Electronic Products for Waterworks Applications

Products that provide control

VC-22D Electronic Valve Controller with Standard and Customizable ValvApps™

PID Control
Used in maintaining a control valve at setpoint, multiple PID loops can be programmed with each of them offering local or remote setpoints. A real-time chart view helps to visualize valve response and fine tune valve response. Programmable setpoint ramping prevents hydraulic shocks.

Control Curves
Offers an easy way to create a relationship between two system variables. Using graphical functions, the user draws the control curve relationship linking pressure, flow, level, and/or time directly on the screen. Up to four control curves allowing independent pump control valve opening and closing or tailored modulating level control.

Actions
Used to take "action" (or alarms) when programmable conditions (1 or 2) are met by forcing an output relay, solenoid, or 4-20 mA output. The closing relay can be used to send an alarm to SCADA. Up to four actions can be programmed including deadband.

Retransmission
Used to retransmit any input signal, variable, or calculation to a SCADA system. Up to four input signals such as pressure, flow, or level can be redirected through the 4-20 mA outputs.

DP Metering
A built-in function to calculate flowrate based on valve position and DP. The returned flow value can be displayed and controlled without a separate flow meter. A metering ValvApp with this feature is included in the standard internal library. All standard Cla-Val valve sizes curves are included.

Totalizer
Keeps track of total volume as a function of time. Customizable units & reset functionality allow for simplified set-up and configuration. Default logging is every 5 minutes but can be as low as 1 minute or customized intervals. Can be used for volume (or batch) control applications limiting water volume taken from supplier per day or into tank trucks.

Data Logging and Log File
All input and output values are logged according to a programmable schedule. Default logging is every 5 minutes but can be as low as 1 minute or customized intervals. 4 GB SD card memory allows greater than 80,000,000 values storage. Data is stored in MS-Excel (CSV) readable format. Transfer is by USB.

VC-22D Electronic Valve Controller
- Provides remote or local set-point control for valves in a variety of fluid applications
- Available versions: IP-68, IP-65 and Panel Mount
- Supplied with pre-loaded ValvApps™ for most common valve functions
- Custom ValvApps™ can be created for unique applications
- Monitors and displays multiple processes with accurate retransmission of parameters to SCADA systems
- Supplied with Standard Alarm Outputs
- Logging capabilities • Low power consumption

exceptional control • simple to use

34 Series Electronic Control

300 Series Electronic Control Valve

retrofittable 34 Series Electronic Pilot Control

Cla-Val 34 Series Electronic Actuated Pilot Control
- Provides simplified remote valve set-point adjustment
- Enables accurate downstream control using any SCADA-type control system using an analog 4-20mA signal
- 12-24VDC input power
- Reverse polarity protection
- IP-68 Submersible
- Ideal for isolated locations and confined spaces
- Available configurations:
  - CRD-34 Pressure Reducing Electronic Pilot Control
  - CDHS-34 Rate-of-Flow Electronic Pilot Control
  - CRL-34 Pressure Sustaining Electronic Pilot Control

remote control for a variable output

Cla-Val PC-22D Pump Control Panel

PC-22D Pump Control Panel

PC-22D Pump Control Panel
- Pre-programmed Valve Controller
- Suitable for all Booster Pump and Deep Well Applications
- Works with 60 Series and 131 Series Control Valves
- Electronically Control Open/Closing Speed of Control Valve
- Indicator Lights Monitor System Status
- NEMA 4X Rated Enclosure
- Controls single and dual chambered pump control valves
- Local visual indication of pump and control valve status
- Easy to adjust sequence timers
- Displays time for system to build pressure and for valve to open
- Contacts provided for remote or automatic start signal
- Operator interface buttons and reset switch

exceptional precision and reliability for smooth pump operations

Products that provide onsite power
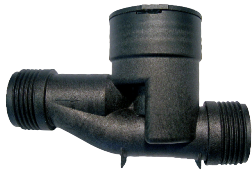
X143 Series Power Generators

retrofittable X143IP Power Generator

X143IP Intermediate Turbine Power Generator
- Uses the hydraulic energy of the system to generate power
- Retrofits to an existing Cla-Val Control Valve
- Can be specified on a new valve
- Ideal for isolated locations and confined spaces
- Generates up to 14 watts of power to operate onsite equipment without tying into the grid, including the following:
  - Electronic Control Valves
  - Electronic valve Controllers
  - Communications Equipment
  - Data loggers that capture and store information

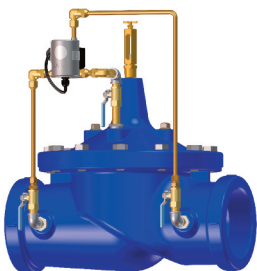**all you need is flow and differential pressure**

retrofittable X143MP Power Generator

X143MP Micro Turbine Power Generator
- Uses the hydraulic energy of the system to generate power
- Retrofits to an existing Cla-Val Control Valve
- Can be specified on a new valve
- Ideal for isolated locations and confined spaces
- Generates .7 watts of power to operate onsite equipment when there is no available power
- Use two in series to generate more power

- Ideal for applications using:
  - Cell phones and GSM communication devices
  - Data loggers that capture and store information

onsite power without tying into the grid

139-10 & 639-10 Programmable Timer Control Valve

Timer Controlled Valve with CTC-33 Control
- Two year battery life on the CTC-33
- Retains stored data even after battery is depleted
- Direct control of valve opening and closing times daily
- Interval Timing Capable
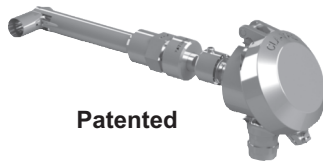- IP-68 Submersible

Cla-Val CTC-33 Timer Control
- Programmable daylight savings times
- High energy efficiency
- Battery life exceeds 2 years
- Retains stored data even after battery is depleted
- Direct control of valve opening and closing 4 times daily
- IP-68 submersible

ideal for remote locations • requires no electricity

Products that provide information

X144D e-FlowMeter with LCD Touch Screen Display

Patented

Installation view

269.3 gpm

simple • reliable • cost effective

X144D e-FlowMeter Vortex Shedding Meter
• The e-FlowMeter™ can be retrofitted to an existing Cla-Val Automatic Control Valve or factory assembled on a new valve
• Built-In LCD Touch Screen
• Alleviates the need for an inline meter and the associated installation costs
• Provides flow data with accuracy +/- 2% of Full Scale
• IP68 Submersible
• Mounts on either inlet body tapping of the Cla-Val Control Valve
• Stainless Steel Construction
• 12/24 VDC 1.0 Watts minimum
• Plug-and-Play Metering
• No Moving Parts
• Independent laboratory tested

UtahState University
Imperial College London

X145 Series e-Display

• Ideal for use with the X144 e-FlowMeter
• Displays: Flow Rate, Total, Pressure, Position and mA
• IP-67 Submersible
• SCADA compatible
• Customizable units
• Backlight optional
• Integral wall-mount hardware included

accurate • retrofittable • economical

X117 Series Valve Position Transmitter

• Accurately Monitors Valve Position
• Environmentally Sealed to IP-68
• Featured on Electronic Control Valves
• Easy Field Adjustments
• Compact and Rugged Construction

SCADA compatible • 4 to 20mA output signal

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