



# EUREKA



## GLASS TUBE ROTAMETER

Works on the principle of variable area



## LOFLO ROTAMETER

Suitable For Measuring Low Flowrates Of Fluids

**EUREKA  
INDUSTRIAL  
EQUIPMENTS  
PVT. LTD.**

**REGD. & SALES OFFICE** : 17-20, 1st Floor, Royal Chambers, Paud Road, Pune 411 038, Maharashtra, India.  
Tel: 0091-20-25443079, 25451314 Fax: 0091-20-25441323 Email: sales@eurekaflow.com / eureka@mail@vsnl.net

**FACTORY** : 501, 'J' Block, M.I.D.C. , Pimpri, Pune - 411 018. Tel: 0091-20-27460585, 306817 31 to 55  
Fax: 0091-20-27460586 Email: eureka@mail@vsnl.net

**MUMBAI OFFICE** : Office No.116, Growmore Tower, 1st Floor, Plot No.5, Sector No.2, Kharghar, Navi Mumbai - 410 210  
Mobile: 9322598274

**AUTHO. SERVICE CENTRE** : Eureka Hightech, 281/1, Plot No.38, Kasar Amboli, Tal. Mulshi, Pune-412 108 Tel: 020-22922170

Website: [www.eurekaflow.com](http://www.eurekaflow.com)

# Glass Tube Rotameter

Eureka 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.

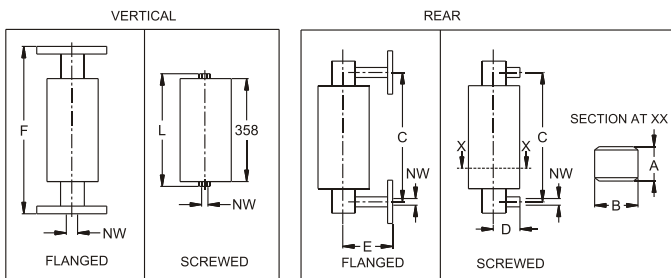
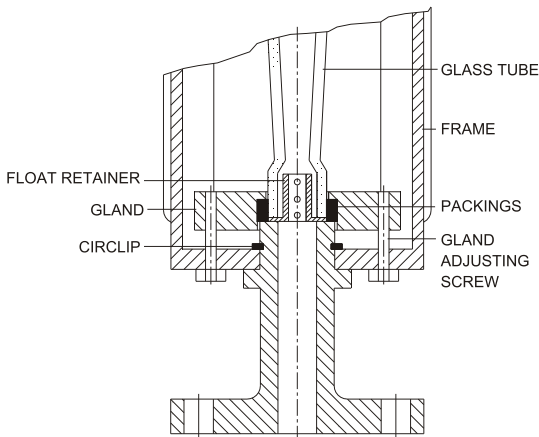


## Materials of Construction

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, 250mm (Optional), 500 mm (optional)
Max. Temp.	: Up to 200°C, depending upon gland packing material
Connections	: Flanged or Threaded
Enclosure	: IP 55 or IP65 on request



## 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

## MODEL IDENTIFICATION CHART

for EUREKA make Glass Tube Rotameter

Material of Construction	S	M	T	B	CS	C	R
Stainless Steel	S						
Mild Steel	M						
PTFE Lined	T						
Brass	B						
Carbon Steel	CS						
Cast Iron	C						
Rubber Lined	R						
Inlet Outlet Connection Direction			V	R			
Vertical (Inlet bottom, Outlet top)			V	R			
Side conn. / Rear conn. / Inlet bottom, Outlet side			V	R			
Type of connection			F	S	H		
Flange			F	S	H		
Screwed			F	S	H		
Hose			F	S	H		
Tube size					PG-1	TO PG-21	
PG-1 TO PG-21					PG-1	TO PG-21	
Modification in connection							(M)
Standard conn.							(M)
Modified meter conn.							(M)
Accessories							FSPH
Flow Switch (Proximity Single Point)							FSPH
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.)							L
TYPICAL MODEL NO. :	S	R	F	PG-5	M	FSPH	

- REMARKS**
- CONN. DIRECTION CODE R IS NOT AVAILABLE IN CASE OF MATERIAL CODE T & R
  - IP55 / IP65 IS NOT APPLICABLE IN CASE OF CODE FSPH & FSPHL
  - EL TYPE ONLY AVAILABLE FOR PG-4 TO PG-17

