



P2 Series

PVC / CPVC Full Port 2-way Ball Valve



END CONNECTIONS

NPT Threaded: 1/2" to 2"

Glue Socket: 1/2" to 4"

MAXIMUM PRESSURE

232 PSIG (at 73°F)

[see Pressure/Temperature Curve](#)

TEMPERATURE RANGE

PVC: 32°F to 140°F

CPVC: 32°F to 212°F

MATERIALS

Body: PVC or CPVC

Seats: PTFE

Seals: EPDM or Viton®

Ball & Stem: PVC or CPVC

The Assured Automation P2 Series ball valves offer a variety of advanced features such as a high quality stem and ball support system, and a multifunctional locking handle. The new Dual Block® system locks the union nuts preventing back-off due to vibration or thermal cycling. Deep grooves, thick o-rings, and cushioned PTFE seats contribute to strong seals at pressures up to 232 PSI while an integral mounting flange and support bracketing combine for simple adaptation for valve actuation and anchoring.

FEATURES

- Expansion and contraction compensating groove on the molded end of the valve body.
- Valve body, union nuts, and carrier have deep square style threads for increased strength.
- Ball and stem are machined smooth to minimize wear on valve seats and seals.
- All valve seats have o-ring backing cushions to compensate for wear and prevent seizure of the ball.
- Stem design features double o-ring seals as well as a safety shear point above the o-rings.
- All of the valve materials comply with standards that are equivalent to NSF Standard 61 for potable water.
- An integrated molded bracket for valve and pipeline mounting is standard.

[see page 2 for feature details](#)

TYPICAL APPLICATIONS

- Seawater
- Corrosive Liquids
- Pollution Control Equipment
- Process Control Applications
- Laundry Equipment
- Textile Dyeing & Drying
- Bottling & Dispensing Equip.
- Ink & Paint Dispensing
- Chemical Process Equipment
- Custom Ball Valve Assemblies

ACTUATORS

Electric

Pneumatic

- Spring Return
- Double Acting

Manual handle lever

[see page 4 for accessory details](#)



