

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

Construction Materials		
Components¹	PVC	CPVC
1. Handle	Orange PVC	
2. Stem	PVC	CPVC
3. Body	PVC	CPVC
4. Seat-Carrier	PVC	CPVC
5. Union Nut	PVC	CPVC
6. End Connector	PVC	CPVC
7. Ball	PVC	CPVC
8. Seat ² ; (2 ea.)	PTFE	
9. O-Ring ³ – Seat-Carrier; End Seal	FKM or EPDM	
10. O-Ring ³ – Body; End Seal		
11. O-Ring ³ – Stem; OD Seal		
12. O-Ring ³ – Seat-Carrier; OD Seal		
13. O-Ring ³ – Seat-Carrier; Seat Energizer		
14. Flange – 2 ea. Socket-End	PVC	CPVC
15. Plain-End Nipple; 2 ea. Spg x Spg	PVC	CPVC

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	A ¹	B	C	D	K Flgd.	E Soc.	F Thd.	G Soc.	H Thd.	J Flgd.	PVC Approx. ² Wt. Lbs.	CPVC Approx. ² Wt. Lbs.	Fluid Flow Coefficient	
													Valve Size	C _v ³ TU
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	1/2	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	3/4	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	1	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	1 1/4	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	1 1/2	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	2	178.4

Maximum Non-Shock Pressure Ratings (psi) vs. Temperatures

"Operating Temperature(F)"	PVC	CPVC
73	250	250
80	250	250
90	240	250
100	180	250
110	140	225
120	115	180
130	80	160
140	60	140
150	NR	115
160	NR	95
170	NR	80
180	NR	70
190	NR	60
200	NR	50
210	NR	NR

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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.

