Valves Technical True Union 2000 Valve Overview



One of the Most Versatile, Compact Valve Designs Available

Spears® True Union 2000 Ball Valves, 3-Way Ball Valves and Ball Check Valves provide maximum versatility with fully interchangeable valve cartridges. Provides for easier system design modifications and upgrades in multiphase projects, or anywhere changes in valve types are desired. Simply exchange any True Union 2000 valve in-line using existing union nuts. Also mates with Spears® new 2000 Pipe Unions. All True Union 2000 valves feature a low profile, compact design for minimal space requirements. Additionally, Spears® offers valve Retrofit Kits for easy in-line replacement of other valves and factory installed Actuation Packages.





with Branch shut-Off



Valves Technical

True Union 2000 Industrial Ball Check Valves



All thermoplastic check valves shall be True Union 2000 Industrial Ball Check

type 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 valve union nuts

shall have Buttress threads. All valve seats shall be a standard O-ring type. All

seal carriers shall be Safe-T-Blocked®. All valve components shall be

replaceable. All EPDM valves shall be listed by NSF® for use in potable water

service. All PVC and CPVC 1/2" through 4" valves shall be pressure rated to

235 psi, all 6" and 8" Venturied and all flanged valves shall be pressure rated to 150 psi for water at 73°F as manufactured by Spears® Manufacturing Company.

Features — PVC, CPVC

Flow tested design provides quick response with positive seal for prevention of system backflow in industrial and chemical processing applications. Valves are available in IPS sizes 1/2" through 6" with socket/regular thread, SR threaded (Special Reinforced), flanged or spigot end connectors and 8" venturied valve with socket or flanged ends. Also available in metric socket and BSP thread sizes 1/2" through 2".

- Chemical & Corrosion Resistant PVC or CPVC Construction
- Also Available in Spears[®] High Purity, Low Extractable PVC Material
- Strong, Buttress Thread Union Nuts
- Schedule 80 Full-Port Design
- Spears® Safe-T-Blocked® Seal Carrier
- · Uses Standard O-ring Seat
- · EPDM or FKM O-rings
- · Fully Serviceable, Replaceable Components
- Sizes 1/2" 4" Pressure Rated to 235 psi @ 73°F, Sizes 6" and 8" Venturied and all Flanged Pressure Rated to 150 psi @ 73°F
- Suitable for Either Horizontal or Vertical Installations
- EPDM valves NSF_® Certified for Potable Water use
- Suitable for Vacuum Service
- Assembled with Silicone-Free, Water Soluble Lubricants
- · Manufactured to ASTM F 1970

Quick-View Valve Selection Chart

Sample Engineering Specification

Valve Size	O-ring Material	PVC Part Number ¹					Pressure
		Socket	Threaded	SR Threaded	Flanged	Spigot	Rating
1/2	EPDM	4529-005	included	4521-005SR	4523-005	4527-005	
	FKM	4539-005	included	4531-005SR	4533-005	4537-005	
3/4	EPDM	4529-007	included	4521-007SR	4523-007	4527-007	
	FKM	4539-007	included	4531-007SR	4533-007	4537-007	
1	EPDM	4529-010	included	4521-010SR	4523-010	4527-010	
	FKM	4539-010	included	4531-010SR	4533-010	4537-010	235 psi Non-Shock Water @ 73°F (Flanged 150 psi Non-Shock) Water @ 73°F
1-1/4	EPDM	4529-012	included	4521-012SR	4523-012	4527-012	
	FKM	4539-012	included	4531-012SR	4533-012	4537-012	
1-1/2	EPDM	4529-015	included	4521-015SR	4523-015	4527-015	
	FKM	4539-015	included	4531-015SR	4533-015	4537-015	
2	EPDM	4529-020	included	4521-020SR	4523-020	4527-020	
	FKM	4539-020	included	4531-020SR	4533-020	4537-020	
2-1/2	EPDM	4522-025	4521-025	4521-025SR	4523-025	4527-025	
	FKM	4532-025	4531-025	4531-025SR	4533-025	4537-025	
3	EPDM	4522-030	4521-030	4521-030SR	4523-030	4527-030	
	FKM	4532-030	4531-030	4531-030SR	4533-030	4537-030	
4	EPDM	4522-040	4521-040	4521-040SR	4523-040	4527-040	
	FKM	4532-040	4531-040	4531-040SR	4533-040	4537-040	
6	EPDM	4522-060	4521-060	4521-060SR	4523-060	4527-060	150 psi
	FKM	4532-060	4531-060	4531-060SR	4533-060	4537-060	Non-Shock
82	EPDM	4522-080			4523-080		Water
	FKM	4532-080	_	_	4533-080	_	@ 73°F

Optional Accessories*

- · Retro-Fit End Connector Sets for Valve Replacement
- · Split-Nut Repair Kits for Union Nut Replacement
- Supplemental End Connectors
- * See "BALL VALVE ACCESSORIES" section for details of individual products.

Ball Check Foot Valves



Spears® Ball Check Valves easily convert to foot valves utilizing optional Foot Valve Screen adapters found in Ball Valve Accessories section.

^{1:} For CPVC valve, add the letter "C" to the part number (e.g., 4529-005**C**, 4521-005**C**SR)

^{2: 8&}quot; Venturied Valves are 6" ball valves fitted with 6x8 end connector adapters