



Brief

A **glass tube rotameter** is a type of flow meter used to measure the flow rate of liquids or gases in a closed tube. It consists of a vertically oriented, tapered glass tube with a float inside that rises or falls depending on the flow rate. The position of the float within the tube is read against a calibrated scale to determine the flow rate.

Rotameters are commonly used in laboratories and industrial settings due to their simplicity, reliability, and direct visual indication of flow

Technical Specification:-

Model	JI-GTR-TB
Material of Construction:	CS/SS 304/316/PTFE
Float	SS 316/SS 304/ PTFE
Tube	Glass Borosilicate
Packing	PTFE / VITON / Silicon / Neoprene
Enclosure	SS Buffed/ MS Powder Coated /FRP
Line Size	15 NB to 80 NB
Ranges	2.0 LPH to 25000 LPH
Face to Face Distance	As required depending upon the range
Accuracy	+/-2% FSD
Measuring Span Scale	1:10 Acrylic/Aluminum/ SS



Direct Flow Measurement: Provides a visual indication of flow rate based on the position of the float within the glass tube, which moves up or down depending on the fluid flow.

Clear Visibility: The glass tube allows for easy observation of the float and the flow rate.

Wide Range of Applications: Suitable for measuring the flow of both liquids and gases in various industries, including chemical, pharmaceutical, and water treatment.

Low Pressure Drop: The rotameter causes minimal pressure loss in the system, making it efficient for low-pressure applications.

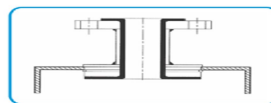
Accuracy: Offers good accuracy for flow measurement, typically within $\pm 2-5\%$ of full scale.

Material Compatibility: The glass tube is often resistant to many chemicals, making it suitable for corrosive environments. The float can be made from various materials

Scalability: Available in different sizes and flow ranges to accommodate various flow rates.

No External Power Required: Operates purely on the mechanical principles of fluid flow and gravity, requiring no external power source.

Ease of Maintenance: Simple design and construction make it easy to clean, calibrate, and maintain. steel, glass, or plastic) to match specific application needs.



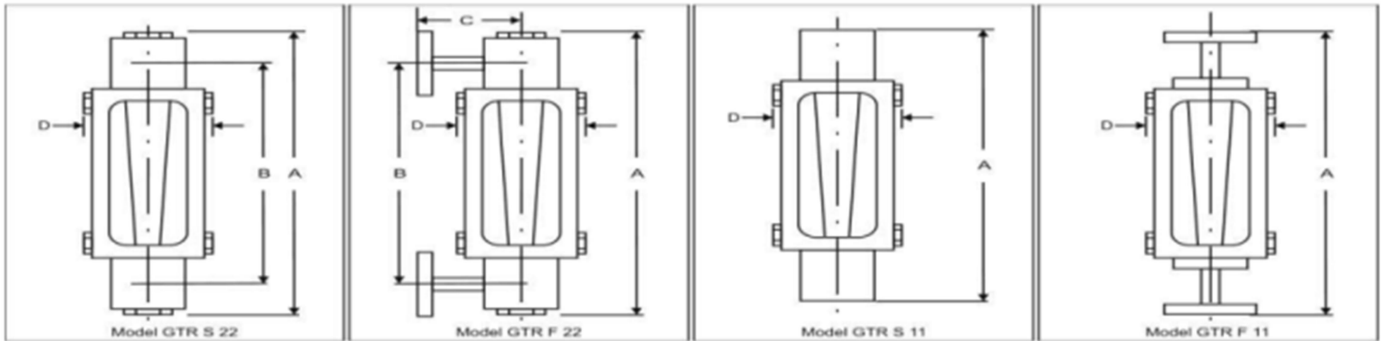
PTFE - Single PC (No Joint)
Cladding 100% Spark Proof



Float with PTFE Ring avoids glass to metal contact and minimizes possibility of Glass Tube breakage

Data Required for Offer:

- Tag No.
- Material of Construction of Wetted parts
- Type of connection
- Flange Size/Rating
- Fluid
- Fluid Density/Sp. Gravity
- Viscosity at Operating Conditions
- Operating Pressure
- Operating Temperature
- Measuring Range



