

VXE Series Ball Valves



Submittal Data Sheet



Job or Customer: _____

Engineer: _____

Contractor: _____

Submitted by: _____ Date _____

Approved by: _____ Date _____

Order No: _____ Date _____

Specification: _____ Date _____

introduction

< STANDARDS >



ASTM D1784
ASTM D2466
ASTM D2467
ASTM F439
ASTM D2464
ASTM F437
ASTM D1498



ANSI B1.20.1
ANSI B16.5

The IPEX EasyFit VXE Series True Union Ball Valves represent the latest innovation in thermoplastic ball valve manufacturing technology. Developed in collaboration with Giugiaro Design, the VXE Series replaces the well received VX Series with new and cutting edge features and is designed for industrial, general purpose and O.E.M. applications. This valve features an ultra-compact double block design, and full port bi-directional operation. The true union design allows the valve to be easily removed from the piping system and fully serviced. A threaded seat stop carrier provides improved seal integrity under tough service conditions while the EasyFit multifunction handle doubles as a tool for ball seat adjustment, and for tightening union nuts precisely.

VXE ball valves are part of our complete system of IPEX pipe, valves, and fittings, engineered and manufactured to our strict quality, performance, and dimensional standards.

VALVE AVAILABILITY

BODY MATERIAL	PVC, CPVC
SIZE RANGE	1/2" through 2"
Pressure	232 psi
SEATS	Teflon® (PTFE)
SEALS	EPDM or Fluoropolymer (FPM)
END CONNECTIONS	Socket (IPS), Threaded (FNPT)

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VXE Series Ball Valves



Valve Selection

Size (inches)	Body Material	O-ring Material	IPEX Part Number		Pressure Rating
			IPS Socket	FNPT Threaded	
1/2	PVC	EPDM	353001		232 psi for Socket or Threaded
		FPM	353002		
	CPVC	EPDM	353041		
		FPM	353042		
3/4	PVC	EPDM	353003		
		FPM	353004		
	CPVC	EPDM	353043		
		FPM	353044		
1	PVC	EPDM	353005		
		FPM	353006		
	CPVC	EPDM	353045		
		FPM	353046		
1-1/4	PVC	EPDM	353007		
		FPM	353008		
	CPVC	EPDM	353047		
		FPM	353048		
1-1/2	PVC	EPDM	353009		
		FPM	353010		
	CPVC	EPDM	353049		
		FPM	353050		
2	PVC	EPDM	353011		
		FPM	353012		
	CPVC	EPDM	353051		
		FPM	353052		

Body Material:

- PVC CPVC

Size (inches):

- 1/2 1-1/4
 3/4 1-1/2
 1 2

Seals:

- EPDM
 Fluoropolymer (FPM)

End Connections:

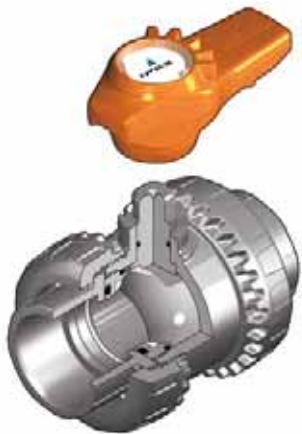
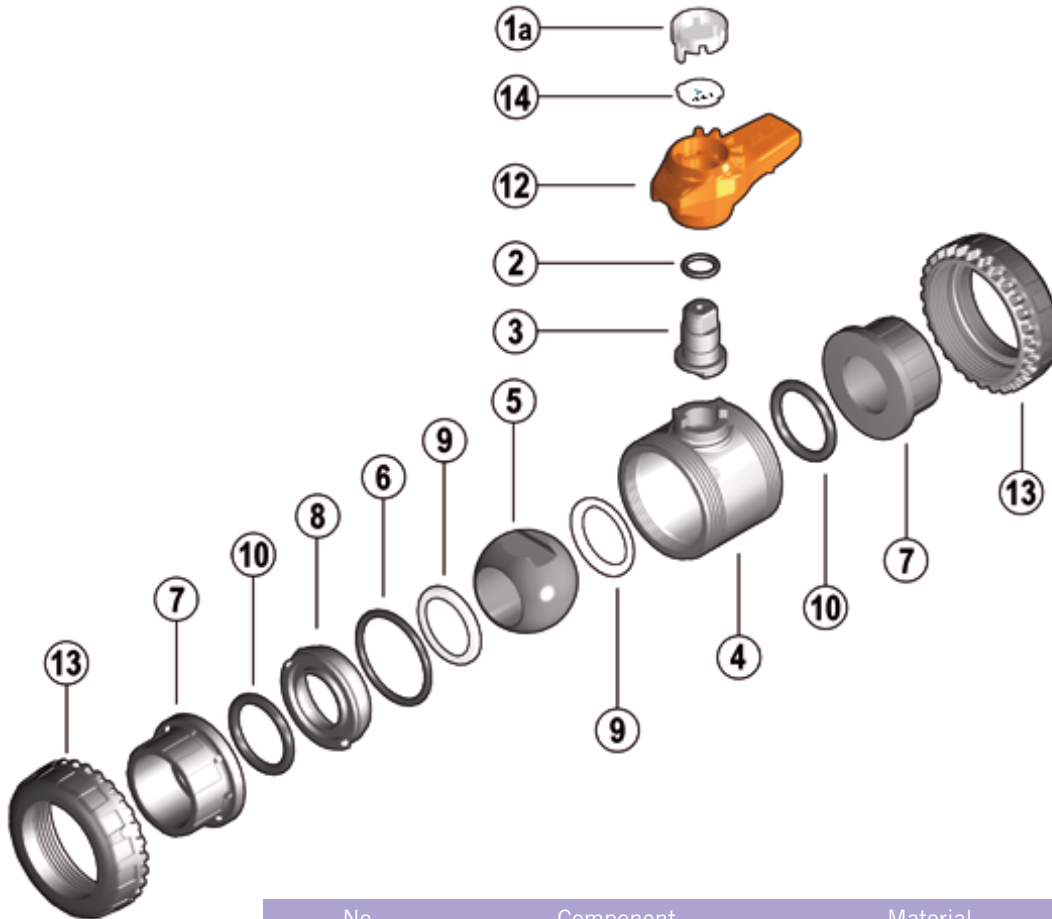
- Socket (IPS)
 Threaded (FNPT)

