

General Trouble Shooting

- The flows indicated on the rubbers are for internal use only. The marking does not always reflect the correct flow of the valve. Several orifices are used on different flows and valve sizes.
- Each size has a specific flow range. They can be installed in parallel if you require higher flows. For example: If a 3" 140 gpm flow is needed, then you can install (2) 70 gpm valves in parallel to achieve the 140 gpm required or upgrade to our Model C901 pilot operated flow control valve.
- Flow curves are unavailable or needed – the flow ranges are ±15% of the valves specified flow.
- Each batch of orifices are certified to be working within the ±15% range.



PROBLEM	POSSIBLE CAUSE OR CAUSES
1. The valve is not regulating properly.	A. Valve is installed backwards. B. Not enough flow. C. Too low or too high of pressure. D. Flow is not laminar.
SOLUTION:	
A. Make sure the valve is installed with the arrow pointing in the direction of flow. B. Increase flow gpm in the system; inlet gpm must be higher than the required flow. C. Make sure the pressure is set between 15 psi and 125 psi. D. Make sure there is no pump, elbows, tees, other valves, or obstructions within 5 diameter lengths upstream (before) the valve. For example: No obstructions 5" before a 1" valve or 10" before a 2" valve.	
PROBLEM	POSSIBLE CAUSE OR CAUSES
2. Not sure what the actual flow is.	A. No flow meter to verify the actual flow.
SOLUTION:	
A. Time how long it takes to fill a 5-gallon bucket. Divide 5 by the number of seconds. Then multiply by 60 which provides the flow in gpm's. For example: If it takes 120 seconds to fill the bucket you will calculated $5/120 = .041 \times 60 = 2.5$ gpm	
PROBLEM	POSSIBLE CAUSE OR CAUSES
3. The flow is too low or too high.	A. Something else besides water is flowing through the valve.
SOLUTION:	
A. Valves are designed for water only. If you are running a different media you may have to try several orifice sizes to achieve the desired flow. B. Make sure you factor in ±15% for tolerance – see chart on page 2	
PROBLEM	POSSIBLE CAUSE OR CAUSES
4. Valve appears to be noisy, hums, whistles, or chatters.	A. Not having laminar flow. B. Trying to reduce the flow more than a 4 to 1 ratio.
SOLUTION:	
A. Make sure there is at least 5 diameters of straight pipe upstream (before). B. Install valves in series to step down the flow to avoid cavitation. For example: The valve cannot reduce from 100 gpm to 20 gpm. You need to reduce to 60 gpm first then to 20 gpm.	

Limited One Year Warranty: Flomatic® valves are guaranteed against defects of material or workmanship when used for the services recommended. If, in any recommended service a defect develops due to material or workmanship, and the device is returned, freight prepaid, to Flomatic's® Corporation within 12 months from date of purchase, it will be repaired or replaced free of charge. Flomatic® Corporations' liability shall be limited to our agreement to repair or replacement of valve only.

Flo-Trol® Test Ranges

GPM	+/- 15%	-15%	+15%
0.060	0.009	0.051	0.069
0.13	0.020	0.111	0.150
0.19	0.029	0.162	0.219
0.25	0.038	0.213	0.288
0.35	0.053	0.298	0.403
0.05	0.008	0.043	0.058
0.75	0.113	0.638	0.863
1.0	0.150	0.850	1.150
1.5	0.225	1.275	1.725
2.0	0.300	1.700	2.300
2.5	0.375	2.125	2.875
3.0	0.450	2.550	3.450
3.5	0.525	2.975	4.025
4.0	0.600	3.400	4.600
4.5	0.675	3.825	5.175
5	0.75	4.25	5.75
6	0.90	5.10	6.90
7	1.05	5.95	8.05
8	1.20	6.80	9.20
9	1.35	7.65	10.35
10	1.50	8.50	11.50
12	1.80	10.20	13.80
15	2.25	12.75	17.25
17	2.55	14.45	19.55
20	3.00	17.00	23.00
25	3.75	21.25	28.75
30	4.50	25.50	34.50
35	5.25	29.75	40.25
40	6.00	34.00	46.00
45	6.75	38.25	51.75
50	7.50	42.50	57.50
55	8.25	46.75	63.25
60	9.00	51.00	69.00
65	9.75	55.25	74.75
70	10.50	59.50	80.50
75	11.25	63.75	86.25
80	12.00	68.00	92.00
85	12.75	72.25	97.75
90	13.50	76.50	103.50
95	14.25	80.75	109.25
100	15.00	85.00	115.00
105	15.75	89.25	120.75
110	16.50	93.50	126.50
115	17.25	97.75	132.25
120	18.00	102.00	138.00