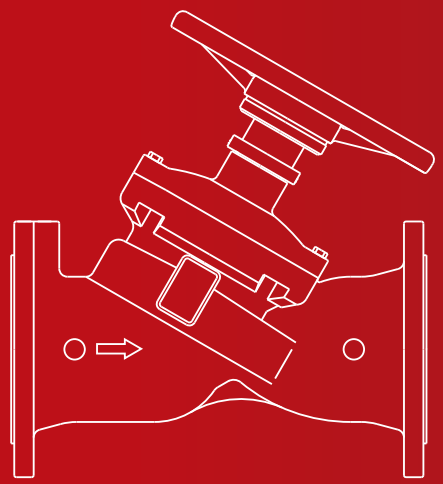
INSTALLATION, OPERATION, & MAINTENANCE GUIDE

MECHANICAL BALANCING VALVES

Manual Balancing, Multi-Turn Globe, Y-Pattern, Variable Orifice, Flanged Connection



MODEL

TG - FLANGED

IMPORTANT

For safe and proper operation, please read the enclosed installation, operation, and maintenance instructions prior to using any Jomar Valve product. Save this document for reference.

Only qualified personnel should undertake the procedures outlined in this document. Jomar Valve, its agents, representatives, and employees assume no liability for the use of these procedures. These procedures are offered as suggestions only.

Note that failure to follow the enclosed instructions may damage the product and/or void any applicable warranties.

I P: 586.268.1220 I F: 586.979.8615 I JOMARVALVE.COM

Mechanical Balancing Valve

Terminator G | Manual Balancing, Multi-Turn Globe, Y-Pattern, Variable Orifice, Flanged Connection, Memory Stop, PT Ports, 230 WOG

Model: TG - Flanged

IMPORTANT

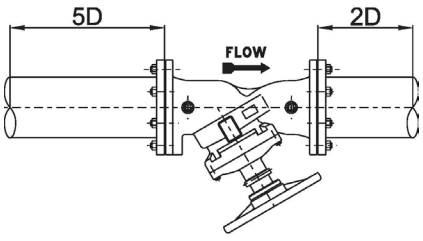
Read the Connection Guidelines prior to installing these components. Failure to follow these instructions may damage the component and/or void the warranty.

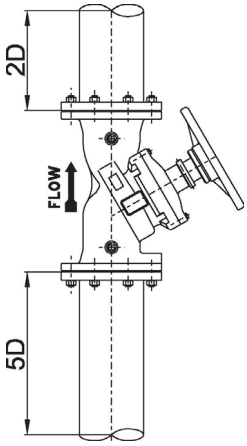
CAUTION

This valve must not be lifted by holding the handwheel.

INSTALLATION

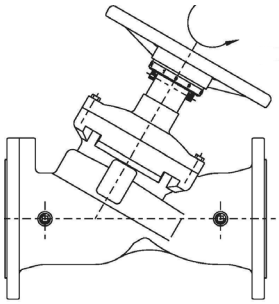
1. The Terminator G is a unidirectional balancing valve. The arrow on the valve body must be in the direction of flow.
2. For horizontal installations, the valve should be installed with the readout port on or above the horizontal centerline. DO NOT install valve with the readout port facing down. Debris from the line can clog the port during the readout process, which can result in leaks.
3. Five straight pipe diameters are required upstream, and 2 straight pipe diameters are required downstream of the Terminator G to ensure specified accuracy. If the Terminator G is located on the outlet of a pump, there must be a minimum of 10 pipe diameter between the pump outlet and the valve inlet.

