

Control Valve Solutions

for Agricultural Irrigation Applications





Precise Control for Irrigation Applications

Typical Industries Served Cla-Val Automatic Control Valves are ideal for use in the agricultural irrigation industry. In addition to their flexible design and precise performance, Cla-Val products are also known for exceptional quality and durability. Regardless of the application, we have the product you need to meet your unique operational requirements.

Typical Applications

Cla-Val Automatic Control Valves are available in the sizes and materials necessary to achieve optimum performance in any fluid control application, including but not limited to the following:

Surge Control

Pressure Control - Hydraulic or Electronic

Pressure Reducing

Pressure Relief

Pressure Sustaining

Backpressure

Flow Control

Pump Control

Solenoid Control

Level Control

Check Valves



Extensive Material Options

One of Cla-Val's greatest strengths is the ability to produce valves in more than 50 different metals poured in two onsite foundries located at our 20-acre facility in Southern California. The foundry facilities also include a pattern shop where customized patterns are built to meet unique customer requirements and a full metallurgical laboratory that tests samples of metals poured before, during and after the casting process.

Metal Alloys

A representative sample of available materials include:

- · Ductile Iron
- Cast Steel
- · Stainless Steel
- Monel
- · Nickel Aluminum Bronze
- Titanium
- Super Duplex Stainless Steel
- Super Austenitic Stainless Steel



Elastomers

The wide range of materials is further extended to the choice of elastomers we can provide to ensure that the valves can withstand the service for which they are intended. Common choices include BUNA N, Viton®, EPDM, Silicone, Neoprene, among others.

Engineering Expertise

Cla-Val has been in the control valve business for over 80 years. The Engineering expertise we developed along the way has enabled us to design hundreds of thousands of valve configurations for both standard and complex applications.

Our fully staffed, in-house Engineering team, combined with extensive industry knowledge enables us to develop solutions for just about any fluid control application you can think of.

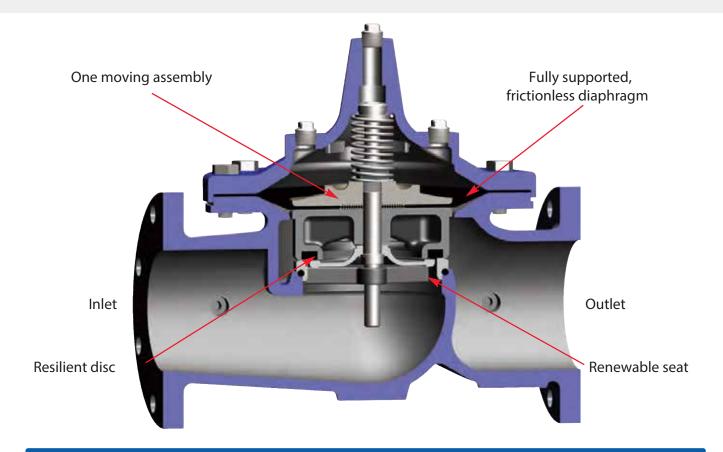
Manufacturing Know-How

Since the first Cla-Val Automatic Control Valve was produced in 1936, we have manufactured the best quality control valves available, utilizing the latest in manufacturing technology.

Each valve is tested and inspected before leaving the factory in accordance with the Cla-Val Quality Control Program and ISO 9001: 2008 requirements.



Inside a Cla-Val Automatic Control Valve



Many Material Options • Epoxy Coating for Durability • Stainless Steel Trim and Pilot Controls

Pressure Classes

ANSI 150 and 300

End Connections

· Threaded · Flanged · Grooved

Sizes

• 10 mm through 12 20 mm

Working Pressures: 150 Class Valves

- Ductile Iron: 250 psi maximum
- · Cast Steel: 285 psi maximum
- · Stainless Steel: 275 psi maximum

Working Pressures: 300 Class Valves* ‡

- Ductile Iron: 400 psiCast Steel: 400 psi
- · Stainless Steel: 400 psi

Body Styles

- Globe or Angle Pattern
- Full or Reduced Port

Stem Options

- · Standard Stainless Steel
- Optional Dura-Kleen® Stem with Fluted Surface to prevent deposit build-up
- Optional Delrin® Sleeved Stem for applications with dissolved minerals to prevent scale deposits

Control Options

- Hydraulic
- Electronic
- Electronic with Hydraulic Fail-Safe Back-Up
- · Solenoid Operated

All Cla-Val Control Valves can be serviced without removal from the pipeline. Additional options can be added to provide multiple functions in a single valve, including flow metering and check features.

Notes

- * Other flange options are also available
- ‡ Consult factory for higher pressures



Turnkey Solutions for Irrigation

Manufacturing a complete range of valves



- Butterfly Valves
- Check Valves
- Automatic Control Valves
- Gate Valves
- Ball Valves
- Rubber Bellows

Cla-Val Pacific -- Located in New Zealand - 1122 square meters of manufacturing and a local team of product experts ready to support customers 24/7

Cla-Val Canada
-- Over 10,220
square meters of
manufacturing
space dedicated
to serving
Cla-Val Pacific
customers
throughout
Australasia



Field Service



Field Service Capabilities

- Valve Start-Up
- Valve Overhaul
- Annual Maintenance
- · Valve Upgrade
- Valve Replacement
- Valve Installation
- Troubleshooting
- Annual Start-Up and System Shutdown Contracts



Field Support wherever, whenever you need it!

