

## TRUE UNION 2000 INDUSTRIAL 3-WAY BALL VALVES





# **Quick-View Valve Selection Chart** 3-Way Vertical Ball Valve

Valve	O-ring Material		Pressure			
Size		Socket	SR Threaded	Flanged	Spigot	Rating
1/2	EPDM	4722L1-005	4721L1-005SR	4723L1-005	4727L1-005	
	FKM	4732L1-005	4731L1-005SR	4733L1-005	4737L1-005	
3/4	EPDM	4722L1-007	4721L1-007SR	4723L1-007	4727L1-007	
	FKM	4732L1-007	4731L1-007SR	4733L1-007	4737L1-007	235 psi Non-Shock
1	EPDM	4722L1-010	4721L1-010SR	4723L1-010	4727L1-010	Water
'	FKM	4732L1-010	4731L1-010SR	4733L1-010	4737L1-010	@ 73°F
1 1/4	EPDM	4722L1-012	4721L1-012SR	4723L1-012	4727L1-012	(Flanged 150 psi
1-1/4	FKM	4732L1-012	4731L1-012SR	4733L1-012	4737L1-012	Non-Shock)
1-1/2	EPDM	4722L1-015	4721L1-015SR	4723L1-015	4727L1-015	Water @ 73°F
1-1/2	FKM	4732L1-015	4731L1-015SR	4733L1-015	4737L1-015	
	EPDM	4722L1-020	4721L1-020SR	4723L1-020	4727L1-020	
2	FKM	4732L1-020	4731L1-020SR	4733L1-020	4737L1-020	
2.1/2	EPDM	4722L1-025	4721L1-025SR	4723L1-025	4727L1-025	
2-1/2	FKM	4732L1-025	4731L1-025SR	4733L1-025	4737L1-025	
3	EPDM	4722L1-030	4721L1-030SR	4723L1-030	4727L1-030	150 psi Non-Shock
	FKM	4732L1-030	4731L1-030SR	4733L1-030	4737L1-030	Water @ 73°F
,	EPDM	4722L1-040	4721L1-040SR	4723L1-040	4727L1-040	G 13 1
4	FKM	4732L1-040	4731L1-040SR	4733L1-040	4737L1-040	

<sup>1:</sup> For CPVC valve, add the letter "C" to the part number (e.g. 4722L1-005 $\mbox{\textbf{C}}$ )

# **Quick-View Valve Selection Chart**3-Way Horizontal Diverter Valve (no branch shutoff)

3-way Horizontal Diverter valve (no branch Shutom)										
Valve	O-ring		Pressure							
Size	Material	Socket	SR Threaded	Flanged	Spigot	Rating				
1/0	EPDM	5022L1-005	5021L1-005SR	5023L1-005	5027L1-005					
1/2	FKM	5032L1-005	5031L1-005SR	5033L1-005	5037L1-005					
3/4	EPDM	5022L1-007	5021L1-007SR	5023L1-007	5027L1-007					
3/4	FKM	5032L1-007	5031L1-007SR	5033L1-007	5037L1-007	235 psi Non-Shock				
1	EPDM	5022L1-010	5021L1-010SR	5023L1-010	5027L1-010	Water				
ı	FKM	5032L1-010	5031L1-010SR	5033L1-010	5037L1-010	@ 73°F				
1-1/4	EPDM	5022L1-012	5021L1-012SR	5023L1-012	5027L1-012	(Flanged 150 psi				
1-1/4	FKM	5032L1-012	5031L1-012SR	5033L1-012	5037L1-012	Non-Shock)				
1-1/2	EPDM	5022L1-015	5021L1-015SR	5023L1-015	5027L1-015	Water @ 73°F				
1-1/2	FKM	5032L1-015	5031L1-015SR	5033L1-015	5037L1-015					
2	EPDM	5022L1-020	5021L1-020SR	5023L1-020	5027L1-020					
2	FKM	5032L1-020	5031L1-020SR	5033L1-020	5037L1-020					
2-1/2	EPDM	5022L1-025	5021L1-025SR	5023L1-025	5027L1-025					
2-1/2	FKM	5032L1-025	5031L1-025SR	5033L1-025	5037L1-025					
3	EPDM	5022L1-030	5021L1-030SR	5023L1-030	5027L1-030	150 psi Non-Shock				
3	FKM	5032L1-030	5031L1-030SR	5033L1-030	5037L1-030	Water @ 73°F				
4	EPDM	5022L1-040	5021L1-040SR	5023L1-040	5027L1-040	2/31				
4	FKM	5032L1-040	5031L1-040SR	5033L1-040	5037L1-040					