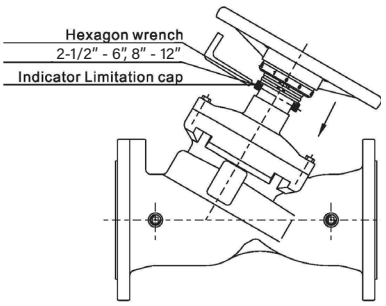




TO BALANCE

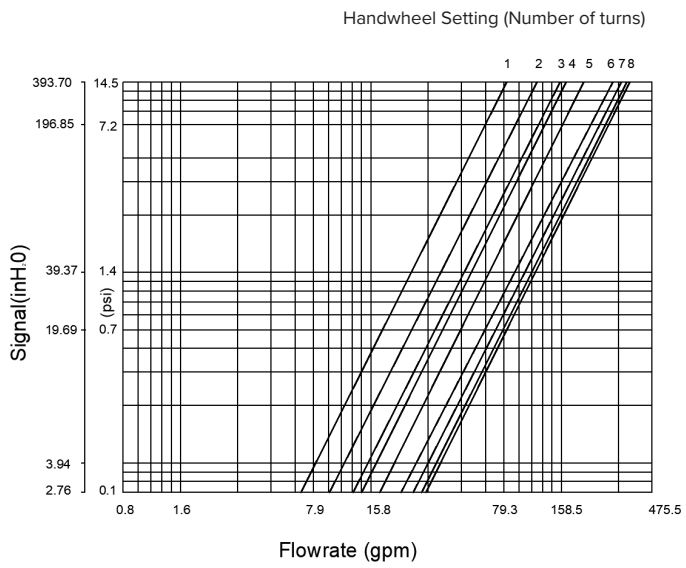
1. Take a reading using a differential pressure gauge calibrated in inches of water. Connect the “high” side line to the upstream port, and the “low” side line to the downstream port.
2. The desired differential pressure can be found by referencing the location tag attached to the valve or by referring to the Terminator G pressure drop charts which are a part of the spec sheet.
3. Throttle the valve until the desired differential pressure is indicated on the gauge. Using a hex wrench, loosing the set screws on the limitation cap. Slide the cap up until it sits snug against the plastic indicator. Tighten the set screws.
4. Record the handwheel setting on balancing location tag attached to the valve. This will allow the valve to be properly reset in the even the memory stop setting is lost.





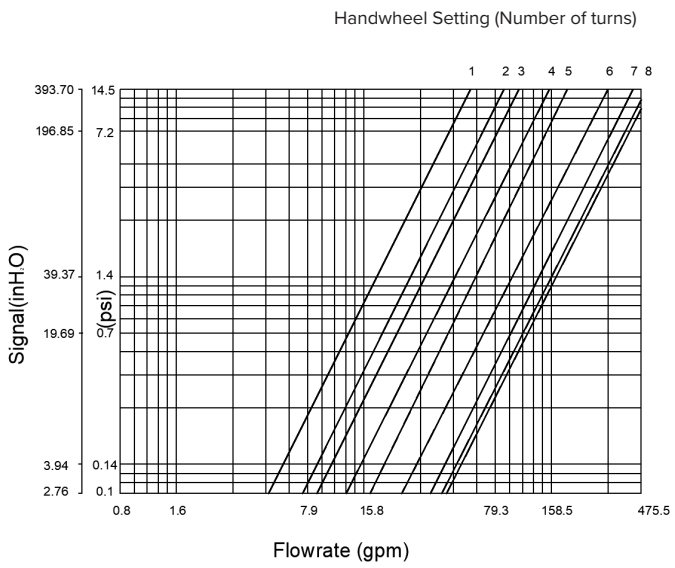
Pressure Drop Charts

Size 2-1/2”



