</b>	<b>001/</b>	<b>304/</b>
	<b>AL/</b>	<b>01/</b>	<b>IN</b>

**Manufactured & Marketed By :**  
**M/S. Bombay Instrument Mfg. Co.**

SHOP NO. 5 , 50/86, JITEKAR WADI  
 OPP. VINAY HOTEL 88, THAKURDWAR ROAD MUMBAI – 400 002 - INDIA  
 Tel. : 91 (022) 2389 1073 / 2389 10 7 5  
 Fax : 91 (022) 2389 1075  
 Web. : www.bombayinstrument.in  
 Email : bimco@mtnl.net.in , bimcoindia@gmail.com