

PVC and CPVC Tru-Bloc® True Union Ball Valve, Model D

Construction Materials

Components ¹	PVC	CPVC
1. Handle	Orange PVC	
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 – Seat-Carrier; Seat Energizer		
15. Plain-End Nipple; 2 ea. Spg x Spg	PVC	CPVC
16. Flange – 2 ea. Socket-End	PVC	CPVC
17. Stem; Friction Washer (4" & 6" Only)	PTFE	
18. Handle Bolt (4" & 6" Only)	PVC	

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.

Chemtrol Figure Number

Valve Style	Elasto-meric Trim	PVC			CPVC		
		Soc.	Thd.	Flgd.	Soc.	Thd.	Flgd.
TU/TB	FKM	U45TB-V*	U45TB-V*	F45TB-V	U51TB-V*	U51TB-V*	F51TB-V
	EPDM	U45TB-E*	U45TB-E*	F45TB-E	U51TB-E*	U51TB-E*	F51TB-E

* As original equipment, 1/2" - 2" True Union Tru-Bloc valve models are supplied with universal connectors (i.e., a set of both socket and thread end connectors).

Dimensions—Weights—Flow Coefficients

Valve Size	TU Figures Profile					TU Figures End-to-End					PVC Approx. ² Wt. Lbs.	CPVC Approx. ² Wt. Lbs.	Fluid Flow Coefficient C _v ³ TU
	A ¹	B	C	D	K Flgd.	E Soc.	F Thd.	G Soc.	H Thd.	J Flgd.			
1/2	2.07	2.16	1.82	.50	3.50	4.20	4.10	2.42	2.44	6.30	0.350	0.370	6.4
3/4	2.74	2.90	2.36	.75	3.88	5.02	4.62	3.02	3.05	7.34	0.690	0.730	38.7
1	2.74	3.07	2.73	1.00	4.26	5.47	5.32	3.22	3.40	8.17	0.960	1.000	58.2
1 1/4	2.62	3.91	4.07	1.25	4.62	6.53	6.07	4.01	4.06	9.41	2.155	2.255	61.7
1 1/2	2.62	3.91	4.07	1.50	5.00	6.89	6.23	4.10	4.18	10.05	2.190	2.315	117.4
2	3.12	4.71	5.23	2.00	6.00	8.04	7.39	5.01	5.19	11.44	4.410	4.670	178.4

1 Handle is not symmetrical about centerline. Dimensions shown represent the longest operational radius. The handle position is correctly shown for the 1/2" - 3" True Union valve style.

2 Weight for 1/2" - 2" TU figures includes both sets of end connectors.

3 C_v values computed for basic valve laying lengths (G).

Features

- Rated at 250 psi with non-shock water service at 73°F
- Corzan® HP CPVC rated at 130 psi at 180°F, see chart in Reference Data section for maximum service temperature.
- Retains laying length of previous models, full interchangeable cartridge, nuts and end connectors
- Designed, with an energizer O-ring beneath the PTFE seat, Model D and C valves automatically adjust for seat wear.
- Full-port design produces minimum flow restriction with the lowest possible pressure-drop
- Improved union nut grip style and flats on end connectors
- Universal product includes socket and threaded end connections
- Ergonomic handle with built-in carrier wrench
- Valves are manufactured and assembled without exposure to silicone compounds. Silicone-free lubricant is used to assemble all ball valves.

