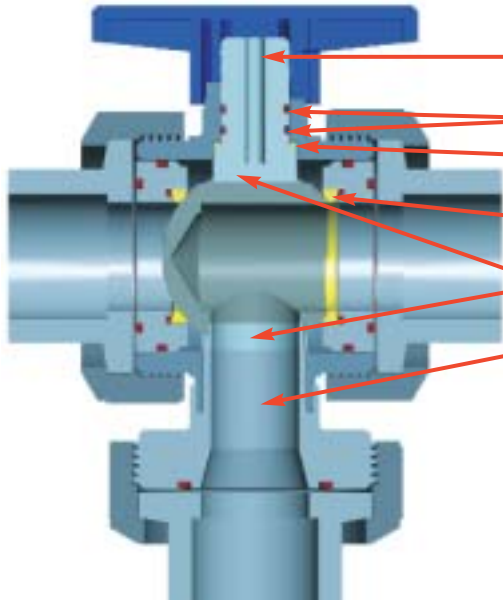


SERIES TMBV • 3-Way Manual Ball Valves

An engineered multiple union ball valve for applications requiring two inlets, two outlets, sampling or diverting



Features:

- Valve shaft (stem) reinforced with stainless steel rod to eliminate flexing and breakage.
- Dual shaft seals eliminate leakage.
- Teflon® bearing on shaft eliminates friction and wear; stem design is “blow-out” proof.
- Teflon seats energized with O-rings eliminate wear and improve cycle life.
- Trunnion design eliminates lateral ball stress and allows downstream piping to be disconnected under full line pressure.
- Smooth flow path minimizes pressure loss.
- Fully concentric and mirror polished ball assures smooth, leakproof operation.
- Three true-union ends for ease of piping installation and removal; helps lower costs and reduce footprint.
- Choice of 2-hole or 3-hole ball.

Each valve is 100% individually inspected and tested prior to shipment.

Design:

Known as “The Engineered Ball Valve”, Series TMBV provides more safety and design features than any other thermoplastic ball valve. With its mirror-polished ball, perfectly machined sealing surfaces, Trunnion centering design, Teflon thrust bearing and O-ring loaded floating Teflon seats, the True Blue three-way ball valve offers smooth turning even in difficult applications. The floating seats automatically compensate for seat wear, and after long-term cycling, the carriers can easily be returned to their original position simply by tightening the union nuts.

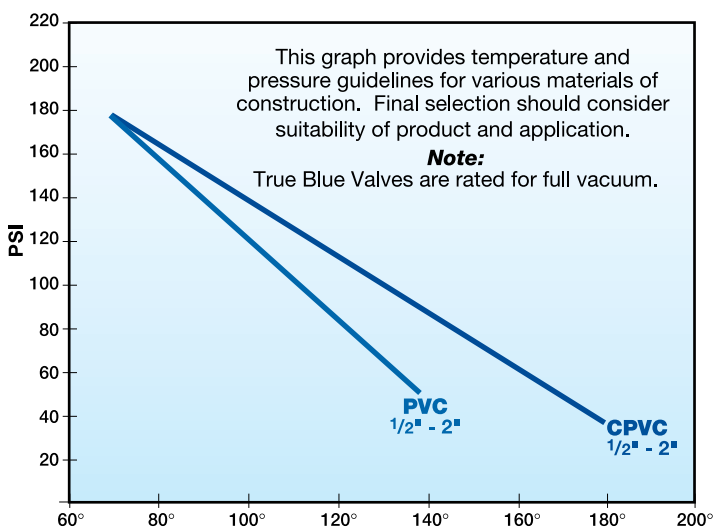
The 2-hole ball design is standard; it is ideal for applications where flow cannot be mixed. To prevent a momentary no-flow (“dead-head”) condition, an optional 3-hole ball is available. Please specify when ordering.

The top to bottom “Trunnion” design permits flow and pressure in either direction, and eliminates the stresses inherent to a ball secured only at the top. An ultra smooth flow path virtually eliminates turbulence and pressure loss and permits flow rates that far exceed pipe manufacturers specifications.

Manual Override:

Series TMBV is molded of Type 1 Grade 1 Geon® PVC and Corzan® CPVC. Standard O-ring seals are Viton® or EPDM. Seats and shaft bearings are Teflon. Stainless steel shaft support is not in contact with liquid. Standard connections are threaded (NPT or BSP) or socket (Schedule 80 or Metric). For optional materials and connections, please consult factory.

Material Guideline For Pressure and Temperature



FLOW CHARACTERISTICS DURING CYCLING

BALL STYLE

2-HOLE STANDARD



During cycling, the standard 2-hole ball has a momentary dead-head when the ball outlet is between ports.

3-HOLE OPTION

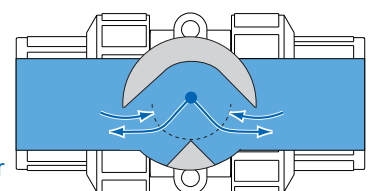
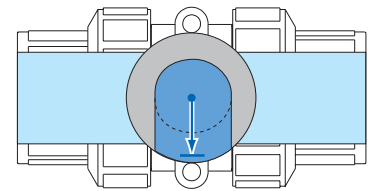


Add “-A” to Part Number

During cycling, the optional 3-hole ball has a momentary mixing of streams when the ball outlet is between ports. This option should be specified if a brief interruption of flow will be detrimental to your process.