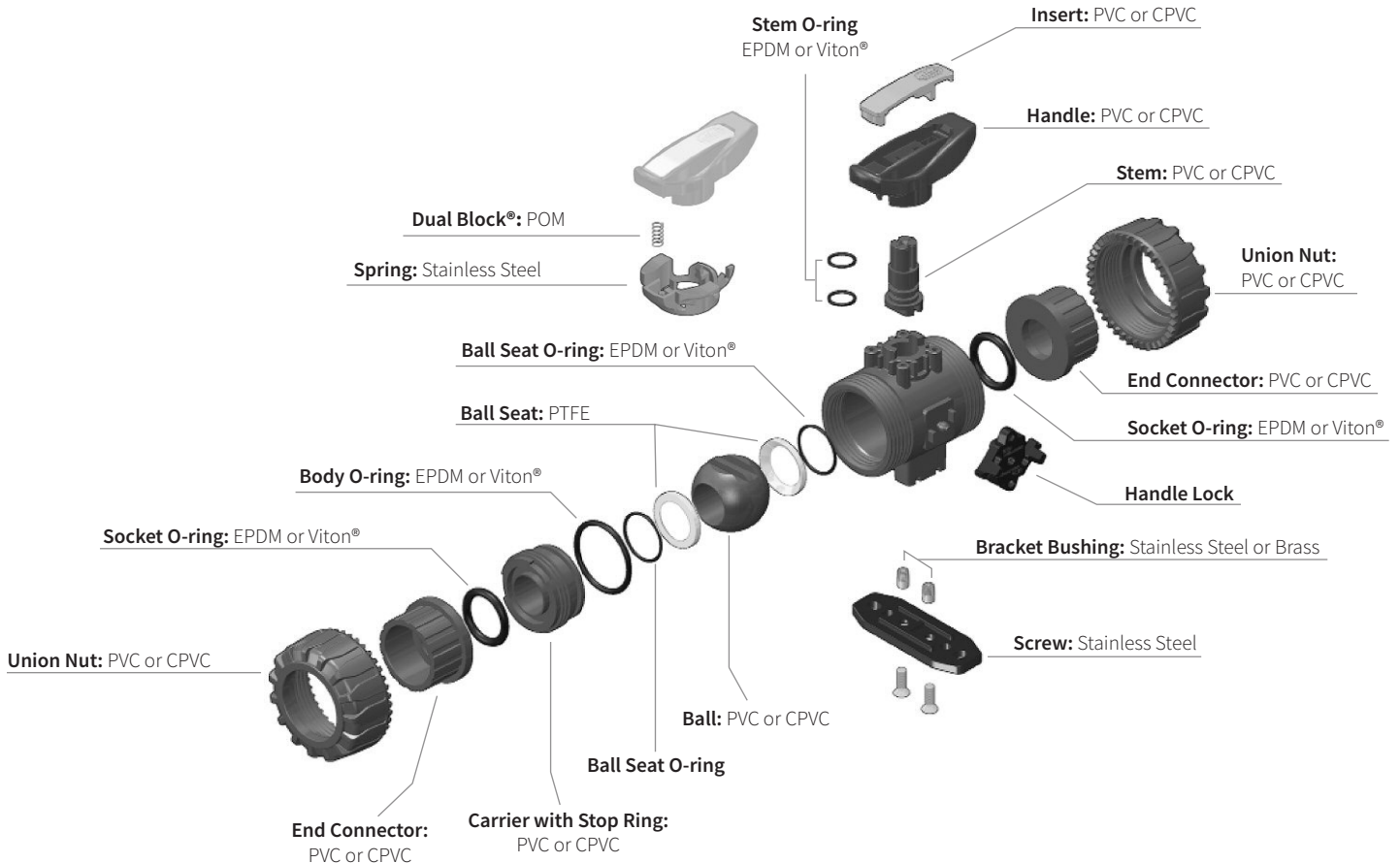


P2 Series



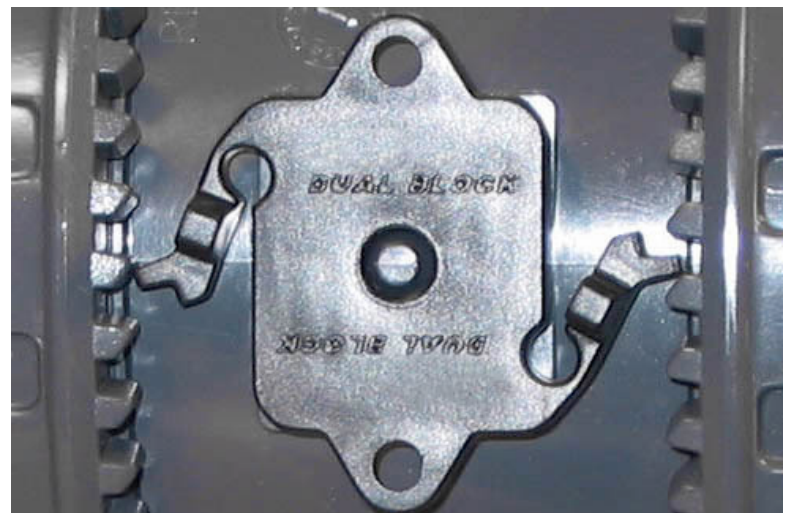
PVC / CPVC Full Port 2-way Ball Valve

FEATURES AND BENEFITS



DUAL BLOCK® LOCKING SYSTEM

The patented Dual Block® system allows the P2 line of valves to excel in working conditions where vibrations or thermal expansion may affect the performance of ordinary true union valves. The patented system incorporates a union nut locking device which prevents back-off during severe service conditions.



