



# FX-8 Series Chlorine Gas Auto-Pacing Valve



## FEATURES

- Automates any chlorinator system.
- Can also be used for Sulphur Dioxide, Ammonia, or Carbon Dioxide.
- Takes a standard 4-20mA signal from a flowmeter, compound loop control system, or PLC.
- Available as a “Servo Only” to retrofit cabinet style units.
- V-Notch sizes from 0-5 to 0-2000 PPD feed rates.
- Available with auto/manual control and input LED display.
- Optional 4-20mA re-transmission output and limit switches

## DESCRIPTION

The Foxcroft FX-8(E) is a gas feed control valve that can be used to automate existing or new chlorination systems. The servo constantly changes valve position to follow the input signal, which can be from a flowmeter, compound loop controller, or any 4-20mA signal control source. A dosage control allows adjustment of valve travel, and hence chlorine residuals, from 50% to 200% of span. The servo uses a variable-speed, reversible AC gear motor for smooth, even response to even slight changes in the control signal.

Installation is simply a matter of plumbing the FX-8 unit in-line between the chlorinator and the injector. What type of input signal is used depends on the application. A signal from a flowmeter will provide “flow-paced” control of your chlorine residual levels. Typically this is done where flows vary considerably and chlorine demand is reasonably constant. A signal from a chlorine analyzer and a setpoint (or compound-loop) controller will provide “residual-paced” control. This setup is used where flow is constant and chlorine demand is variable. Signals from a flowmeter and a chlorine residual analyzer, connected through a compound-loop controller, will provide flow and residual-paced or “compound-loop” control. Compound-loop control is used where flow and chlorine demand are both variable and/or where a higher degree of chlorine residual control is required.

Several options are available including: Auto/Manual Control, LED Input Display, 4-20mA Valve Position Re-Transmitter, and Valve Position Limit Switches.

# FX-8 Series Chlorine Auto-Pacing Valve

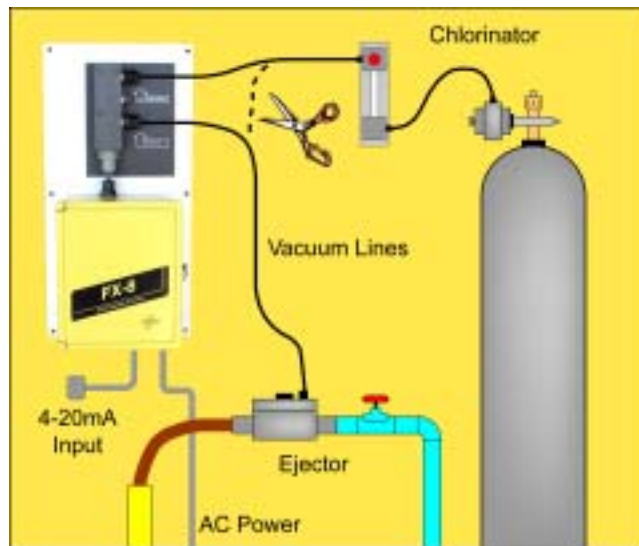
## SPECIFICATIONS

### GENERAL

Ranges Available  
(in Pounds per Day): . . . . . 0-4, 0-10, 0-25, 0-30,  
0-50, 0-100, 0-175,  
0-200, 0-300, 0-350,  
0-400, 0-500, 0-1000,  
0-2000

For best results the range chosen should be based on the typical control range of the application, not the maximum span of the application. For example: A sewer plant that is designed to handle up to 1 million gallons per day might see typical flows of up to only 300,000 GPD. A valve that is sized to match the 1 MGD maximum plant flow would normally be operating in the lower 30% of its control range. This doesn't give as much control resolution as a valve that is sized to the 300,000 GPD, which would have a 100% control range and therefore more accuracy. Future range changes can be made in the field just by changing out the V-Notch for a larger or smaller size.

Accuracy: . . . . . +/- 2% of Span  
Sensitivity: . . . . . +/- 2% of Span  
Turndown Ratio: . . . . . 10 to 1  
Speed of Response: . . . . . 10 Seconds per Inch  
Valve Travel: . . . . . 3 Inches  
Ambient Temperature: . . . . . 0 to 120 degree F.



### ELECTRICAL

Signal Input: . . . . . 4-20mA DC, 37.5 ohms impedance  
Power Requirements . . . . . 120 Volts AC, 60 hz; 230 VAC, 50 hz optional

### MECHANICAL

Electronic Enclosure: . . . . . NEMA 4X  
Instrument Mounting: . . . . . Wall Mount  
Overall Dimensions: . . . . . The entire assembly measures 24" high x 12" wide x 7" deep

### OPTIONS

Auto/ Manual Control, Digital Display, Diagnostic Card, No Flow/ Full Flow Limit Switch Set, 4-20mA Retransmitter, Compound Loop Input, Step Rate Control (Pump Control)



PO Box 39  
2101 Creek Road  
Glen Moore, PA  
19343  
(610) 942-2888  
(800) 874-0590  
fax: (610) 942-2769  
www.foxcroft.com

Distributed By:

Every effort has been made to ensure the accuracy of this document at the time of printing. In accordance with the company's policy of continuous product improvement Foxcroft reserves the right to make product changes without notice. No liability is accepted for any consequential losses, injury or damage resulting from the use of this document or from any omissions or errors herein.