# SIMTECH Guide Specification VB Series: True Union Ball Valve - PVC

#### 1.0 VB Series – True Union Ball Valve

# 1.1 Design

SIMTECH VB series PVC true union ball valves 1/2" through 4" shall be either solvent cement socket or NPT threaded pipe connections. VB series ball valves shall have blow-out proof stems designed with a break point in the event of excessive torque. SIMTECH VB series PVC true union ball valves will hold down stream pressure when the necessity of disassembling the downstream end connector arises. The PVC ball shall be machined and tumbled after injection molding to insure smooth operation and extended seat life. The T-type handle is designed as a key for removal of the threaded seat carrier. Socket end connection dimen¬sions shall conform to ASTM D-2467. Threaded pipe connections shall be in accordance with ASTM D-2464 which references ANSI B 1.20.1 for tapered pipe threads. Optional flanged version shall be in accordance with ANSI B16.5, class 150 flanges

## 1.2 Seats

Seats shall be PTFE (Teflon®) with elastomer backing rings creating self-adjusting seals and constant operat¬ing torque and sealing characteristics.

#### 1.3 Seals

O-rings and seals shall be EPDM, FPM\*or Kal-Rez.

## 2.0 Material

## 2.1 Material of Construction

PVC compound used in the manufacturing of the SIMTECH VB series true union ball valves shall be Type I, Grade 1 PVC 1120 (cell classification 12454-B) as identified in ASTM D 1784. The compound shall contain the amounts of pigment, stabilizers and other additives as outlined by NSF for the conveyance of potable water.

## 3.0 Testing

# 3.1 Pressure Testing

All valves are pressure tested in both the open and closed position by the manufacturer.

## 3.2 Pressure Rating

SIMTECH VB Series PVC true union ball valves  $\frac{1}{2}$ " - 2" shall be pressure rated at 232 psi/16 bar, 2  $\frac{1}{2}$ " - 4" shall be pressure rated at 150 psi/10 bar at  $68^{\circ}F/20^{\circ}C$ 

# 3.0 Manufacturer

SIMTECH

Phone: 877-777-2467 www.SimtechUSA.com

# SIMTECH Guide Specification VB Series: True Union Ball Valve – CPVC(CORZAN®)

#### 1.0 VB Series – True Union Ball Valve

# 1.1 Design

SIMTECH VB series CPVC (CORZAN®) true union ball valves 1/2" through 4" shall be either solvent cement socket or NPT threaded pipe connections. VB series ball valves shall have blow-out proof stems designed with a break point in the event of excessive torque. SIMTECH VB series CPVC (CORZAN®) true union ball valves will hold down stream pressure when the necessity of disassembling the downstream end connector arises. The CPVC (CORZAN®) ball shall be machined and tumbled after injection molding to insure smooth operation and extended seat life. The T-type handle is designed as a key for removal of the threaded seat carrier. Socket end connection dimen¬sions shall conform to ASTM D-2467. Threaded pipe connections shall be in accordance with ASTM D-2464 which references ANSI B 1.20.1 (was B2.1) for tapered pipe threads. Optional flanged version shall be in accordance with ANSI B16.5, class 150 flanges

## 1.2 Seats

Seats shall be PTFE (Teflon®) with elastomer backing rings creating self-adjusting seals and constant operat¬ing torque and sealing characteristics.

#### 1.3 Seals

O-rings and seals shall be EPDM, FPM\*or Kal-Rez

## 2.0 Material

## 2.1 Material of Construction

CPVC (CORZAN®) compound used in the manufacturing of the SIMTECH VB series true union ball valves shall be Type IV, Grade 1 CPVC 4120 (cell classification 23447) as identified in ASTM D 1784. The compound shall contain the amounts of pigment, stabilizers and other additives as outlined by NSF for the conveyance of potable water.

### 3.0 Testing

# 3.1 Pressure Testing

All valves are pressure tested in both the open and closed position by the manufacturer.

## 3.2 Pressure Rating

SIMTECH VB Series CPVC (CORZAN®) true union ball valves  $\frac{1}{2}$ " -2" shall be pressure rated at 232 psi/16 bar, 2  $\frac{1}{2}$ " - 4" shall be pressure rated at 150 psi/10 bar at 68°F/20°C

#### 3.0 Manufacturer

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