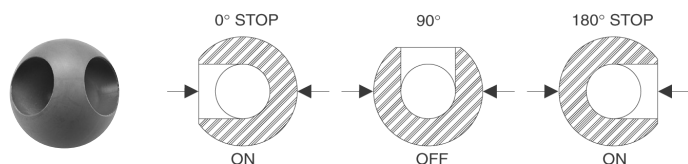
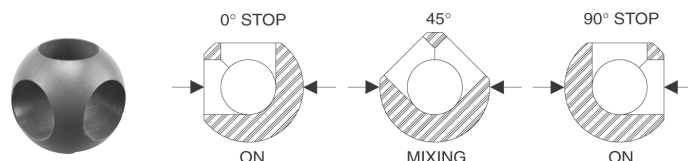


PVC and CPVC 3-Way Ball Valves, True Union 3-Position (Multiport) and 2-Position (Diverter)



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 controls 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 by all intermediate positions between the 180° stops.



The Chemtrol True Union Diverter Valve is a 3-Way/3 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 the opposite side run-outlet (at the 90° stop position). The diverter may also be used to alternately divert flow 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

- Rated at 150 psi with non-shock water service at 73°F
- **FLOW** externally molded onto the body to indicate the fixed end containing a PTFE seat.
- **ADJ** externally molded onto the body to indicate the seat carrier end of the valve. 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.



Maximum Operating Pressure (psi) vs. Temperature

"Operating Temperature (F)"	PVC	CPVC
100	150	150
110	135	140
120	110	130
130	75	120
140	50	110
150	N.R.	100
160	N.R.	90
170	N.R.	80
180	N.R.	70
190	N.R.	60
200	N.R.	50
250	N.R.	N.R.
280	N.R.	N.R.

N.R. - Not recommended

Chemtrol Figure Numbers

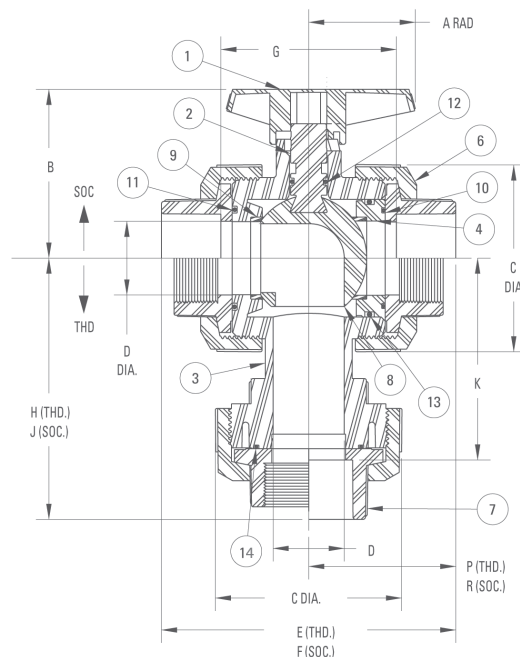
Valve Style	Elastomeric Trim	PVC Soc.	Thd.	CPVC Soc.	Thd.
1/2" – 2" Multiport (3-Way/3-Position)	FKM EPDM	S45M3-V S45M3-E	T45M3-V T45M3-E	S51M3-V S51M3-E	T51M3-V T51M3-E
1/2" – 2" Diverter (3-Way/3-Position)	FKM EPDM	S45D2-V S45D2-E	T45D2-V T45D2-E	S51D2-V S51D2-E	T51D2-V T51D2-E

Construction Materials		
Components ¹	PVC	CPVC
1. Handle		
2. Stem	PVC	CPVC
3. Body	PVC	CPVC
4. Seat-Carrier	PVC	CPVC
6. Union Nut	PVC	CPVC
7. End Connector	PVC	CPVC
8. Ball	PVC	CPVC
9. Seat ² ; (2 ea.)	PTFE	
10. O-Ring ³ – Seat-Carrier; End Seal	FKM or EPDM	
11. O-Ring ³ – Body; End Seal		
12. O-Ring ³ – Stem; OD Seal		
13. O-Ring ³ – Seat-Carrier; OD Seal		
14. O-Ring ³ – Branch Union; End Seal	FKM or EPDM	

¹ All components except valve bodies are available as replacement parts.

² Each replacement PTFE seat kit contains two seats.

³ Each replacement O-ring kit contains all the O-rings required to refurbish a particular size True Union Ball or Check Valve (regardless of model or style), or a minimum of two pipe unions.



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	Approx. ² Wt. Lbs.	E	H	P	Approx. ² Wt. Lbs	
1/2	2.07	1.94	2.00	0.50	4.19	2.41	3.56	2.69	2.13	0.64	4.00	3.50	2.06	0.60	8
3/4	2.74	2.50	2.44	0.75	5.00	2.97	4.19	3.19	2.50	1.15	4.63	4.00	2.31	1.05	19
1	2.74	2.69	2.86	1.00	5.50	3.22	4.63	3.50	2.75	1.59	5.18	4.44	2.63	1.50	36
1 1/4	2.62	3.74	4.08	1.25	6.47	3.94	5.88	4.63	3.25	3.43	6.10	5.63	3.06	3.24	55
1 1/2	2.62	3.74	4.08	1.25	6.76	3.98	6.00	4.63	3.38	3.62	6.15	5.63	3.06	3.37	55
2	3.12	4.25	5.25	2.00	8.01	4.98	7.08	5.63	3.96	7.02	7.35	6.81	3.62	6.25	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.