



# VC-22D Valve Controller Custom Capabilities

## Overview

The most valuable feature on the VC-22D Valve Controller is its flexibility. Since released, the VC-22D has been used to control anything from a simple 131-01 dual solenoid valve, to a complex pressure optimization system. Due to its powerful processor, the VC-22D can simultaneously perform multiple processes at once. The valve controller can be configured with various alarms to watch input signals & alarm if an event occurs. The VC-22D can be programmed with numerous timers for a pump control application. Whatever the system requirements may be, the VC-22D Valve Controller can handle it.



## Standard VavApps™

The VC-22D Valve Controller is shipped with 14 standard ValvApps™. In many cases, one of the ValveApps™ listed below will meet system requirements. There are other instances where this is not the case and a custom ValveApp™ will need to be developed. The list below shows the standard ValvApps™ as supplied.

1. 131 Flow Control, MagMeter Feedback
2. 131 Flow Control, X144 Feedback
3. 131 Level Control using Position
4. 131 Level Control using Flow
5. 131 Level Control, ON/OFF
6. 131 Upstream Pressure Control
7. 131 Downstream Pressure Control
8. 131 Position Control
9. 133 Metering, Flow Control, DP
10. 133 Metering, Flow Control, P1P2
11. 138 Flow Control, CPC
12. 138 Level Control, MagMeter
13. 390 Downstream Pressure Control
14. 390 Pressure Optimization

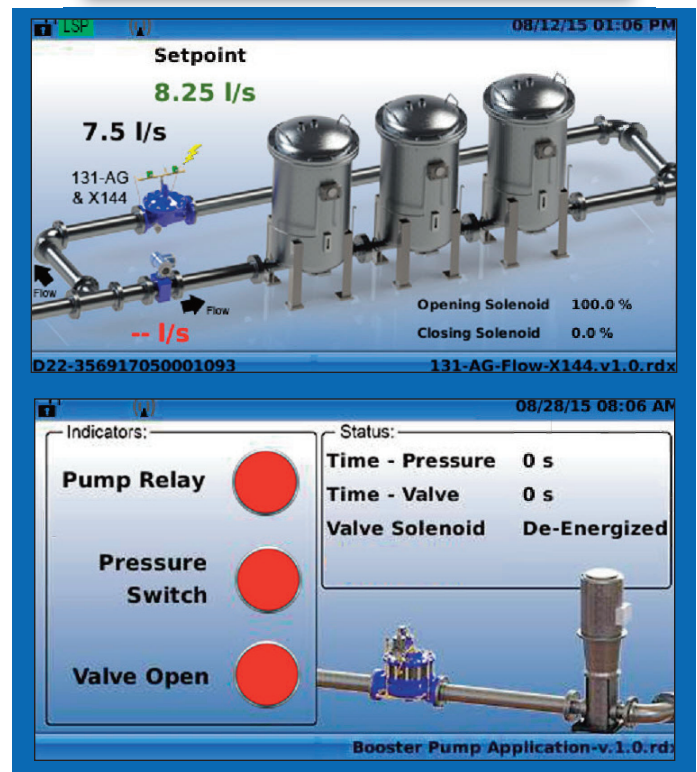
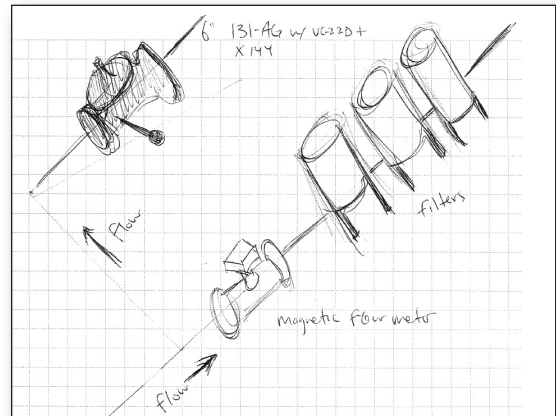
## Custom Programming

Cla-Val engineers have the ability to write custom ValvApps™ to suit any application requirement. Using a proprietary development environment call "R-Designer", programs can be customized with multiple PID functions, totalizers, metering functions, various alarms, control curves, numerous timers, or any advanced logic system requirement as shown below.

IF	~Version 1.0~
GOTO	
YEAR	
MONTH	
DAY	
DOW	
HOURS	
MINUTES	
SECONDS	
NOW	
	~Inputs & Outputs~
	DI1; ~Auto Pump Sta
	DI2; ~Control Valve
	DI3; ~Pressure Swit
	DI4; ~Manual Start
	DI5; ~Manual Stop P
	DI6; ~Emergency Sto
	RO1; ~Pump Relay~
	RO2; ~Valve Solenoi

## Custom Programming

Using "R-Designer", custom graphics can be inserted into any ValvApp™. Customer logos, system indicators and timers can be added with ease to the VC-22D home screen. A rough customer sketch like the one shown below explaining the layout is all that's required to develop the ValvApp™ as depicted in the two screenshots that follow.



## How Do I Download My Custom ValvApp™ To the VC-22D Controller?

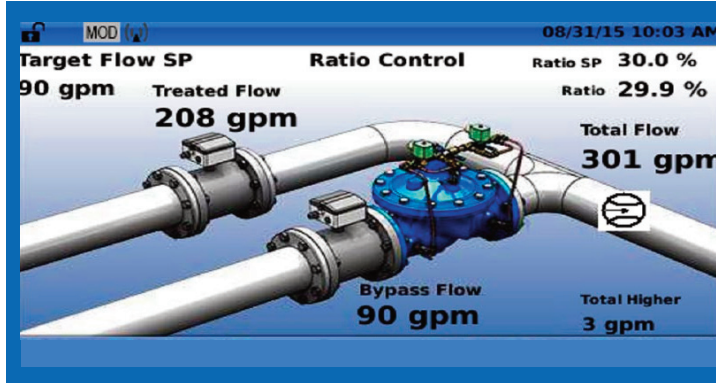
Downloading a custom ValvApp to the VC-22D is a simple process. Once you receive an email with your new custom ValvApp™, simply copy the file to a USB flash drive and insert into the valve controller. Using the 5 button keypad, navigate to the "Application Management" menu and import the ValvApp™.



