

RCVC

RED CIRCLE VALVE CONTROLLER



RUGGED. INTELLIGENT.

VALVE CONTROL WITH ZERO STEADY STATE EMISSIONS FOR NATURAL GAS CONTROL VALVES

The **VRG Red Circle Valve Controller (RCVC)** provides accurate positioning of natural gas control valves using analog or discrete electronic input signals.

Compatible with all VRG Controls valve actuators, the RCVC can also be installed on virtually any pneumatic control valve actuator. It features **zero steady-state** with the ability to route emissions to a suitable nearby pressure system.

Its high-pressure capability enables the use of more compact pneumatic actuators, while advanced programmable controls, diagnostics, and operational features provide reliable performance and easy integration for new or retrofit applications.

KEY FEATURES:

RCVC Override – Apply 24 VDC to
OPEN/CLOSE Valve – No Additional Hardware Required

OPEN/CLOSE on loss 24 VDC Power Supply –
For Spring Return Actuated Control Valves

RCVC will fail on loss of Command and/or Feedback Signal.
Fail Open
Fail Closed
Lock Last/Fail Last position.

Directionally Adjustable Deadband and Pulse Control in OPEN or CLOSE Direction
Pulse Control Allows Adjustable “Asymptote Response” to Eliminate Valve Overshoot

Alarm Output (24 VDC) to Indicate Failure of:
Command Signal
Feedback Signal
RCVC Placed in Manual Mode
RCVC System Fault

**Alarm Output (24 VDC) can Register in Control System and/or trigger a
Device Such as Solenoid Valve**

Class 1, Div. 1 Ex Proof Terminal Strip Housing Provides Generous Room for Easy Wire Termination.
Remote Install Option – REM Box IP 56, Fabricated SS.

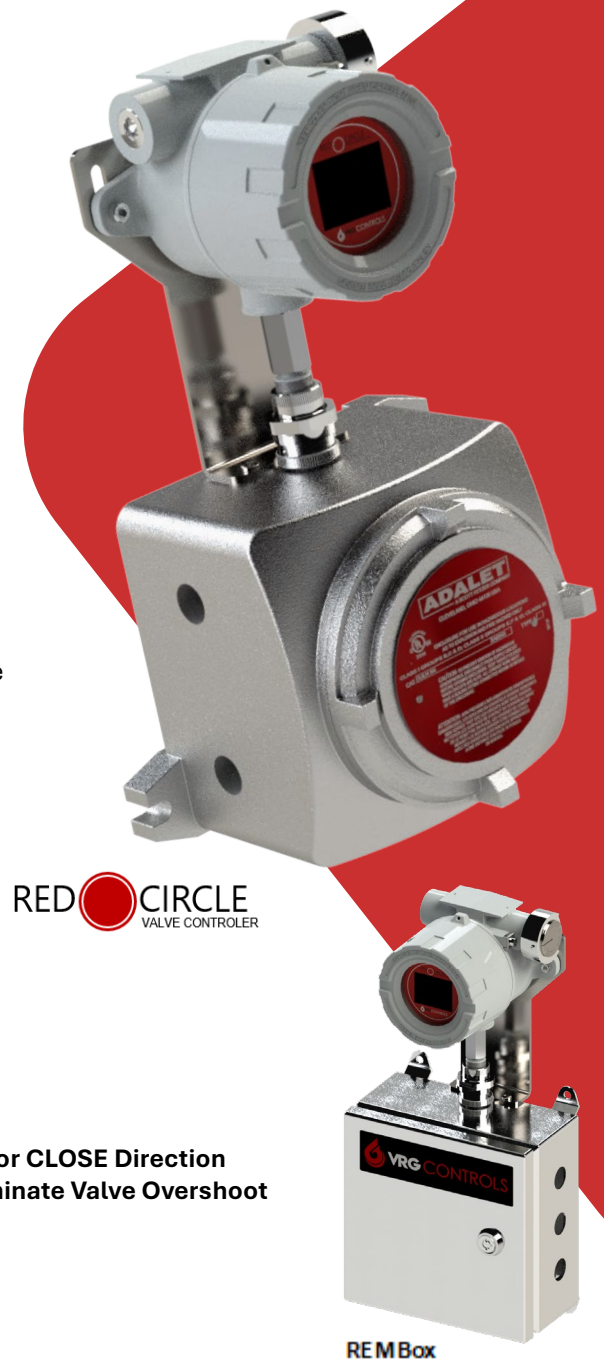
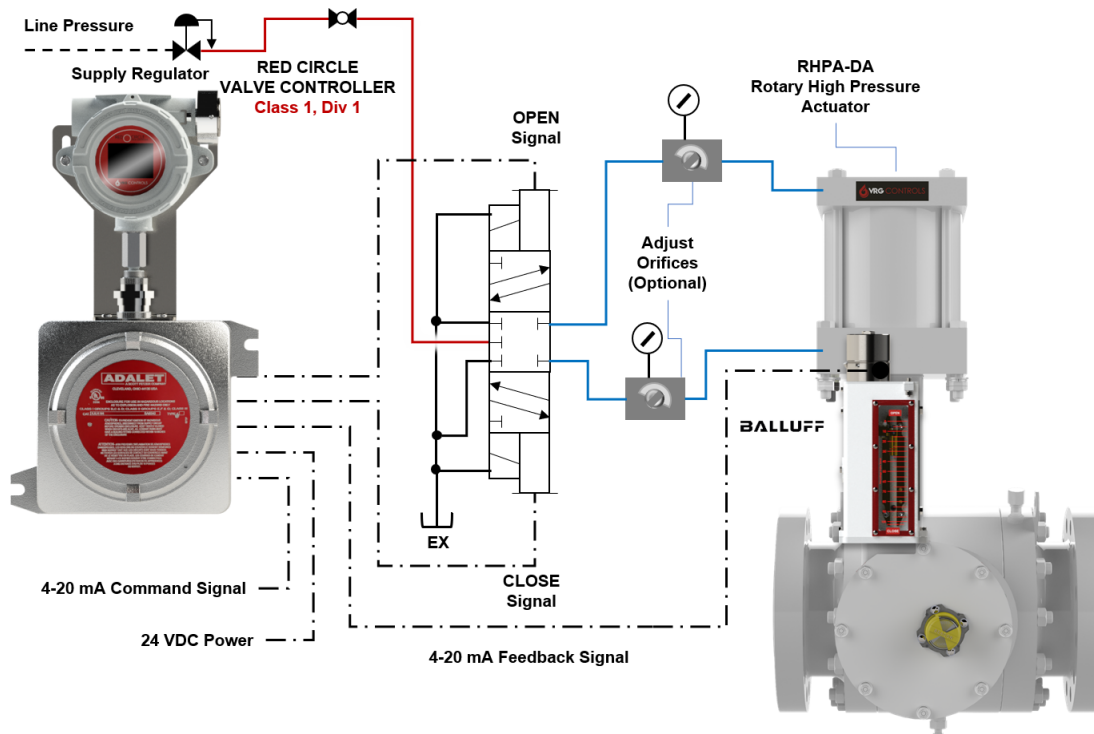