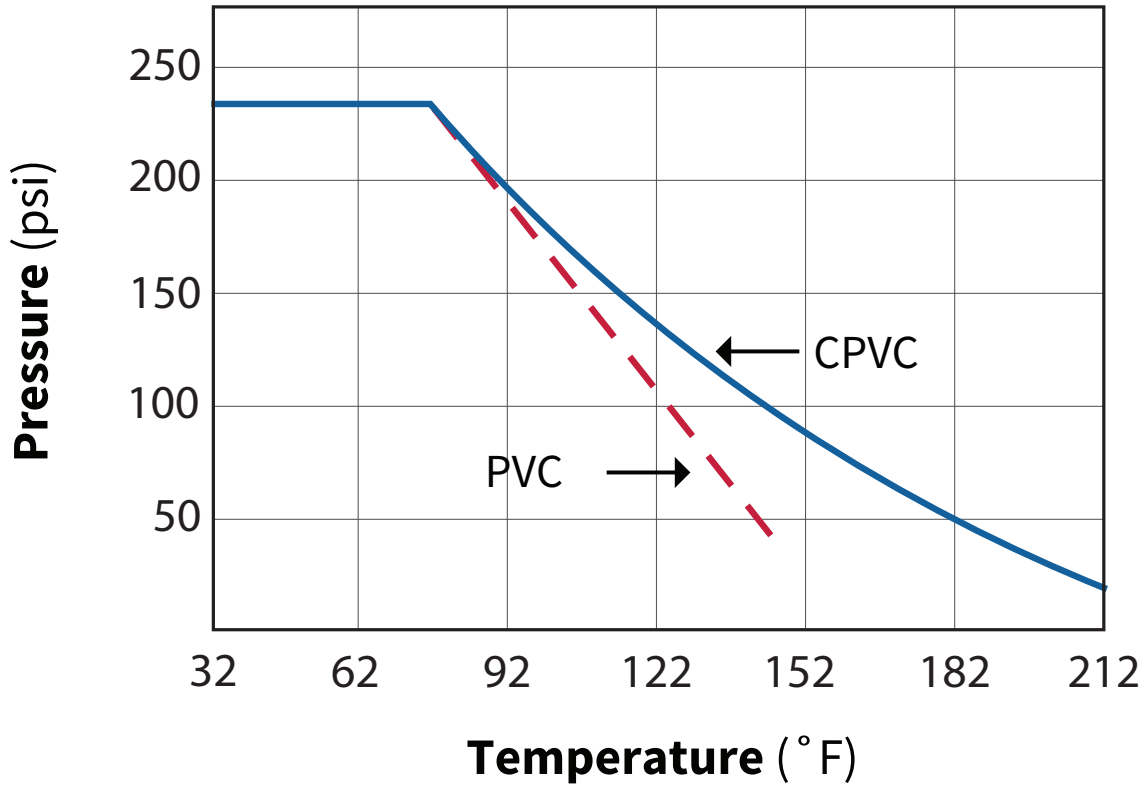


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PRESSURE/TEMPERATURE CURVE



C_v FACTORS

Size	C _v (gpm)
1/2"	14
3/4"	27
1"	54
1-1/4"	77
1-1/2"	123
2"	238
2 1/2"	368
3"	497
4"	665



P2 Series



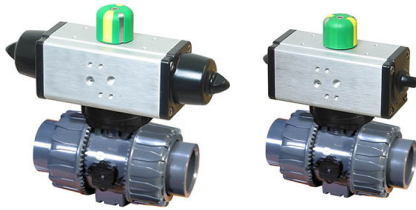
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ACTUATORS AVAILABLE

A full range of actuators are available to choose from. All sizing is done by Assured Automation to make selecting your assembly easy. Any accessories ordered with the actuator will be installed and tested by our ISO certified facility.