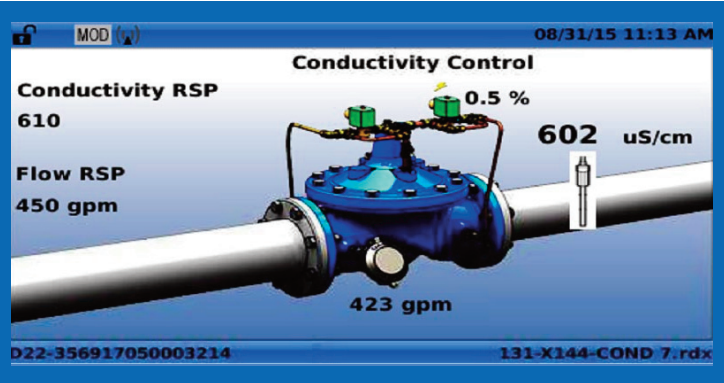


# VC-22D Valve Controller Custom ValvApp™ Examples

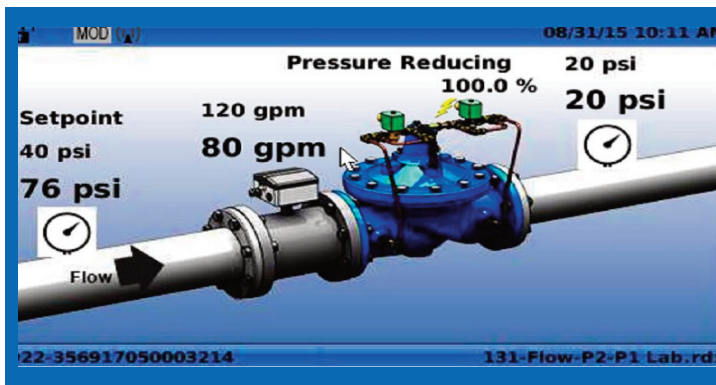
Ratio Control ValveApp™



Electrical Conductivity Control ValveApp™

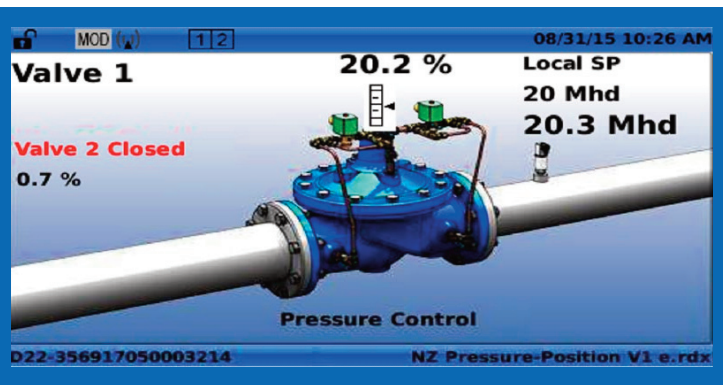


Multiple Function ValveApp™

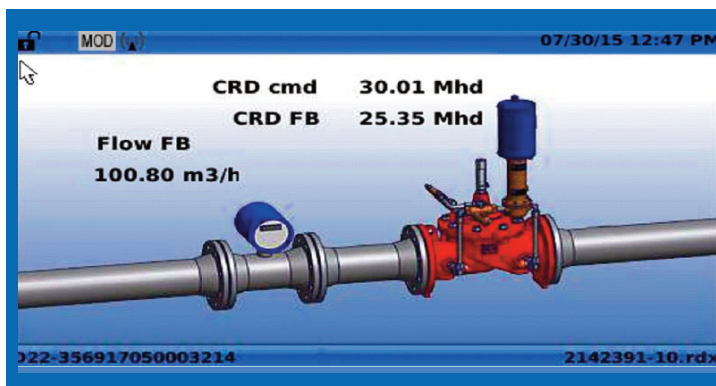


Three Functions: Flow Control • Pressure Reducing and Pressure Sustaining

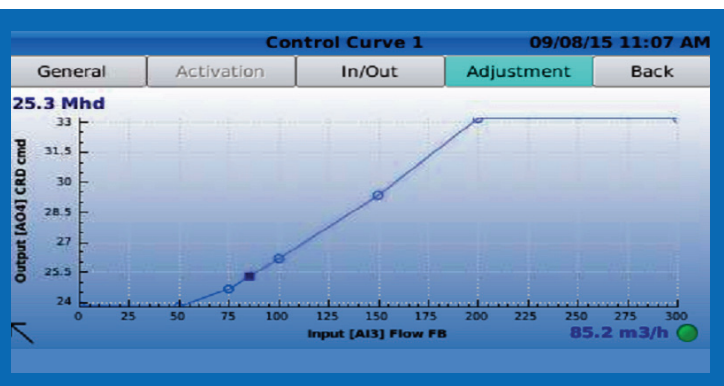
Parallel Valve ValveApp™



Pressure Optimization ValveApp™



Pressure Optimization ValveApp™ Curve



M-VC-22D Custom Capabilities

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