TABLE 1.0 RCVC SPECIFICATIONS

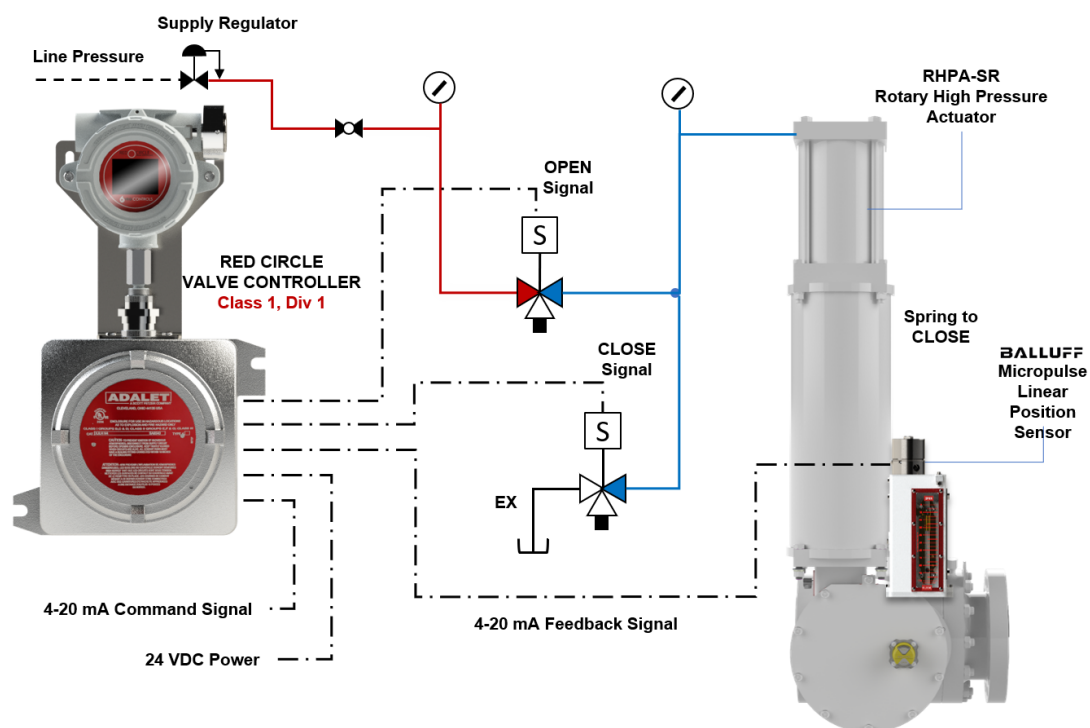
POWER SUPPLY	
Power Supply	19-30 VDC
RCVC Module Current	50mA max
RCVC Total Assembly Rating	2A max
Onboard Fuse	Limitron: FNQ-R-2 600VAC IR 200kA
DIGITAL OUTPUTS	
Configurable Solenoids	3 Max
Voltage	24 VDC
Load Current (max)	1.0 Amps
DIGITAL INPUTS	
No. Digital Inputs	2 (Configurable)
Voltage	24 VDC
Input Current	5.0 mAmps
DIGITAL OUTPUTS	
No. Digital Outputs	3 (Open Sol, Close Sol, Auxiliary)
Voltage	24 VDC
Load Current (max)	250 mAmp
ANALOGUE INPUTS	
No. Analogue Inputs	2 (Feedback, Command)
Input Type	Current / Voltage
Voltage Input Range	1 - 5.0 VDC
Voltage Input Impedance	100 kOhms
Current Input Range	4 - 20 mA
Current Input Impedance	300 Ohms
Resolution	1 in 3600
ANALOGUE OUTPUTS	
Output Type	Current / Voltage
Voltage Output Range	4.0 - 20.0 ma / 0 - 3.0 VDC
Resolution	1 in 3600
SOLENOID OHMS	
AAA	58 - 65 Ohms
Asco	43 - 54 Ohms