TOP VIEW

Flow from bottom, center





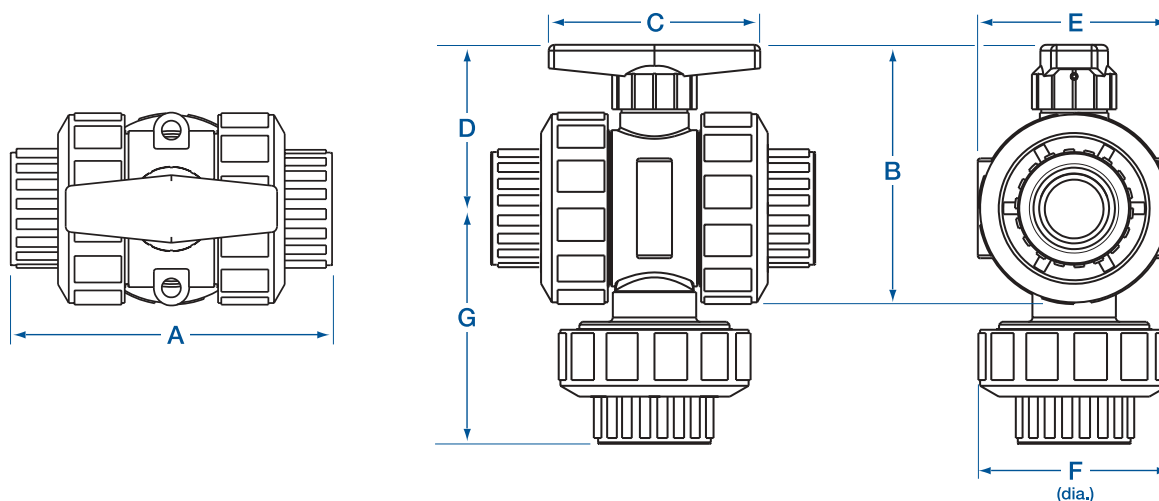
APPROXIMATE FLOW RATES at 1.0 PSI (0,07 Bar) Pressure Drop

Valve Sizes	1/2	3/4	1	1 1/2	2
Cv Factor	4.0	8.0	13.0	38.0	39.0
TORQUE SPECIFICATIONS					
Torque, in-lbs.	25	35	45	70	70

ORDERING INFORMATION

Two Hole Design				Three Hole Design			
Sizes	Seal	PVC	CPVC (Corzan™)	Sizes	Seal	PVC	CPVC (Corzan™)
1/2"	EPDM Viton	TMBV050EPT-PV TMBV050VT-PV	TMBV050EPT-CP TMBV050VT-CP	1/2"	EPDM Viton	TMBV050EPT-PV-A TMBV050VT-PV-A	TMBV050EPT-CP-A TMBV050VT-CP-A
3/4"	EPDM Viton	TMBV075EPT-PV TMBV075VT-PV	TMBV075EPT-CP TMBV075VT-CP	3/4"	EPDM Viton	TMBV075EPT-PV-A TMBV075VT-PV-A	TMBV075EPT-CP-A TMBV075VT-CP-A
1"	EPDM Viton	TMBV100EPT-PV TMBV100VT-PV	TMBV100EPT-CP TMBV100VT-CP	1"	EPDM Viton	TMBV100EPT-PV-A TMBV100VT-PV-A	TMBV100EPT-CP-A TMBV100VT-CP-A
1 1/2"	EPDM Viton	TMBV150EPT-PV TMBV150VT-PV	TMBV150EPT-CP TMBV150VT-CP	1 1/2"	EPDM Viton	TMBV150EPT-PV-A TMBV150VT-PV-A	TMBV150EPT-CP-A TMBV150VT-CP-A
2"	EPDM Viton	TMBV200EPT-PV TMBV200VT-PV	TMBV200EPT-CP TMBV200VT-CP	2"	EPDM Viton	TMBV200EPT-PV-A TMBV200VT-PV-A	TMBV200EPT-CP-A TMBV200VT-CP-A

NOTE #1: A two (2) holed ball is standard with 180° uni-directional rotation. To prevent a momentary no-flow (dead-heading) condition during cycling, a three (3) holed ball is available. **NOTE #2:** End connections must be specified. **NOTE #3:** Model numbers listed are for "threaded" end connectors. For "socket" change the the "T" in the model number to "S".



DIMENSIONS

Valve Size	A		B		C		D		E		F		G	
	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
1/2"	4.125	104.8	3.0	76.2	3.125	79.4	2.0	50.8	2.25	57.2	1.75	44.45	2.75	69.85
3/4"	4.625	117.5	3.75	95.3	3.75	95.3	2.5	63.5	2.75	69.9	2.25	57.15	3.31	84.07
1"	5.50	139.7	4.312	111.1	3.75	95.3	3.0	76.2	3.25	82.6	2.50	63.50	3.81	96.77
1 1/2"	6.75	171.5	6.125	155.6	4.50	114.3	4.0	101.6	4.125	104.8	3.37	85.60	5.00	127.0
2"	8.00	203.2	6.125	155.6	4.50	114.3	4.0	101.6	4.125	104.8	3.68	93.47	5.56	141.2