



— MODEL — **138-01** (Sizes 3" - 12")  
(Full Internal Port)

**638-01** (Sizes 4" - 16")  
(Reduced Internal Port)

## Electronic Actuated Positioning Control Valve



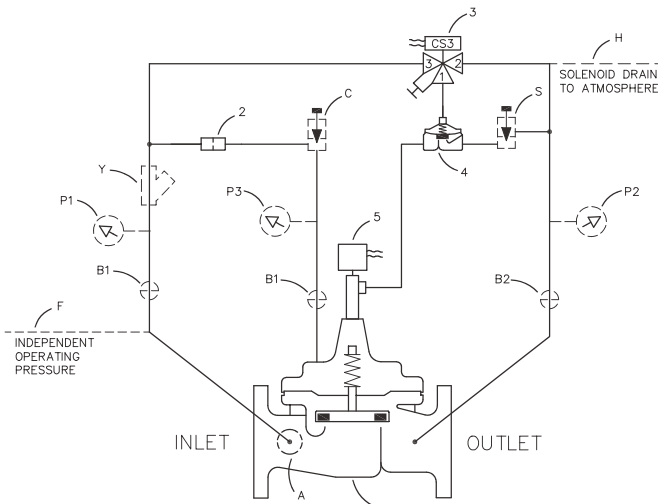
### Product Features and Benefits

- Precise Valve Position Control
- Completely Self-contained
- High Energy Efficiency with Low Operation Friction
- Direct Control of Valve Opening and Closing
- Combines with Pressure, Flow or Level Control
- Ideal for SCADA Control
- Easy adjustment and maintenance
- Fully Supported Frictionless Diaphragm for trouble-free service and low maintenance

### Product Enhancements

Get more from your valve by adding any of the following optional features.

- KO Anti-Cavitation Trim
- Epoxy Coating
- X141 Pressure Gauge
- Stainless Steel Tubing and Fittings
- X43H-Style Strainer
- Stem Upgrade to Delrin® or Dura-Kleen®



### Schematic Diagram

Item	Description
1	100-01 Hytrol Main Valve
2	X58A Restriction Fitting
3	CS3 Solenoid Control
4	100-01 Auxiliary Hytrol (Reverse Flow)
5	CPC Electronic Actuator Positioning Control

### Optional Features

Item	Description
A	X46A Flow Clean Strainer
B	CK2 Isolation Valve
C	CNA Needle Valve (Closing)
F	Independent Operating Pressure
H	Solenoid Drain to Atmosphere
P	X141 Pressure Gauge
S	CNB Needle Valve (Opening)
Y	X43 "Y" Strainer

### How It Works

The Cla-Val Model 138-01/638-01 Electronic Actuated Positioning Control Valve regulates flow or pressure or other system parameter by changing valve position from full open to shut-off. Exact valve position for large-scale waterworks or industrial applications is achieved with CPC pilot control that consists of electronic actuator and hydraulic pilot sub-assembly. The CPC controls valve position by limiting valve opening using hydraulically-assisted technology. The pilot sub-assembly has two calibrated orifices that are positioned proportional to valve position to vary main valve control chamber operating pressure. The CPC actuator creates slight changes in orifice position and in turn operating pressure hydraulically changes valve position. The pilot sub-assembly requires very little torque and is virtually frictionless for long service life. The actuator features high repeatable-accuracy brush-less motor technology and low energy consumption. Precision, no-contact hall-effect internal position sensor assures accuracy and durability. The CPC has factory pre-configured parameters of full valve stroke, preset rotation speed, and default setting on loss of set point. Actuator parameters can be changed using free downloadable software and special USB cable. Valve fully-closed position is assured by signaling solenoid to lock control pressure in main valve operating chamber when valve is very close to seat (adjustable). Operating on 24 VDC and with customer supplied battery backup, the 138-01/638-01 valve can eliminate downtime due to power failures.