

Glass Tube Rotameter

Applications:

Omicron Variable Area Flow Meters (Rotameters) work on the principle of Variable Area. The float moves freely up and down in the tapered borosilicate glass tube with fluid flow from bottom to top. The float takes up a position where buoyancy forces and the float weight are balanced in proportion to flow rate. The vertical position of the float as indicated by scale is the measure of the instantaneous flow rate.



Materials of Construction:

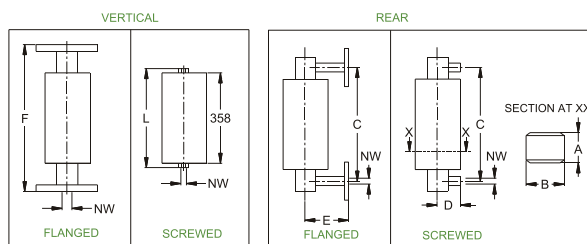
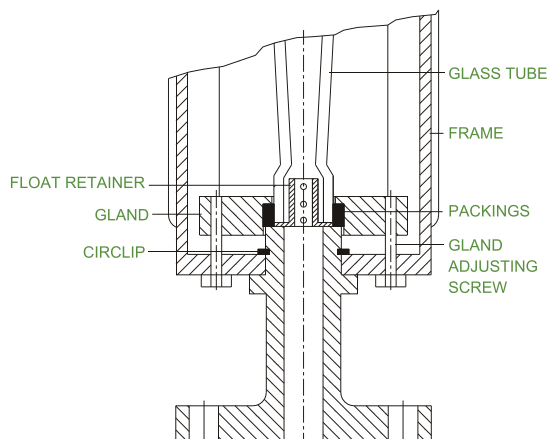
Tube	:	Borosilicate Glass
Float	:	SS316, PTFE, other on request
Packings	:	Neoprene, PTFE, Silicon, VITON
End Fitting	:	Mild steel, Carbon steel, SS304, SS316 CF-8M, CF8, Cast Iron PTFE lined, SS lined, PVC, and any other desired material subject to its availability.
Frame & Cover	:	Mild Steel, SS (optional)

Performance:

Accuracy	:	$\pm 2\%$ of full flow
Repeatability	:	0.5%
Rangeability	:	10:1
Scale length	:	175-200 mm, CF-8M, CF8, Cast Iron PTFE lined, 250mm (Optional), 500 mm (optional)
Max. Temp.	:	Up to 2000°C, depending upon gland packing material
Connections	:	Flanged or Threaded
Enclosure	:	IP 55 or IP65 on request



Glass Tube Rotameter



OVERALL DIMENSIONS

NW	F	L	C	E	D	A	B
15	500	400	440	90	55	95	90
20	500	400	440	90	60	95	90
25	500	400	440	115	65	120	115
40	500	400	500	125	70	140	140
50	500	450	500	150	70	155	160
80	500	NA	500	170	NA	190	190
80	600	NA	NA	NA	NA	NA	NA

HOW TO ORDER

Basic Model:

RMG

Material of Construction:

S

S Stainless Steel

M Mild Steel

T PTFE Lined

B Brass

CS Carbon Steel

C Cast Iron

R Rubber Lined

Inlet Outlet Connection Direction :

V

Vertical (Inlet bottom, Outlet top) Side conn. / Rear conn. / Inlet bottom, Outlet side

Type of Connection:

F

F Flange

S Screwed

H Hose

Tube size:

PG-1
TO PG-21

PG-1 TO PG-21

Modification in connection:

M

Standard conn.

Modified meter conn

Accessories:

FSPL

FSPL Flow Switch (Proximity Single Point)

FSPHL Flow Switch (Proximity Double Point)

NV Needle Valve

SF Stainless Steel Frame

EL Extra Long (Scale Length 500mm approx.)

WP Weather Proof

L Long (Scale Length 250mm approx.)

Ordering Example : RMG-S-R-F-PG-5-M-FSPL

Glass Tube Rotameter

Data required for sizing :

- Name of Fluid
- Sp. Gr. Of Fluid at Operating Conditions
- Viscosity of Fluid at Operating Conditions
- Operating Pressure & Operating Temperature
- Measuring Range
- Material of Construction desired.

STANDARD RANGES - GLASS TUBE ROTOMETER

NW	Glass size	Water at Amb. Temp LHP		USGPM		Air at 20°C. 760 Torr nm ³ /hr		SCFM		Pressure rating KG/CM ² G	Pressure Drop mm WC
		Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum		
15	PG-1	4	40	0.018	0.18	0.14	1.4	0.90	9.00	25	140
	PG-2	6	60	0.026	0.26	0.2	2	0.13	1.30		
	PG-3	10	100	0.04	0.44	0.3	3	0.19	1.90		
20	PG-4	16	160	0.07	0.70	0.5	5	0.32	3.20	25	360
	PG-5	25	250	0.11	1.10	0.8	8	0.50	5.00		
	PG-6	40	400	0.175	1.75	1.2	12	0.76	7.60		
	PG-7	60	600	0.26	2.60	-	-	-	-		
25	PG-8	60	600	0.26	2.60	2	20	1.25	12.50	15	650
	PG-9	100	1000	0.44	4.40	3	30	1.90	19.00		
	PG-10	160	1600	0.70	7.00	-	-	-	-		
	PG-11	250	2500	1.10	11.00	-	-	-	-		
40	PG-12	160	1600	0.70	7.00	5	50	3.10	31.00	12	950
	PG-13	300	3000	1.30	13.00	8	80	5.00	50.00		
	PG-14	400	4000	1.75	17.50	-	-	-	-		
50	PG-15	400	4000	1.75	17.50	12	120	7.60	76.00	10	550 950
	PG-16	600	6000	2.65	26.50	18	180	11.30	113.00		
	PG-17	1000	10000	4.40	44.00	-	-	-	-		
80	PG-18	1000	10000	4.40	44.00	30	300	19.00	190.00	7	750 900
	PG-19	1600	16000	7.00	70.00	-	-	-	-		
	PG-20	2500	25000	11.00	110.00	-	-	-	-		
80	PG-21	4000	40000	17.50	175.50	-	-	-	-	7	1100

