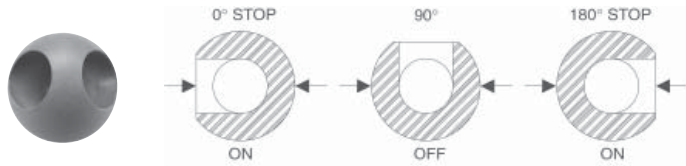


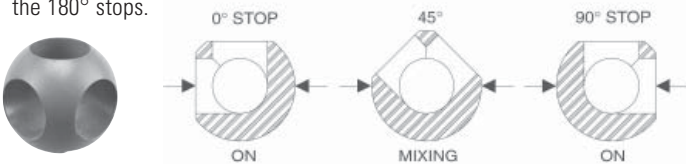
PVC and CPVC 3-Way Ball Valves True Union Model A 3-Position (Multiport) and 2-Position (Diverter)

150 psi at 73°F water—non-shock—full port*



The Chemtrol® True Union Multiport Valve is a 3-Way/3-Position Ball Valve

It is ideally suited for applications where flow direction and on-off control are needed. When the handle is rotated 180°, the three (3) positions of on, off, and on may direct flow from the branch center-inlet to one side run-outlet (at the 0° stop position), then to shut-off (at the 90° position), and then to the opposite side run-outlet (at the 180° stop position). The multiport may also be used to alternately direct flow from either of the side run-inlet ports to the branch center-outlet port, with shut-off at the mid-position (when handle is perpendicular to the body). Cross-contamination of the two inlet streams is prevented at all intermediate positions between the 180° stops.



The Chemtrol® True Union Diverter Valve is a 3-Way/2-Position Ball Valve

It is used for applications where a quarter-turn will achieve diversion of flow, but shut-off control is not required. When the handle is rotated 90°, the two positions of on and on may direct flow from the branch center-inlet to one side run-outlet (at the 0° stop position), and then to the opposite side run-outlet (at the 90° stop position). The diverter may also be used to alternately divert flow from either of the side run-inlet ports to the branch center-inlet port. The internal porting of the diverter makes no provision for shut-off. Therefore, the valve can be used for proportional mixing at all intermediate positions between the 90° stops.

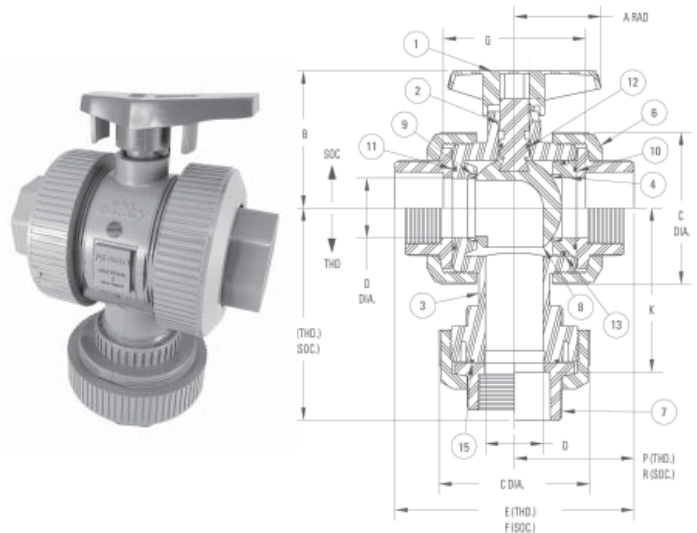
Features

- The laying length of the body and the heavy-duty modified-acme threads in the union connections to the body have not changed in the 40-year history of the valve. Thus, the True Union design permits the replacement of a fouled valve with a new body cartridge, which will fit the old union nuts that are likely to be permanently attached to adjacent piping. No disruption or length change of connected piping is required.

- ◀ **FLOW** ▶ externally molded onto the body to indicate the fixed end containing a PTFE seat. Flow can be blocked at this port while adjacent piping is disconnected for repair or alteration.
- ▶ **ADJ** ▶ externally molded onto the body to indicate the open end used for assembly. Adjustment of this union nut can compensate for wear of PTFE seats, with no production loss to remove valve for internal adjustment.
- Valves are manufactured and assembled without exposure to silicone compounds.
- Full port design produces minimum flow restriction with the lowest possible pressure drop for 90° porting.

Notes

See page 2 for a list of *Components and Construction Materials*. For more insight into the selection of materials, refer to *Materials*, page 1. *Actuation Mounting Data* and a complete listing of *Optional Accessories* for ball valves begins on page 20. *Installation and Maintenance Instructions* for these valves appear on page 9. For specific relationships of pressure vs. temperature ratings, refer to *Engineering Data*, page 29. For *Chemtrol Valve Standards*, see page 30.



Chemtrol Figure Numbers

Valve Style	Elastomeric Trim	PVC Soc.	Thd.	CPVC Soc.	Thd.
1/2" – 2" Multiport (3-Way/3-Position)	FKM EPDM	S45M3-V S45M3-E	T45M3-V T45M3-E	S51M3-V S51M3-E	T51M3-V T51M3-E
1/2" – 2" Diverter (3-Way/2-Position)	FKM EPDM	S45D2-V S45D2-E	T45D2-V T45D2-E	S51D2-V S51D2-E	T51D2-V T51D2-E

Dimensions—Weights—Flow Coefficients

Valve Size	Soc. & Thd Figures				Socket Figures				Threaded Figures				Fluid Flow Coefficient
	A ¹	B	C	D	F	G	J	K	R	E	H	P	
1/2	1.70	1.94	2.00	0.50	4.19	2.41	3.56	2.69	2.13	4.00	3.50	2.06	8
3/4	2.12	2.50	2.44	0.75	5.00	2.97	4.19	3.19	2.50	4.63	4.00	2.31	19
1	2.12	2.69	2.86	1.00	5.50	3.22	4.63	3.50	2.75	5.18	4.44	2.63	36
1 1/4	2.56	3.74	4.08	1.25	6.47	3.94	5.88	4.63	3.25	6.10	5.63	3.06	55
1 1/2	2.56	3.74	4.08	1.25	6.76	3.98	6.00	4.63	3.38	6.15	5.63	3.06	55
2	2.92	4.25	5.25	2.00	8.01	4.98	7.08	5.63	3.96	7.35	6.81	3.62	149

1 Handle is not symmetrical about stem centerline. Dimension shown represents the longest operational radius.

2 Weights shown for socket figures are CPVC models. Weights for threaded figures are PVC models.

3 C_v values were computed using equivalent cylinder length for 90° turn with full bore.

* 1 1/2" valve has conventional port on center outlet.