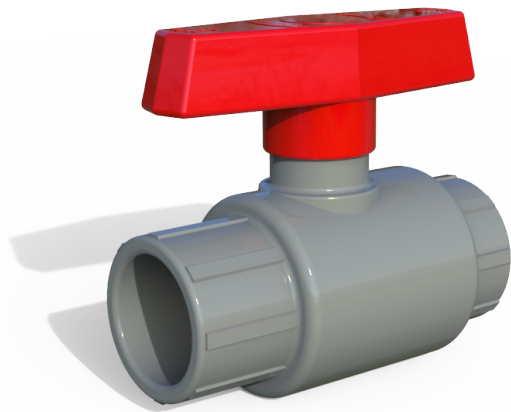


# Xirtec® CPVC One-Piece Ball Valve

## Submittal Data Sheet



Job or Customer: .....

Engineer: .....

Contractor: .....

Submitted by: .....

Date

Approved by: .....

Date

Order No: .....

Date

Specification: .....

### < STANDARDS >



NSF 14  
NSF 61  
ASTM F1970

Please see our listing on agency websites for NSF compliant pipe, valves and fittings.

[www.nsf.org](http://www.nsf.org)

Xirtec® CPVC One-Piece Ball Valves are a light and compact solution for on/off applications in Xirtec CPVC potable water systems. This one-piece valve with integral end connectors eliminates mechanical connections that can wear or leak over time. Xirtec CPVC One-Piece Ball Valves are engineered and manufactured to strict quality, performance and dimensional standards and are listed to ASTM F1970.

#### VALVE AVAILABILITY

**Body Material:** CPVC

**Size Range:** 1/2" – 1"

**O-Ring Material:** EPDM

**Ball Seat Material:** PTFE

**Pressure Rating:** 400 psi @ 73°F, 150 psi @ 160°F

**End Connections:** Socket

Find us in

**MasterSpec®**

a product of The American Institute of Architects

Our products are specified in

**BSD  
SpecLink**

[www.bsdspeclink.com](http://www.bsdspeclink.com)

Xirtec® CPVC piping system is made with Corzan® CPVC compound.  
Corzan® is a registered trademark of the Lubrizol Corporation.

USA: Website: [ipexna.com](http://ipexna.com) • Toll Free: 800-463-9572



**IPEX**

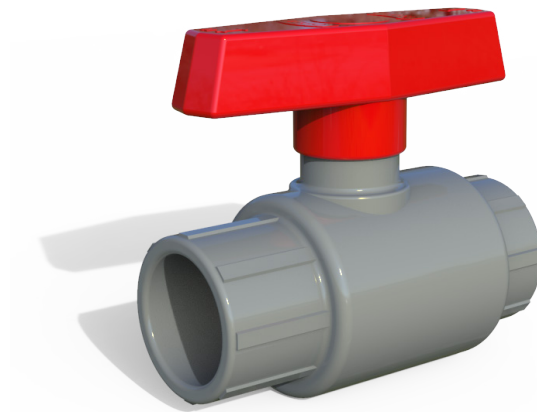
by **alixis**

# Xirtec® CPVC One-Piece Ball Valve

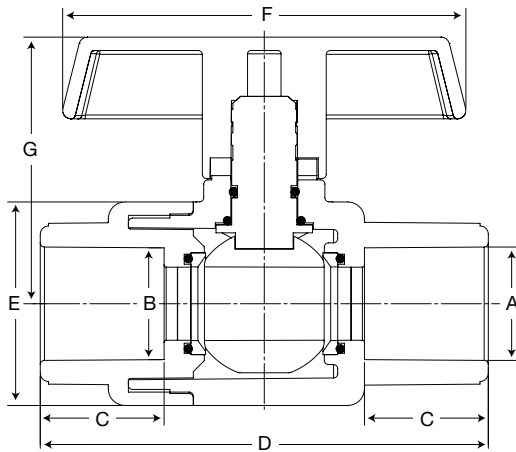
## Submittal Data Sheet

### Valve Selection

Size (inches)	Part Number
1/2	052677
3/4	052678
1	052679



### Dimensions

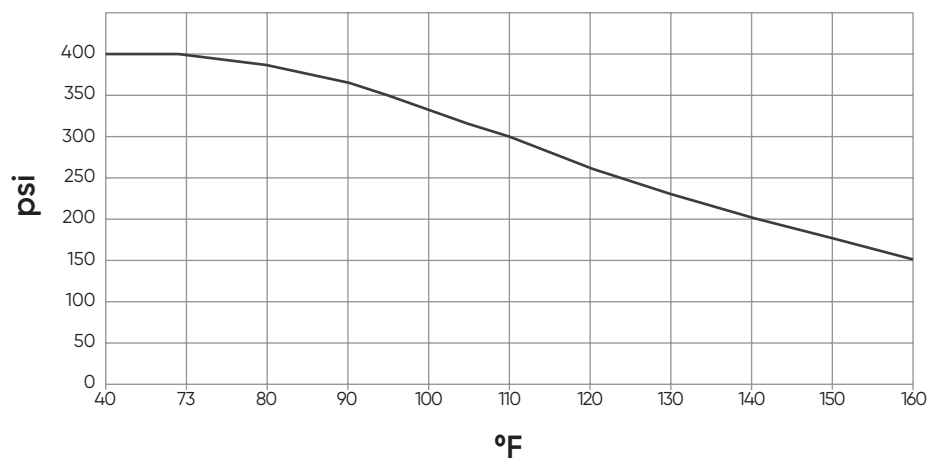


Size inches	A	B	C	D	E	F	G
1/2	0.848	0.836	0.698	3.31	1.52	3.03	2.01
3/4	1.058	1.046	0.729	3.82	1.82	3.62	2.41
1	1.325	1.310	0.885	4.31	2.16	4.12	2.81