APPLICATION SCHEMATICS

HI PRESSURE DOUBLE ACTING CONFIGURATION

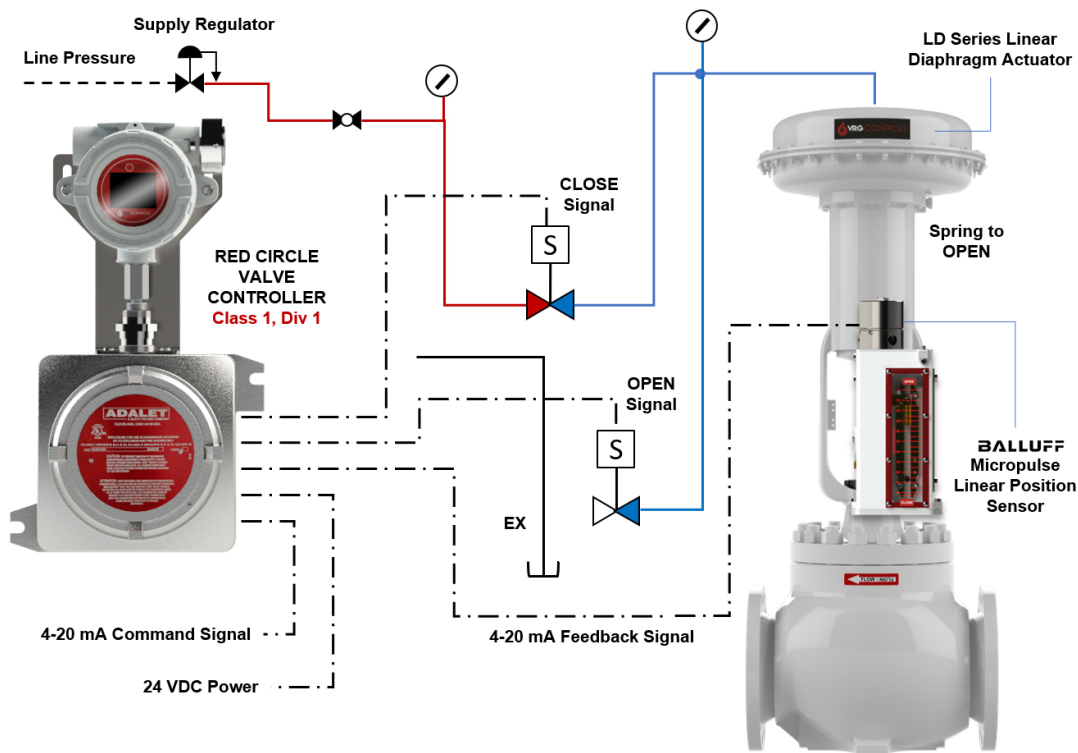


HI PRESSURE SINGLE ACTING CONFIGURATION



APPLICATION SCHEMATICS

LOW PRESSURE DOUBLE ACTING CONFIGURATION



PRESSURE CONTROL OVERRIDE – LOW PRESSURE SINGLE ACTING