OVERALL DIMENSIONS

Meter Size	Model GTR S 22 & Model GTR F 22			Model GTR S 11	Model GTR F 11	All Meters
	A	B	C	A	A	D
	15	475	450	100	400	500
20	475	450	100	400	500	90
25	475	450	100	400	500	90
40	475	450	90	400	500	90
50	475	450	90	400	500	90
80	475	450	90	400	500	90

CAPACITY TABLE – GLASS TUBE ROTAMETER

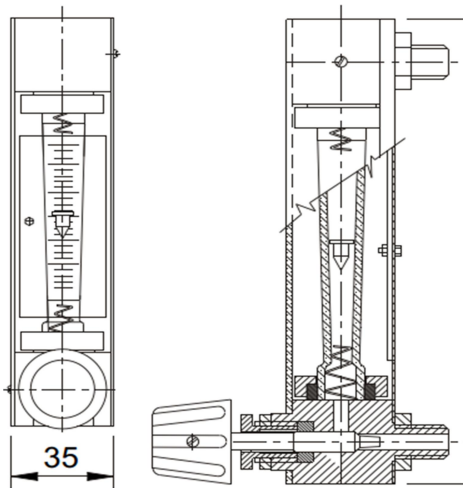
Meter Size	Tube Size	Water at Amb. Temp. in LPH		Air at 20 o C & 760 Torr in SCFM		Pressure Drop in mm WC
		MINIMUM	MAXIMUM	MINIMUM	MAXIMUM	
15	1	4	40	0.90	9.00	140
	2	6	60	0.13	1.30	
	3	10	100	0.32	3.20	
20	4	16	160	0.50	5.00	360
	5	25	250	0.76	7.60	
	6	40	400	-	-	
	7	60	600	-	-	
25	8	60	600	1.25	12.50	650
	9	100	1000	1.90	19.00	
	10	160	1600	-	-	
40	11	250	2500	-	-	950
	12	160	1600	3.10	31.00	
	13	300	3000	5.00	50.00	
50	14	400	4000	-	-	550
	15	400	4000	7.60	76.00	
	16	600	6000	11.30	113.00	
	17	1000	10000	-	-	
80	18	1000	10000	19.00	190.00	750 900
	19	1600	16000	-	-	
	20	2500	25000	-	-	



Model: JI-GTR



Model	JI-GTR-CV (With Control Valve)
Description	Precious flow measuring instrument designed on the "Variable Area" Rotameter basis using "TAPERED tubes.
Metering Tube	Extra thick stress relieved "Tapered" borosilicate glass tube
Enclosure	2 sides SS with front side & back side see thru Acrylic Sheet
Float	SS / PP
End Fittings	BSP / NPT at Side Top & Bottom of SS / As Required
Range	As Required
Application	As Required
Temperature Max	100 Deg C
Needle Valve	Provided at Inlet
Pressure Max	14 Kg/Cm2
Accuracy	+/- 2% FS



Flow Range Chart			
For Rotameter with Control Valve			
Fluid: Water Pressure: ATM Temperature: Ambient			
Model No.	Flow Range in LPH	Thread Connection	
JI-GTR-CV-1	1-10	1/4"	
JI-GTR-CV-2	2-20	1/4"	
JI-GTR-CV-3	3-30	1/4"	
JI-GTR-CV-4	4-40	1/4"	
JI-GTR-CV-5	5-50	1/4"	
JI-GTR-CV-6	6-60	1/4"	
JI-GTR-CV-7	7-70	1/4"	
JI-GTR-CV-8	8-80	1/4"	
JI-GTR-CV-9	9-90	1/4"	
JI-GTR-CV-10	10-100	1/4"	

Flow Range Chart			
For Rotameter with Control Valve			
Fluid: Air Pressure: 14 Bar Temperature: 100 Deg C			
Model No.	Flow Range in LPM	Thread Connection	
JI-GTR-CV11	01.-1	1/4"	
JI-GTR-CV-12	0.5-5	1/4"	
JI-GTR-CV-13	1-10	1/4"	
JI-GTR-CV-14	3-30	1/4"	
JI-GTR-CV-15	10-100	1/4"	
JI-GTR-CV-16	20-200	1/4"	
JI-GTR-CV-17	30-300	1/4"	