Pneumatic

P Series Dual Scotch Yoke



Spring Return
fail open or closed

[\(see P series web page\)](#)

Double Acting
fail in place

F Series Dual Rack and Pinion



Spring Return
fail open or closed

[\(see F series web page\)](#)

Double Acting
fail in place

Accessories

- NAMUR direct mount solenoid valves
- Variety of limit switches
- Modulating positioners
- 1/4" NPT x 1/4" tube push fittings
- 1/4" NPT x 1/4" compression fittings
- SS and poly tubing

Electric

Weatherproof

V4 Series



12 or 24 VDC, 120 VAC

- Manual override
- NEMA-4/4X housing
- External wire leads
- High Strength Gears

[\(see V4 series web page\)](#)

R4 Series



12 or 24 VDC, 120 VAC

- Compact Design
- Thermally protected motor
- Spur Gear Drive

[\(see R4 series web page\)](#)

S4 Series



24 to 240 VAC/VDC

- Isolated end of travel limit switches
- Manual override
- Electronic torque limiter

[\(see S4 series web page\)](#)

Explosion Proof

B7 Series Heavy Duty



24 VDC or 120 VAC

- NEMA 4/4X/7 enclosure
- Heater and thermostat installed in all actuators
- Manual override on all units

[\(see B7 series web page\)](#)

Manual

Tee Handle





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ORDERING INFORMATION



VALVE BODY

Size: _____

- C = 1/2" H = 2"
- D = 3/4" I = 2 1/2"
- E = 1" J = 3"
- F = 1 1/4" K = 4"
- G = 1 1/2"

Body Material: _____

- P = PVC
- C = CPVC

Seat and Seal Material: _____

- E = EPDM
- V = Viton®

End Connection: _____

- N = NPT
- S = Glue Socket



ACTUATOR

Pneumatic Actuators

Series: _____

- P = P Series Dual Scotch Yoke
- F = F Series Dual Rack & Pinion

Supply Air Pressure: _____

- 6 = 60psi 8 = 80psi

Function: _____

- S = Spring return D = Double acting

Fail Safe Position: _____

- C = Fail to CLOSED O = Fail to OPEN
- D = Fails to Last Position
- (omit) for direct acting

Electric Actuators

Series: _____

- V4, R4, K4 = Weatherproof (NEMA 4/4X)
- S4UV = Universal Voltage - Weatherproof (NEMA 4/4X)
- B7 = Explosion Proof (NEMA 7)

Voltage: _____

- A = 120VAC B = 24VDC F = 12VDC (all BUT S4UV which is 24 to 240 VAC/DC)

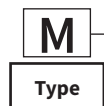
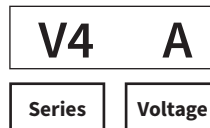
Manual Operators

Type: _____

- M = basic lever with locking device

Note: only one actuator may be chosen

Code continues to specify additional accessories and options





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ACCESSORIES

Solenoid Valves

NAMUR solenoid valves for direct mount to the actuator. Various coil and connector options are available including weatherproof, explosion proof, corded, NPT conduit, and cable gland.

3-way
for spring return models



3/4-way for
for double acting models



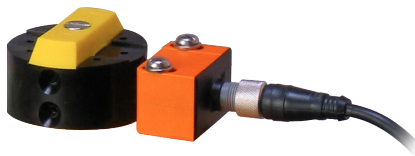
[Solenoid valve web page](#)

Limit Switches (valve position indicators)

Used to communicate the position of the valve to a PLC, HMI, or simple remote indicator lamp. Various switch technologies are available. All include a local visual indicator as well.

UA/UB Series

2x Solid state proximity switches; 1 for Open, 1 for Closed



YF Series

2x SPDT mechanical switches; 1 for Open, 1 for Closed



YE, YH, YO Series

2x Solid State Proximity Sensors or SPDT solid state switches



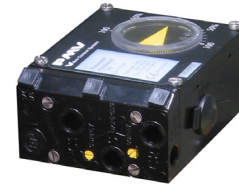
Other limit switches are available [Limit Switch web page](#)

Modulating Positioners

Add modulating control to either of our pneumatic actuator series. These positioners mount to the top of the actuator using the NAMUR standard mounting hole and stem pattern.

Pneumatic

0-15 psi control signal



Electro-pneumatic

4-20mA control signal



With feedback unit

4-20mA feedback signal or 2x SPDT switches



[Positioner web page](#)