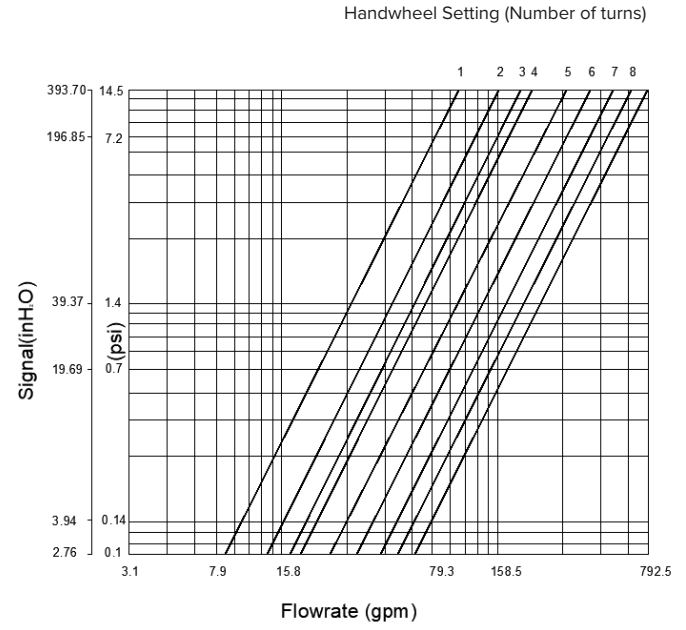
Handwheel Position	1	2	3	4	5	6	7	8	All Open
C_v Value	21.5	30.9	40.9	44.7	57.1	75.7	86.2	92.7	96.9

Size 3”



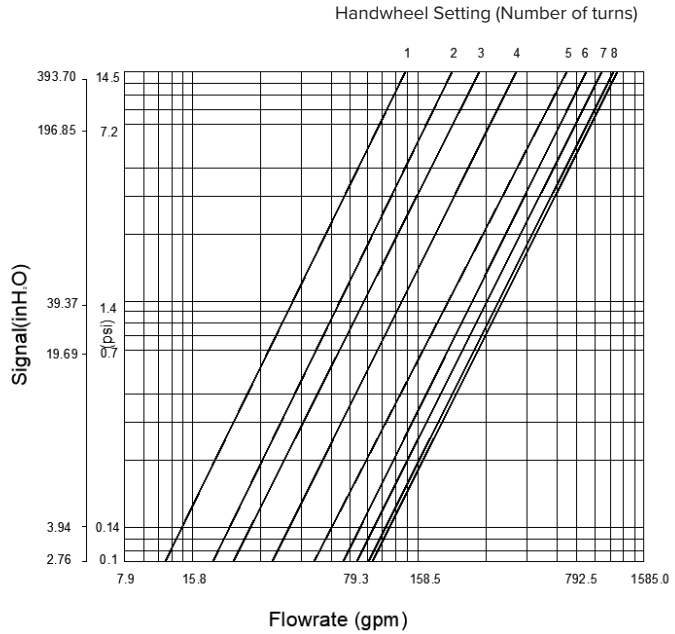
Handwheel Position	1	2	3	4	5	6	7	8	All Open
C_v Value	15.4	23.1	27.9	40.3	53.0	82.8	114.2	131.4	138.1

Size 4”



Handwheel Position	1	2	3	4	5	6	7	8	All Open
C_v Value	27.3	42.3	56.1	63.8	86.9	113.2	143.2	172.7	206.6

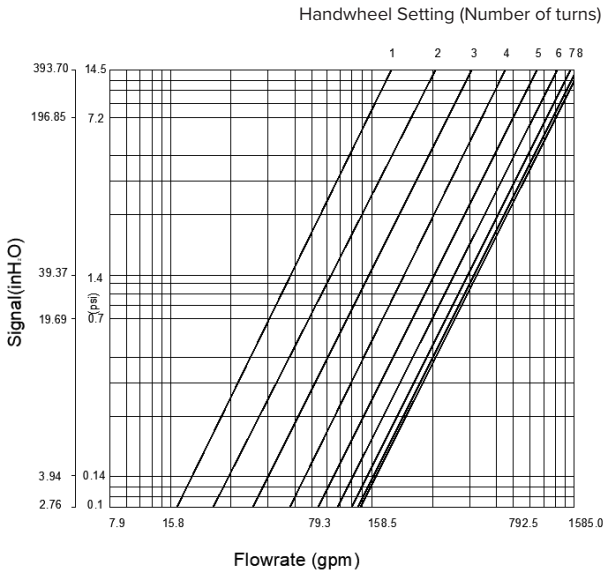
Size 5”