## STANDARD RANGES - GLASS TUBE ROTAMETER

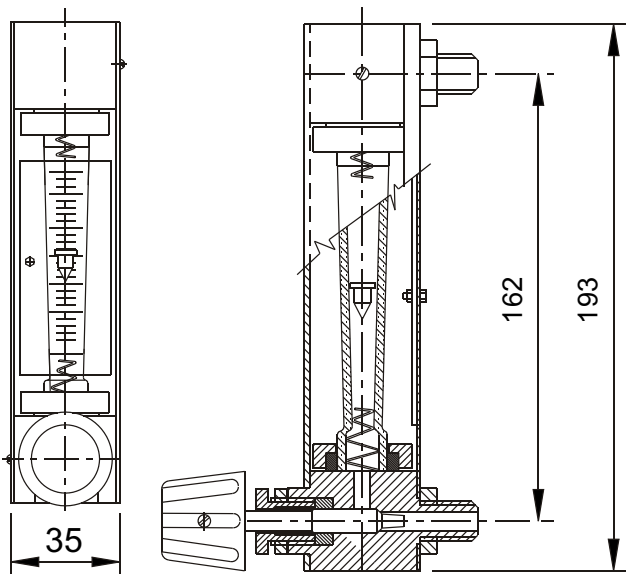
NW	Glass size	Water at Amb. Temp LHP		USGPM		Air at 20°C. 760 Torr nm <sup>3</sup> /hr		SCFM		Pressure rating KG/CM <sup>2</sup> G	Pressure Drop mm WC
		Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum		
15	PG-1	4	40	0.018	0.18	0.14	1.4	0.90	9.00	25	140
	PG-2	6	60	0.026	0.26	0.2	2	0.13	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

### 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.

## Loflo Rotameter

### STD MODEL : MG5 - MG12



### PERFORMANCE

Accuracy	: ± 3% Full flow
Rangeability	: 10:1
Scale length	: 75mm Approx.
Max. Temperature	: Up to 120°C depending upon gland packing material
Max. Pressure	: 100 psig. (High pressure on request)
Connection	: 1/4" BSP (M), other on request
Direction of conn.	: Back to Back (Rear) Bottom to Top (Vertical)
Optional Connections	: Screwed, Hose, Compression fitting

### MATERIALS

Measuring tube	: Borosilicate Glass
Float	: SS 316, Hard Rubber, Aluminium, Glass, PTFE
End fittings	: AISI SS 316
Packing / Gaskets	: Neoprene, Silicon, Viton, PTFE
Cover	: Transparent Acrylic / Polycarbonate
Additional Accessories	: Differential Pressure Regulator. High and Low Flow Alarms

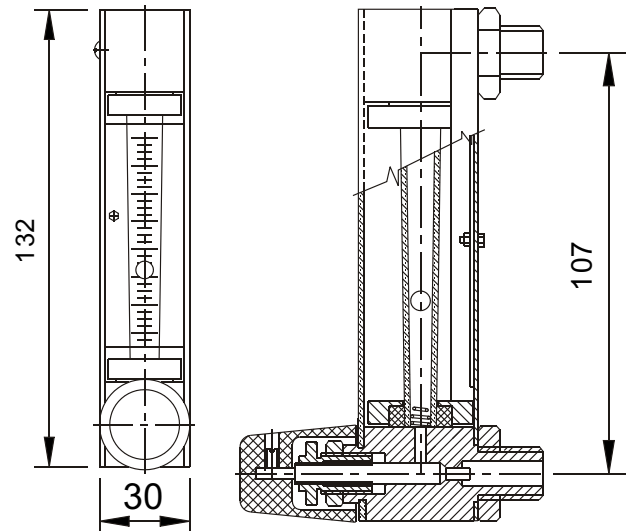
### PERFORMANCE

Accuracy	: ± 5% Full flow
Rangeability	: 10:1
Scale length	: 65mm Approx.
Max. Temp.	: Up to 80°C depending upon gland packing material
Max. Pressure	: 100 psig. (High pressure on request)
Connection	: 1/4" BSP (M) other on request
Direction of conn.	: Back to back (Rear)
Connections	: Threaded, Hose

### MATERIALS

Measuring tube	: Borosilicate Glass
Float	: SS 316, PTFE, Hard Rubber, Aluminium, Glass
End fittings	: AISI SS 316
Packing / Gaskets	: Neoprene, Silicon, Viton, PTFE only for MG1 Z-4Z
Cover	: Transparent Acrylic

### MODEL : MG1 Z-MG8Z



# Loflo Rotameter



## MODEL IDENTIFICATION CHART

for EUREKA make Glass Tube Rotameter

<b>Material Of Construction</b> Stainless Steel Mild Steel Ptfе Lined Brass Carbon Steel	S M T B Cs									
<b>Inlet Outlet Connection Direction</b> Vertical (inlet Bottom, Outlet Top) Side Conn.* / Rear Conn. / Inlet Bottom, Outlet Side*		V R								
<b>Type Of Connection</b> Flange Screwed Hose			F S H							
<b>Tube Size</b> Mg-1 T0 Mg-13								Mg-1 T0 Mg-13		
<b>Modification In Connection</b> Standard Conn. Modified									(M)	
<b>Accessories</b> Flow Switch (proximity) High / Low Only Needle Valve Stainless Steel Frame Miniature Loflowmeter (mg 1z-8z)										Fsp Nv Sf Z
<b>TYPICAL MODEL NO. :</b>	S	R	F	PG-5	M	FSPL				

