



METAL TUBE ROTAMETER

Principle of operation: 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 determines the flow rate.

DIGITAL VARIABLE AREA FLOW 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 of only for the Flow Rate Indication, this flowmeter does not require any electrical connection, since it operates on a inbuilt battery. When 4 to 20 mA output is required, 24 VDC loop power supply is required.

BENEFITS OF VARIABLE AREA FLOWMETERS

Local indication of Flow Rate without the need for auxiliary power. Easy to read. Accurate measurement even at higher flow (150 m³/hr). Suitable for low flow (1 LPH) Default inbuilt transmitter of 4-20 mA (Loop powered). No movement assembly reducing the maintenance.

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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 – 260
65	6 – 30	200 – 900	225 – 240
80	10 – 45	300 – 1200	225 – 260
100	20 – 100	600 – 3000	350 – 700
125	30 – 120	900 – 4000	300 – 850
150	30 – 150	900 – 4500	35 – 950

TECHNICAL SPECIFICATION

- Accuracy +/- 1.5% of FSR
- Range ability 10:1
- Repeatability +/- 0.25% of FSR
- Temperature Rating 50 to 120 °C
- Pressure Rating 80 kg/cm²
- Flow Direction Bottom to Top.
- Wetted Parts SS304 or, SS316 (otherwise customized)
- Mounting position vertical.
- Indication Digital flow rate
- Transmission 2 wire loop powered.
- Enclosure Flameproof / weatherproof
- Power supply 9 VDC battery for Flow only Flow Rate



Model Code of Flowmeter					
Local Flow Rate Indicator LCD ½ ” Display and Battery operated than given 24V DC loop power 4-20 mA	R301				
Local Flow Rate Indicator and Totalizer LCD (16 X 2 Line) with 4-20 mA Isolated. Supply 24V DC	R302				
Local Flow Rate Indicator and Totalizer LCD (16 X 2 Line) Display 230 VAC Input and 4-20 mA output.	R303				
Local Flow Rate Indicator with 1” LED Display 230 VAC Input and 4-20 mA output	R304				
Local Flow Rate Indicator with Totalizer and batch controller (16 X 2 Line) LCD Display, 230 VAC Input./24 VDC Input Also	R305				
Local Flow Rate Indicator with Totalizer and Density correction facility	R306				
Local Flow Rate Indicator with High / Low switch	R307				
MATERIAL OF CONSTRUCTION (BODY)					
SS 304		4			
SS 304 with Teflon Lined		5			
SS 316		6			
SS 316 with Teflon Lined		7			
PP		8			
PVC		9			
INDICATOR HOUSING DIE-CAST ALUMINIUM			A		
INDICATOR HOUSING SS 304			S		
MATERIAL FOR FLOAT					
SS 316				1	
TEFLON				2	
PVC				3	
ADDITIONAL ACCESSORIES					
JACKETING					J
Remote Totalizer 230 AC					T
Remote Totalizer and Controller 110 VAC					C
Example	R301	4	A	1	J

Manufacturer & Marketed by:

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