## PVC and CPVC Tru-Bloc<sup>®</sup> True Union Ball Valve, Model D

Construction Materials						
Components <sup>1</sup>	PVC	CPVC				
1. Handle	Orange PV	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 <sup>2</sup> ; (2 ea.)	PTFE	PTFE				
9. O-Ring <sup>3</sup> – Seat-Carrier; End Seal						
10. O-Ring <sup>3</sup> – Body; End Seal						
11. O-Ring <sup>3</sup> – Stem; OD Seal	FKM or EP	FKM or EPDM				
12. O-Ring <sup>3</sup> – Seat-Carrier; OD Seal						
13. O-Ring <sup>3</sup> – 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.

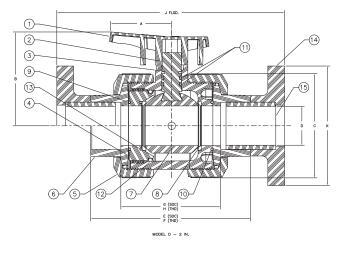
2 Each replacement PTFE seat kit contains two seats.

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	Elasto- meric		PVC		CPVC					
ç	Style	Trim	Soc.	Thd.	Flgd.	Soc.	Thd.	Flgd.		
1	U/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		

## **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.



\* 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								d Flow						
Valve	A1	R	С	D	К	F	F	G	Н	.1	PVC Approx. <sup>2</sup>	CPVC Approx. <sup>2</sup>	Coe	ficient
Size		D	0	D	Flgd.	Soc.	Thd.	Soc.	Thd.	Flgd.	Wt. Lbs.	Wt. Lbs.	Valve Si	ze C <sub>V</sub> <sup>3</sup> 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. Temperaturets						
"Operating						
Temperature(F)"	PVC	CPVC				

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

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 Cv values computed for basic valve laying lengths (G).

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