



international polymer solutions

## IPS PTFE Chemical Injection Control Valve

International Polymer Solutions Inc. is proud to introduce our new line of PTFE Chemical Injection Control Valves.

Offering precision performance under extreme conditions, our all-wetted PTFE design is ideally suited for chemical wet process in water, wastewater, pharmaceutical, life science and general chemical handling applications. The PTFE construction guarantees best-in-class inert characteristics for high purity applications and exceptional chemical resistant behavior for corrosive applications.

With a wide range of options available, our IPS Chemical Injection Control Valve can solve the most challenging Chemical Dosing problem. Whether injecting Fluoride, Chlorine, Chlorine Dioxide, Ammonia, Sulfuric Acid, Nitric Acid, Peracetic Acid or any number of other process chemistries, our PTFE Chemical Injection Control Valve will self-regulate and control the dosing flow rate to gallons per hour (GPH) of injected chemistry.

Our IPS PTFE Chemical Injection Control Valve is factory configured with a PTFE Pressure Regulator allowing for a wide range of inlet source pressures from fixed Chemical Storage Tanks and Vessels. The days of manually adjusting over time for large inlet pressure variation are gone. The Control Valve design incorporates a quarter-turn tapered orifice which modulates the media flow up to a 10:1 ratio.



### Quarter-Turn Actuation Options:

- Electromechanical 4 to 20ma Control Signal
- Electromechanical On/Off with Return Spring
- Pneumatic On/Off with Return Spring
- Manual Actuation with Topside Hand Lever

### Porting Options:

- ½" FNPT Connection
- ½" ANSI 150# Flange Connection
- ½" Mini Sanitary Connection
- 1" Ladish Sanitary Connection

### Inlet Pressure Regulation:

- 2 psi to 20 psi Fixed Set Point Pressure Regulation to Control Valve
- Source Pressure at Pressure Regulator Inlet from set point up to 80 psi

### Control Valve Flow Characteristics:

- Configurable Fixed Tapered Orifice on PTFE Ball
- Flow Configuration A: 2 to 12 GPH max (with zero flow when closed)
- Flow Configuration B: 4 to 32 GPH max (with zero flow when closed)
- Flow Configuration C: 6 to 60 GPH max (with zero flow when closed)
- Flow Configuration D: 10 to 100 GPH max (with zero flow when closed)
- Liquid Tight ANSI/FCI 70-2:2006 Class V Valve Seat Leakage (< 0.0002 GPH)

Call IPS with your unique  
Flow Requirements



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## Highlights:

- PTFE design optimized for inert high purity, chemical resistance and food safe use
- Ideally suited for harsh chemical media and elevated media temperatures
- All sealing surfaces are PTFE hard seated or diaphragm seals
- Actuation is rated for a continuous control duty cycle

## General Parameters:

- Orifice Cv (depending on design) 0.02 - 0.50
- Media Temperature (range) 0 - 100°C / 32 - 212°F
- Ambient Temperature (range) 0 - 50°C / 32 - 122°F
- Maximum Port Pressure Rating (psi) at Regulator inlet 80 psi
- Backpressure (psi) at Ball Valve outlet 20 psi

## Options Available on Request:

- Special Port Configurations
- End of Travel Limit Switches
- Continuous Position Feedback
- Special Mounting Configurations
- Custom Orifice Flow Patterns

Call IPS with your unique Valve Requirements

## ORDERING FORMAT

ICV - 88 - A - A - 420 - 1A

### End Connection:

- A = 1/2" ANSI 150# Flange
- M = 1/2" Mini Sanitary Connection
- L = 1" Ladish Sanitary Connection
- F = 1/2" FNPT Port Connection

### Actuator Type:

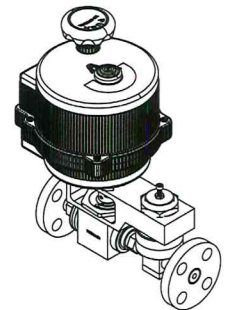
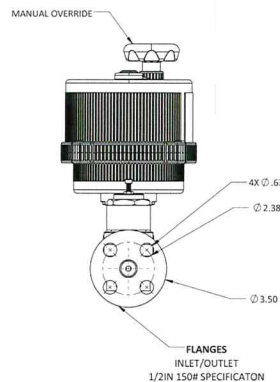
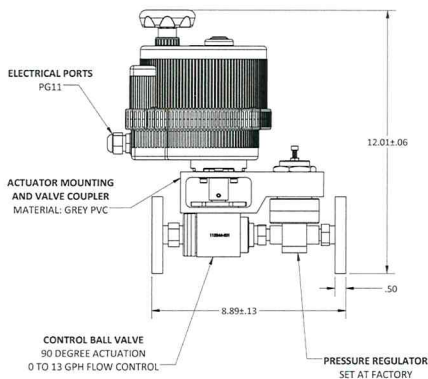
- 420 = 4-20ma Electromechanical
- OOE = On/Off Electromechanical
- OOP = On/Off Pneumatic
- MAN = Manual Actuator

### Flow Configuration:

- A = Flow A: 2 - 12 GPH
- B = Flow B: 4 - 32 GPH
- C = Flow C: 6 - 60 GPH
- D = Flow D: 10 - 100 GPH

### Power Configuration (if Electromechanical):

- 1A = 115VAC Power to Electromechanical Actuator
- 2A = 230VAC Power to Electromechanical Actuator
- 1D = 12VDC Power to Electromechanical Actuator
- 2D = 24VDC Power to Electromechanical Actuator



## IPS Product Notes:

1. Please email Customer Service at [info@ipolymer.com](mailto:info@ipolymer.com).
2. Call us for special applications. We can manufacture our Valves with special mounting and interface dimensions.
3. Upon request, alternate material selection from those listed will allow for expanding temperature ratings or other performance characteristics.
4. Unauthorized disassembly of this product will void the original factory one-year product warranty. For further details please contact your local Distributor or our factory directly.

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