

CPC — MODEL —

Electronic Actuated Positioning Pilot Control

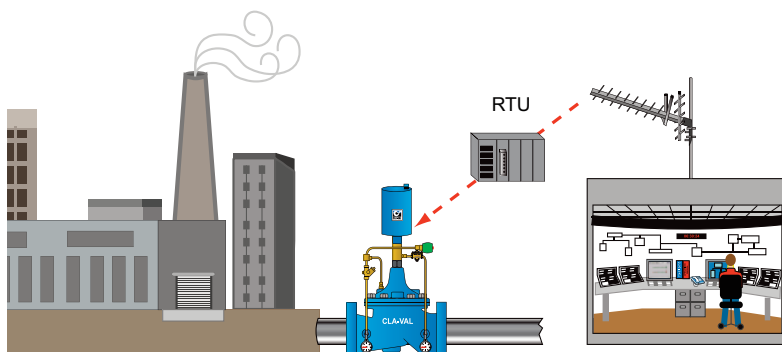


- **Precise Valve Position Control**
- **Completely Self-contained**
- **High Energy Efficiency with Low Operation Friction**
- **Direct Control of Valve Opening and Closing**
- **Combines with Pressure, Flow or Level Control**
- **Ideal for SCADA Control**
- **Optional 133VF Valve-Mounted Flow Monitoring**

The Cla-Val CPC Electronic Actuated Positioning Control regulates flow through Cla-Val Main Valves by changing valve position from full open to shut-off. The CPC consists of electronic actuator and hydraulic pilot sub-assembly. The CPC controls valve position by hydraulically limiting valve opening with hydraulically-assisted pilot modulating main valve. The pilot sub-assembly has two calibrated orifices that are positioned proportional to valve position to vary Cla-Val basic 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 durability. The CPC is factory pre-configured to full 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 CPC can eliminate downtime due to power failures.

Note: When retrofitting an existing valve, high capacity cover bearing must be installed. This requires removing the valve cover. Consult factory for details.

Typical Applications



Model 138-01 Electronic Position Process Control Valve

The CPC Electronic Actuated Positioning Control is used with 138 Series Electronic Actuated Control Valves in high rise building chill water circulating system applications. Building SCADA control systems often use multiple circulating system parameters to control valve position for optimizing water circulating system. Also, 138 Series valves are used in large water transmission systems where several system parameters must be controlled by one valve. SCADA system monitors various water distribution system parameters, such as downstream pressure, upstream pressure, tank level, time of day, flow rates in several zones, etc., and then remotely changes 138 Series valve position to meet several system requirements as all parameters continue changing.

Cla-Val 138 Series valves can have optional 133VF Flow Metering System installed for flow rate monitoring. Consult factory for details.