Handwheel Position	1	2	3	4	5	6	7	8	All Open
C_v Value	37.2	64.3	79.5	113.3	168.4	230.2	267.8	301.1	315.2

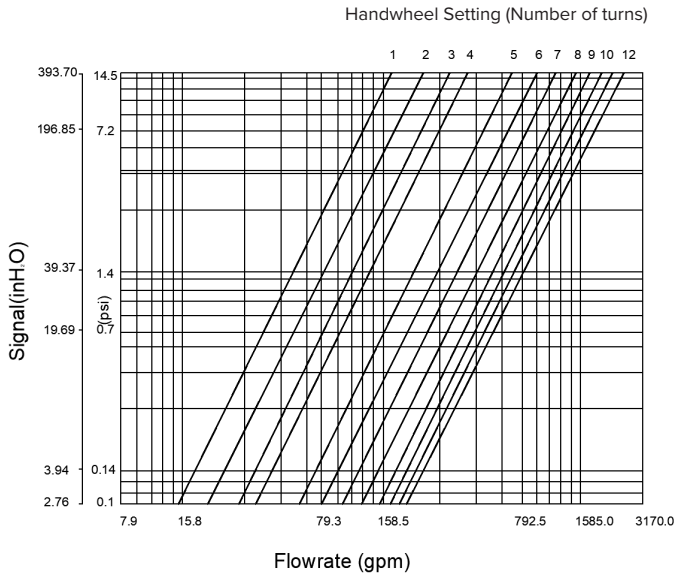
Pressure Drop Charts

Size 6”



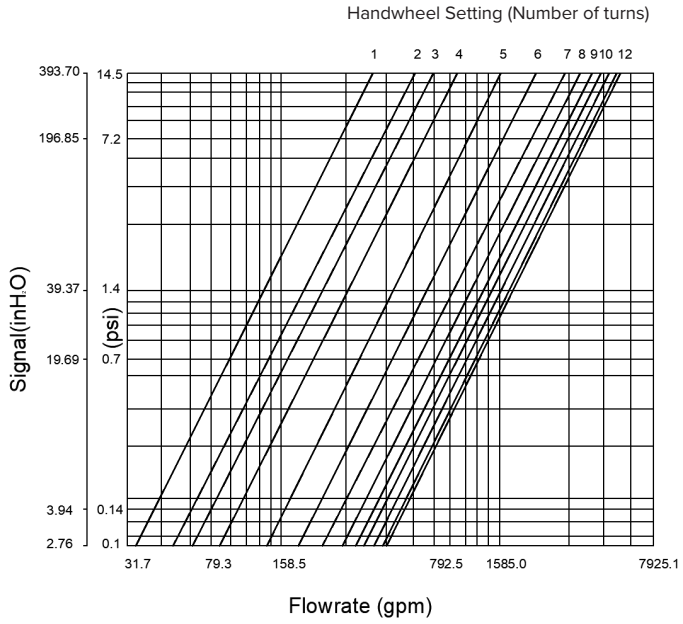
Handwheel Position	1	2	3	4	5	6	7	8	All Open
C_v Value	55	87	127	187	269	340	400	429	439

Size 8”