<sup>1:</sup> For CPVC valve, add the letter "C" to the part number (e.g. 5022L1-005  ${\bf C})$ 

<sup>2:</sup> For Double L-Port, add the number "2" to the part number (e.g. 4722L2-005)

<sup>3:</sup> For Triple L-Port, add the number "3" to the part number (e.g. 4722L3-005)

<sup>4:</sup> For T-Port, add the letter "T1" to the part number (e.g. 4722T1-005)

<sup>2:</sup> For T-Port, add the letter "T1" to the part number (e.g. 5022**T1**-005)

## TRUE UNION 2000 INDUSTRIAL 3-WAY BALL VALVES



#### Features - PVC, CPVC

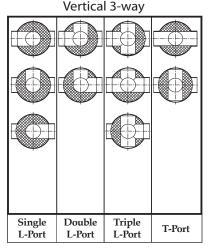
Versatile design provides multiple port and configuration options for controlling flow distribution in industrial and chemical processing applications. Choose Vertical 3-Way (L-Port Diverter, T-Port Off) or Horizontal Diverter configurations with open branch (no shutoff) design. Valves are available in IPS sizes 1/2" through 4" with socket, SR threaded (Special Reinforced), flanged or spigot end connectors. Venturied 6" (4" valves with 4 x 6 reducers) are also available with socket or flanged valve end connections.

- Chemical & Corrosion Resistant PVC or CPVC Construction
- Vertical 3-Way or Horizontal Diverter Design (no branch shutoff)
- · L-Port, Multi L-Port & T-Port Ball Configuration Options
- Interchangeable with all True Union 2000 Valves, Mates with Union 2000 Pipe Unions
- · High Impact Polypropylene Handle
- · Built-in Handle Lockout
- · Strong, Buttress Thread Union Nuts
- Spears<sup>®</sup> Double O-ring Safe-T-Shear<sup>®</sup> Stem Design
- · EPDM or FKM O-rings

- Spears<sup>®</sup> Safe-T-Blocked<sup>®</sup> Seal Carrier
- · Self Adjusting PTFE Floating Seat Design
- · Fully Serviceable, Replaceable Components
- Sizes 1/2" 2" pressure rated to 235 psi @ 73°F
  Sizes 2-1/2" 4" and all Flanged to 150 psi @ 73°F
- · EPDM Valves NSF® Certified for Potable Water use
- · Suitable for Vacuum Service
- Assembled with Silicone-Free, Water Soluble Lubricants
- Manufactured to ASTM F 1970
- Metric Socket and BSP Thread Available

#### 3-Way Port Options

Diverter Valves have no shut-off on branch.



L-Port T-Port

Horizontal Diverter

Ball Port Options viewed from top of valve.

#### **Optional Accessories\***

- Retro-Fit End Connector Sets for Valve Replacement
- Split-Nut Repair Kits for Union Nut Replacement
- Supplemental End Connectors
- · Stem Extension Kits
- · Square Operator Nuts
- Multi Mount Valve/Actuation Mounting Kits

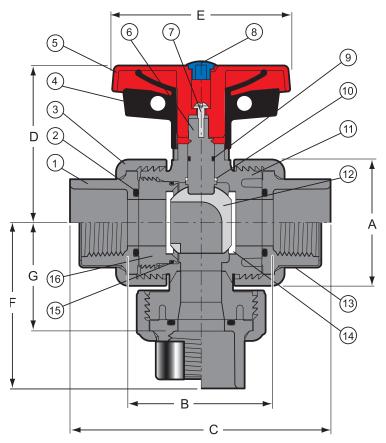
\* See "BALL VALVE ACCESSORIES" section for details of individual products.