### Component Materials

Components	Material
Valve Body	CPVC
Ball	CPVC
Seat Holder	CPVC
Stem	CPVC
Handle	ABS
Ball Seat	PTFE
Seat O-Ring	EPDM
Stem O-Ring	EPDM

### Working Pressure/Temperature Curve



# Xirtec® CPVC One-Piece Ball Valve

## Handling & Installation Procedures

### Handling and Storage

#### SAFE HANDLING AND STORAGE OF PIPE, FITTINGS & VALVES

Care must be taken when handling Xirtec CPVC products to ensure that pipe, fittings, valves and accessories are not damaged prior to installation. Please refer to the *Volume VII: Xirtec CPVC Potable Water Piping System Technical Manual* for detailed handling and storage instructions.

### Installation

Xirtec CPVC Potable Water Piping System is a solvent welded system.

The Xirtec CPVC System also comprises of fittings that allow for flanging and threading.

Please refer to the *Volume VII: Xirtec CPVC Potable Water Piping System Technical Manual* for detailed installation methods and instructions. Solvent weld Xirtec CPVC One-Piece Ball Valves using the standard solvent welding procedures outlined in the manual.

### Cement Types

Joints for the Xirtec CPVC Potable System should be made using using primers and CPVC heavy-bodied, medium setting cements that meet or exceed the requirements of ASTM F656 and ASTM F493 respectively. Follow all solvent welding instructions provided in the *Volume VII: Xirtec CPVC Potable Water Piping System Technical Manual*.

# Xirtec® CPVC One-Piece Ball Valve

## Handling & Installation Procedures

### Testing and Operating

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 Plumbing & Mechanical Technical Manual Series, "Volume VII: Xirtec® CPVC Potable Water Piping System" under the section entitled "System Acceptance (Hydrostatic Pressure) Test". 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.**



### WARNING

- **NEVER** use compressed air or gas in Xirtec CPVC pipe, fittings and valves.
- **NEVER** use or test Xirtec CPVC with compressed air or other gases. **DO NOT** use air-over-water boosters.

**Use of compressed air or gas in Xirtec CPVC pipe, fittings and valves can result in explosive failures and cause severe injury or death.**

### NOTICE

**Do not exceed the maximum working pressure of any system components including pipe, fittings, valves, threaded adapters, unions, maintenance couplings or flanges.**

- The pressure rating of all components must be reduced when operating temperatures exceed 73°F. Refer to the Xirtec CPVC Correction Factor Table in the System Pressure and Temperature Ratings section of IPEX Plumbing & Mechanical Technical Manual Series, *Volume VII: Xirtec® CPVC Potable Water Piping System*.
- Exceeding the maximum working temperature or pressure of the system may result in system failure and/or property damage.

# Xirtec® CPVC One-Piece Ball Valve

## Short Form Specifications

### Sample Specifications

#### 1.0 Ball Valves – One-Piece

##### 1.1 Material

- The valve body, stem, ball and seat holder shall be made of Corzan® CPVC compound which shall meet or exceed the requirements of 23447 according to ASTM D1784.
- These compounds shall be listed with NSF to Standard 61 for potable water.

##### 1.2 Seats

- The ball seats shall be made of Teflon® (PTFE).

##### 1.3 Seals

- The o-ring seals shall be made of EPDM.

#### 2.0 Connections

- The IPS socket CPVC end connectors shall conform to the dimensional standard ASTM F438.

#### 3.0 Design Features

- The valve shall have a one-piece spin-welded body.
- The valve shall be double blocking with socket ends.
- All sizes 1/2" through 1" shall be full port.
- All sizes shall allow for bi-directional flow.
- The ball shall be smooth to minimize wear on valve seats.

##### 3.1 Pressure Tested

- The valve shall have been pressure tested in both the open and closed positions by the manufacturer.

##### 3.2 Pressure Rating

- The valve shall be rated at 400 psi at 73°F and 150 psi at 160°F.

##### 3.3 Markings

- The valve shall be marked to indicate size, material designation, and manufacturers name or trademark.

##### 3.4 Color Coding

- The CPVC valve shall be color-coded light gray.

#### 4.0 NSF Listing

- The valve shall be listed with NSF to standard 61 for potable water.
- The valve shall be certified to NSF/ANSI 372 and conform with the lead content requirements for "lead free" plumbing as defined by California, Vermont, Maryland, and Louisiana state laws and the U.S. Safe Drinking Water Act.

#### 5.0 The valve shall be Xirtec® CPVC by IPEX.

### About the IPEX Group of Companies

As leading suppliers of thermoplastic piping systems, the IPEX Group of Companies provides our customers with some of the world's largest and most comprehensive product lines. All IPEX products are backed by more than 50 years of experience. With state-of-the-art manufacturing facilities and distribution centers across North America, we have established a reputation for product innovation, quality, end-user focus and performance.

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- Telecommunications and utility piping systems
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- Electrofusion systems for gas and water
- Industrial, plumbing and electrical cements
- Irrigation systems
- PVC, CPVC, PP, PVDF, PE, ABS, and PEX pipe and fittings

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