- REMARKS**
1. Connection direction code R is not available in case of matl code T
  2. Connection direction code R is applicable with AL / MS / SS frame only
  3. Type of connection code F is available with only AL / MS / SS frame material
  4. Type of connection code F is not applicable for MG 1Z-4Z

Model No.	Rate of flow of Water at 20°C with SS 316 Float (LPH)	Rate of flow of Air at ambient Temp., 760 Torr Pressure								
		USGPM	316SS Float (NLPH)	SCFM	PTFE Float (NLPH)	SCFM	Hard Rubber Float (NLPH)	SCFM	Glass Float (NLPH)	SCFM
MG-1Z	.....	.....	1-10	0.001 - 0.01	.....	.....	.....	.....	.....	.....
MG-2Z	.....	.....	.....	.....	.....	.....	.....	2.5 - 25	0.0016 - 0.016	
MG-3Z	.....	.....	.....	.....	.....	.....	.....	3 - 30**	0.0018 - 0.018	
MG-4Z	.....	.....	4 - 40	0.003 - 0.03	.....	.....	.....	.....	.....	
MG-5Z	0.6 - 6	0.003 - 0.03	26 - 260	0.016 - 0.16	9 - 90	0.006 - 0.06	6 - 60	0.0038 - 0.038	13.5 - 135	0.0085 - 0.085
MG-6Z	1.0 - 10	0.004 - 0.04	36 - 360	0.023 - 0.23	16 - 160	0.010 - 0.10	10 - 100	0.006 - 0.06	19 - 190	0.012 - 0.12
MG-7Z	1.6 - 16	0.007 - 0.07	55 - 550	0.035 - 0.35	25 - 250	0.016 - 0.16	19 - 190	0.012 - 0.12	.....	.....
MG-8Z	2.5 - 25	0.01 - 0.10	80 - 800	0.050 - 0.50	40 - 400	0.025 - 0.25	26 - 260	0.016 - 0.16	.....	.....
MG-5	0.6 - 6	0.003 - 0.03	26 - 260	0.016 - 0.16	9 - 90	0.006 - 0.06	6 - 60	0.0038 - 0.038	13.5 - 135	0.0085 - 0.085
MG-6	1.0 - 10	0.004 - 0.04	36 - 360	0.023 - 0.23	16 - 160	0.010 - 0.10	10 - 100	0.006 - 0.06	19 - 190	0.012 - 0.12
MG-7	1.6 - 16	0.007 - 0.07	55 - 550	0.035 - 0.35	25 - 250	0.016 - 0.16	19 - 190	0.012 - 0.12	.....	.....
MG-8	2.5 - 25	0.01 - 0.10	80 - 800	0.050 - 0.50	40 - 400	0.025 - 0.25	26 - 260	0.016 - 0.16	.....	.....
MG-9	4 - 40	0.018 - 0.18	110 - 1100	0.070 - 0.70	65 - 650	0.041 - 0.41	50 - 500*	0.032 - 0.32	.....	.....
MG-10	6 - 60	0.026 - 0.26	185 - 1850	0.115 - 1.15	100 - 1000	0.063 - 0.63	80 - 800*	0.050 - 0.50	.....	.....
MG-11	10 - 100	0.044 - 0.44	300 - 3000	0.190 - 1.90	170 - 1700	0.107 - 1.07	130 - 1300*	0.082 - 0.82	.....	.....
MG-12	16 - 160	0.07 - 0.70	500 - 5000	0.310 - 3.10	360 - 3600	0.225 - 2.25	185 - 1850*	0.115 - 1.15	.....	.....

\*\* Ranges with Sapphire Float

\* Ranges with Hollow Aluminum Float

## Product Range Includes

- Variable Area Glass & Metal Tube Rotameters
- Rotameter Transmitters
- Bypass Rotameters
- Loflo Meters
- EUMAG Electromagnetic Flow Meters
- Eureka Flow Transmitter
- Orifice Assemblies
- Bronkhorst Hightech B. V., The Netherlands make Thermal Mass Flow Meters/Controllers and other products
- Katronic Technologies Ltd., UK make Ultrasonic Flow Meters
- In-line Density Meters
- Pressure & Temperature Gauges
- Sight Flow Indicators
- Instrument Manifolds
- Flow Switches
- Wheel Flow Meters Transmitters
- Valves