IPEX Part Number:

VXE Series Ball Valves



Components



No.	Component	Material	Qty
1a	Transparent Service Plug	PVC	1
2*	Stem O-Ring	EPDM / FPM	1
3*	Stem	PVC / CPVC	1
4	Body	PVC / CPVC	1
5	Ball	PVC / CPVC	1
6*	Body Seal O-Ring	EPDM / FPM	1
7	End Connector	PVC / CPVC	2
8	Support for Ball Seat	PVC / CPVC	1
9*	Ball Seat	PTFE	2
10*	Socket Seal O-Ring	EPDM / FPM	2
12	Handle	PVC	1
13	Union Nut	PVC / CPVC	2
14	Tag Holder	PVC	1

* Spare parts available.

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Installation Procedures



1. For socket and threaded style connections, remove the union nuts (part #13 on previous page) and slide them onto the pipe. For flanged connections, remove the union nut / flange assemblies from the valve.
2. Please refer to the appropriate connection style sub-section:
 - a. For socket style, solvent cement the end connectors (7) onto the pipe ends. For correct joining procedure, please refer to the section entitled, *“Joining Methods – Solvent Cementing”* in the IPEX Industrial Technical Manual Series, *“Volume I: Vinyl Process Piping Systems”*. **Be sure to allow sufficient cure time before continuing with the valve installation.**
 - b. For threaded style, thread the end connectors (7) onto the pipe ends. For correct joining procedure, please refer to the section entitled, *“Joining Methods – Threading”* in the IPEX Industrial Technical Manual Series, *“Volume I: Vinyl Process Piping Systems”*.
3. Open and close the valve to ensure that the ball seat support (8) is at the desired adjustment. If adjustment is required, ensure that the valve is in the closed position then remove the handle (1) from the valve stem. Line up the moldings on the handle with the slots in the ball seat support. Tighten or loosen to the desired position then replace the handle on the valve stem.
4. Ensure that the valve is in the closed position, and that the socket o-rings (10) are properly fitted in their grooves. Carefully place the valve in the system between the two end connections.
5. Tighten the union nut on the side **opposite** to that which is marked “ADJUST”. Hand tightening is typically sufficient to maintain a seal for the maximum working pressure. **Over-tightening may damage the threads on the valve body and/or the union nut and may even cause the union nut to crack. It is recommended to use the handle.**
6. Tighten the union nut on the side marked “ADJUST”. Tightening the union nuts in this order results in the best possible valve performance due to optimum positioning and sealing of the ball and seat support system.
7. Open and close the valve to again ensure that the cycling performance is adequate. If adjustment is required, place the valve in the closed position, loosen the union nuts, remove the valve from system and then continue from Step 3.

The purpose of system testing is to assess the quality of all joints and fittings to ensure that they will withstand the design working pressure, plus a safety margin, without loss of pressure or fluid. Typically, the system will be tested and assessed in sub-sections as this allows for improved isolation and remediation of potential problems. With this in mind, the testing of a specific installed valve is achieved while carrying out a test of the overall system.

An onsite pressure test procedure is outlined in the IPEX Industrial Technical Manual Series, “*Volume 1: Vinyl Process Piping Systems*” under the section entitled “*Testing*”. The use of this procedure should be sufficient to assess the quality of a valve installation. **In any test or operating condition, it is important to never exceed the pressure rating of the lowest rated appurtenance in the system.**

IMPORTANT POINTS:

- Never test thermoplastic piping systems with compressed air or other gases including air-over-water boosters.
- When testing, do not exceed the rated maximum operating pressure of the valve.
- Avoid the rapid closure of valves to eliminate the possibility of water hammer which may cause damage to the pipeline or the valve.

For safety reasons, please contact IPEX customer service and technical support when using volatile liquids such as hydrogen peroxide (H₂O₂) and sodium hypochlorite (NaClO). These liquids may vaporize causing a potentially dangerous pressure increase in the dead space between the ball and the valve body. Special VXE ball valves are available for these types of critical applications.

Please contact IPEX customer service and technical support with regard to any concern not addressed in this data sheet or the technical manual.