### **Sample Engineering Specification**

All thermoplastic ball valves shall be True Union 2000 3-Way [specify horizontal or vertical] type with [specify port option] manufactured to ASTM F 1970 and constructed from PVC Type I, ASTM D 1784 Cell Classification 12454, or CPVC Type IV, ASTM D 1784 Cell Classification 23447. All O-rings shall be EPDM or FKM. All valves shall have Safe-T-Shear® stem with double O-ring stem seals. All valve handles shall be polypropylene with built-in lockout mechanism. All valve union nuts shall have Buttress threads. All seal carriers shall be Safe-T-Blocked®. All valve components shall be replaceable. All EPDM valves shall be certified by NSF® International for use in potable water service. All PVC and CPVC 1/2" through 2" valves shall be pressure rated to 235 psi, all 2-1/2" through 4" and all flanged valves shall be pressure rated to 150 psi for water at 73°F as manufactured by Spears® Manufacturing Company.



## TRUE UNION 2000 INDUSTRIAL 3-WAY BALL VALVES



### **Replacement Parts**

No.	Component	Qty.	Material		
1	End Connector	3	PVC/CPVC		
2	End Connector O-ring	3	EPDM/FKM		
3	Union Nut	3	PVC/CPVC		
4	Handle Lock	1	PP		
5	Handle	1	PP		
6	Stem	1	PVC/CPVC		
7	Screw	1	Stainless Steel		
8	Handle Cover	1	PP		
9	Stem O-ring	2	EPDM/FKM		
10	Stem Bearing*	1	PTFE		
11	Body	1	PVC/CPVC		
12	Ball	1	PVC/CPVC		
13	End Connector Collar	3	Stainless Steel		
14	Seat	2	PTFE		
15	Carrier O-ring	1	EPDM/FKM		
16	Seal Carrier	1	PVC/CPVC		

**Note:** Applies to both Vertical and Horizontal configurations. \* For sizes 2-1/2, 3 & 4 only.

NOTE: Diverter style valve has no shutoff on branch.

## Vertical 3-Way Ball Valves — Dimensions & Operating Torque

Vertical 3-Way Ball Valve											Oper. <sup>2</sup>			
Nominal Size	А	В1		С			_	F		G		Torque		
		Soc/SR Thd	Spigot	Socket	SR Thd	Spigot	D	E	Socket	SR Thread	Spigot	Soc/SR Thd	Spigot	(in. lbs.)
1/2	1-7/8	2-7/16	2-15/16	4-1/4	3-27/32	4-3/4	2-9/16	2-13/16	2-3/4	2-9/16	2-13/16	1-11/16	2	12
3/4	2-1/4	2-3/4	3-5/16	4-3/4	4-1/4	5-3/8	2-7/8	3-5/16	3	2-3/4	3-5/16	2	2-5/16	12
1	2-1/2	2-7/8	3-1/2	5-1/8	4-11/16	5-3/4	3-1/8	3-7/16	3-1/4	3	3-9/16	2-1/8	2-7/16	20
1-1/4	3-1/16	3-1/4	3-13/16	5-3/4	5-3/16	6-5/16	3-5/8	3-13/16	3-3/4	3-3/8	4-1/16	2-3/8	2-13/16	25
1-1/2	3-1/2	3-1/2	4	6-1/4	5-7/16	6-3/4	4	4-3/16	4-3/16	3-13/16	4-1/2	2-3/16	3-1/8	40
2	4-1/4	4-3/4	5-3/16	7-3/4	6-3/4	8-1/4	4-1/2	5-1/8	5	4-1/2	5-5/16	3-1/2	3-3/4	67
2-1/2	5-3/8	5-7/8	7-13/16	9-5/16	8-1/2	11-3/8	5-1/8	6-1/4	5-7/8	5-1/2	6-7/16	4-1/8	5-5/16	120
3	6-3/16	6-7/8	7-13/16	10-11/16	9-3/4	11-9/16	5-7/8	7-5/8	6-11/16	6-3/16	7-3/16	4-3/4	5-5/16	120
4	7-1/2	7-1/4	8-1/4	11-13/16	10-1/4	12-13/16	6-3/4	9-3/16	7-1/8	6-3/4	8-3/4	5-7/8	6-1/2	336

<sup>1:</sup> Valve Lay Length

<sup>2:</sup> Torque required at valve maximum internal pressure rating, 5ft/sec. Flow velocity; due to adjustment differences during installation, actual values may vary.