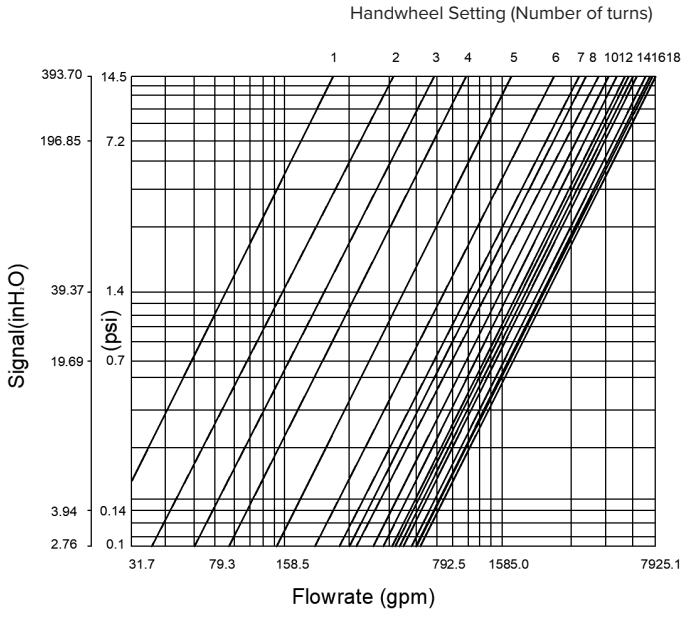
Handwheel Position	1	2	3	4	5	6	7	8	9	10	11	12 (All Open)
C_v Value	47	71	94	114	186	249	313	392	476	557	631	703

Size 10”



Handwheel Position	1	2	3	4	5	6	7	8	9	10	11	12	All Open
C_v Value	112	169	205	268	425	628	803	962	1110	1208	1331	1444	1494

Size 12”



Handwheel Position	1	2	3	4	5	6	7	8	9	10
C_v Value	73	131	201	283	459	726	916	1009	1158	1285

Handwheel Position	11	12	13	14	15	16	17	18	All Open
C_v Value	1414	1539	1599	1669	1740	1895	1973	2000	2070

GENERAL INFORMATION

For proper operation, make sure that the system in which the valve is installed is free of debris, and that the water is devoid of entrained air. Air and debris will cause the balancing valves supplied by **Jomar Valve** to function improperly. A strainer with a minimum 20 mesh screen is recommended upstream of all balancing valves to prevent clogging. High point and in line air vents are also recommended to ensure all entrained air is removed.

On chilled water systems, the test ports may seep after a reading is taken. Re-install the port cap and wait approximately one minute. Check the port. If seepage is still present, re-insert probe and remove slowly to allow port to seal.

Performance Guarantee

Jomar Valve guarantees to the original purchaser that the equipment of its manufacture will perform at the rated capacity as stated only when (1) properly installed, connected, started, operated and maintained in accordance with Company instruction(s) and/or information guide(s), as revised from time to time, (2) used for the applications specified and (3) used in the environments as specified or as limited. If equipment is part of a greater system, the Company accepts responsibility only for the equipment manufactured by it.

WATER TREATMENT

Introduction of chemical cleaners, stabilizers and solvents into the systems may cause damage to the seats, seals liners and gaskets or cause stress corrosion cracks in the product. Consult a water treatment specialist whenever introducing chemicals. It is important that you analyze all aspects of your systems components and the systems application with any introductions of chemicals into a system. It is solely the responsibility of the purchaser, contractor or engineer to review the material specification sheets for compatibility of these products. The documentation for the products described herein are subject to change at any time without notice. To obtain a copy of the current product specification sheets, **please visit www.jomarvalve.com or contact us at 586.268.1220 or csr@jomar.com**.

CONNECTION GUIDELINES

Flanged Ends

When installing flanged joints, ensure that the flanges are properly aligned prior to installation. Be sure to evaluate that no side loading is occurring. When tightening flanges, do so in a star type pattern to properly level out the joint. All bolting materials and torques must meet applicable codes. Appropriate gasketing material must be used when installing flange-mounted valves.

Factory Assembled Threaded Connections

All threaded bosses found on our components will contain either a PT port, accessory, accessory extension, or plug. All of the connections are made using Teflon tape or Loctite, and are factory tested up to 120 PSI to ensure a leak free joint. The removal or modification of any of these connections voids the warranty of the joint, as well as the warranty of the component. Contact us prior to modifying any factory assembled connections.