

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 | | | | | | | | | | | Fluid Flow Coefficient | | | |
|--------------------------------------|----------------|------|------|------|------------|-----------|-----------|-----------|-----------|------------|--------------------------------------|---------------------------------------|------------|--------------------------------|
| 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. | Valve Size | C _v ³ TU |
| | | | | | | | | | | | | | | |
| 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 |

Corzan® is a registered trademark of The Lubrizol Corporation.

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.