Local Inventory



Project Capabilites

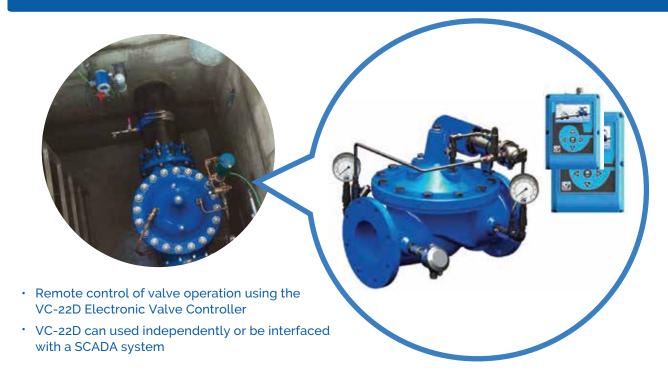
- Complete Valve Packages
- Actuation and Control
- Piping Transition Sets
- Property Offtake Structures

For an overview of our complete product range, please visit us online at www.cla-valpacific.com Call the factory at 64 39644860 or send your inquiries to info@cla-valpacific.com



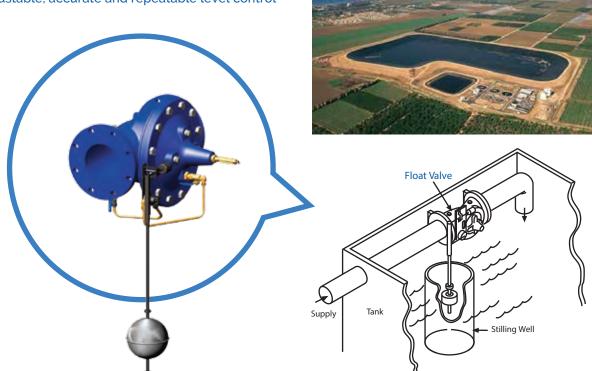
Typical On-Off Valve Applications

131 Series Electronic Control Valve with VC-22D Controller



Float Control On-Off Service (124 Series)

- Designed to open fully when the liquid level reaches a pre-set low point and close drip-tight when the level reaches a preset high point
- · Fully adjustable, accurate and repeatable level control





Typical Modulating Applications

40 Series



Flow Control

- · Prevents excessive flow by limiting flow to a preselected maximum rate
 - Ideal for pumping applications
- and rate-of-flow control for transmission header

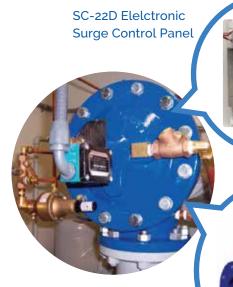
90 Series



Pressure Reducing Service

- Automatically reduces a higher inlet pressure to a steady lower downstream pressure, regardless of fluctuations
- When downstream pressure exceeds the pressure setting of the control pilot, the main valve and pilot valve close drip-tight

50 Series





- · Opens fast to maintain line pressure and closes slowly to prevent high pressure surges
- · Ideal for pump discharge pressure control or pressure relief at a transmission header
- · For extreme surge conditions, use Model 52-03



Available Models

- 50-01
- 50-03
- 52-01
- 52-03



Butterfly Valves for Irrigation Applications

Model 2302

Wafer Butterfly Valve

- Sizes: DN40 DN700
- Working Pressure: ≤ 25 Bar
- Working Temp: -20°C to 150°C

Materials:

- · Body: CI/DI/WCB/SS/Bronze
- · Disc: DI/SS/Bronze
- Seat: EPDM/NBR/FPM/PTFE





Model 2502

Lug Butterfly Valve

- · Sizes: DN40 DN700
- Working Pressure: ≤ 25 Bar
- Working Temp: -20°C to 150°C

Materials:

- · Body: CI/DI/WCB/SS/Bronze
- · Disc: DI / SS / Bronze
- Seat: EPDM/NBR/FPM/PTFE

Double Flanged Butterfly Valve

- · Sizes: DN50 DN3000
- Working Pressure: ≤ 16 Bar
- Working Temp: -20°C to 150°C

Materials:

- · Body: Ductile Iron
- · Disc: DI / SS
- · Seat: EPDM / NBR / FPM



Model 2123

Model 2102

AWWA C504 Double-Flanged Butterfly Valve

- Sizes: DN80 DN1500
- · Working Pressure: ≤ 21 Bar
- Working Temp: -20°C to 120°C

Materials:

- · Body: Ductile Iron
- · Disc: DI / SS
- Seat: EPDM / NBR

Materials: Body: Duc

• Body: Ductile Iron / WCB

U-Type Butterfly Valve

• Sizes: DN1500 - DN1200

• Working Pressure: ≤ 16 Bar

• Working Temp: -20°C to 150°C

- Disc: DI / SS / Bronze
- · Seat: EPDM / NBR / FPM / PTFE

Model 2986

Model 2122

Triple Eccentric Butterfly Valve

- Sizes: DN50 DN2800
- Working Pressure: ≤ 63 Bar
- Working Temp: -196°C to 550°C

Materials:

- Body: WCB / CF8M / WC6/ LCB
- Disc: WCB / CF8M / WC6/ LCB
- · Seat: SS304+Graphite

Model 2688

Double Eccentric Butterfly Valve

- Sizes: DN100 DN2000
- Working Pressure: ≤ 25 Bar
- Working Temp: -10°C to 120°C

Materials:

- · Body: Ductile Iron
- · Disc: DI / SS
- Rubbre Seals: EPDM / NBR



Cla-Val Pacific offers a complete range of butterfly valves for commercial applications including potable water, fire protection and HVAC systems. Known for their quality and reliable performance, the valves below are just a few of the many solutions we provide to the worldwide marketplace.

Model GFLEX-F1

Single-Sphere Rubber Joint with Floating Flangers

- Sizes: DN32 DN600
- · Working Pressure: 16 Bar
- · Working Temp: -10°C to 120°C

Materials:

- Flange: Ductile Iron (32-300) Mild Steel (350-600)
- Rubber: EPDM





Model 7105

Basket Type Strainer

- Sizes: DN50 DN600
- · Working Pressure: 16 Bar / 25 Bar

Materials:

- · Body: Ductile Iron
- · Cover: Ductile Iron
- Screen: SS 304 / SS 316

Model 7101

Y-Type Strainer

- Sizes: DN50 DN650
- · Working Pressure: 16Bar / 25 Bar

Materials:

- Body: Ductile Iron / Cast
- Cover: Ductile
- · Screen: SS 304 / SS 316





Model 3226

AWWA C509 NRS Resilient Seat Gate Valve

- · Standard: AWWA C509
- Sizes: DN50 DN300
- · Working Pressure: 200 psi
- Working Temp: -4°F to 230°F

Materials:

- · Body: Ductile Iron
- · Disc: EPDM Coated DI

Model 3233

BS/MSS OS&Y Resilient Seat Gate Valve

- · Standard: BS 5163 / AWWA C509
- · Sizes: DN50 DN400
- Working Pressure: 16 Bar
- Working Temp: -20°C to 120°C

Materials:

- · Body: Ductile Iron
- · Disc: EPDM Coated DI





Model 3243B

BS NRS Resilient Seat Gate Valve

- · Standard: BS 5163
- Sizes: DN50 DN600
- · Working Pressure: 16 Bar
- Working Temp: -20°C to 120°C

Materials:

- · Body: Ductile Iron
- · Disc: EPDM Coated DI

Model 3143

BS NRS Metal Seated Gate Valve (Heavy pattern, Horizontal)

- Standard:BS 5163/ BS 5150
- Sizes: DN300 DN1400
- · Working Pressure: 16 Bar
- Working Temp: -10°C to 120°C

Materials:

- · Body: Ductile Iron
- Disc: Ductile Iron
- · Seat: SS316 / Bronze





Model 3141

BS NRS Metal Seated Gate Valve (Heavy pattern, Vertical)

- Standard:BS 5163/ BS 5150
- Sizes: DN300 DN1400
- Working Pressure: 16 Bar
- Working Temp: -10°C to 120°C

Materials:

- · Body: Ductile Iron
- Disc: Ductile Iron
- · Seat: SS316 / Bronze

Air Release and Vacuum Breaker Valves CLA-VAL For Irrigation Applications

33 Series High Performance Air Release and Vacuum Breaker Valve





Designed to protect pipelines and vertical turbine pump applications from air lock and vacuum collapse, the Model 33A Air Release and Vacuum Breaker Valve eliminates air and prevents vacuum formations in pipelines.

- · Corrosion resistant materials of construction
- Standard Working pressure = 300 psi. Higher pressure available.

34 Series Air Release Valve

Cla-Val 34 Series Air Release Valves are designed to vent entrained air that collects at high points in a pipeline. This valve continuously eliminates air from a system by releasing small quantities of air before large air pockets can occur. In many installations, continuing accumulations of air in the pipeline (lacking air release valves); cause flow capacity to slowly decrease; power consumption slowly increases; unnoticeable at first, until flow drops dramatically, even stopping due to air blocks in the piping.



35 Series Air Release and Vacuum Breaker Valve



The Cla-Val 35 Series Air and Vacuum Valve is designed to perform two separate functions. First, it will allow large quantities of air to be exhausted from the pipeline as it is being filled with water. When this air has been vented completely, water will enter the valve causing the float to seal tightly against the seat to prevent water flow. Secondly, if the line is being drained, either intentionally or as a result of pipeline breakage, the valve responds to the loss in pressure and opens. This allows air to re-enter the pipeline and prevents potentially damaging vacuum from developing.

36 Series Combination Air Release Velve

The Cla-Val 36 Series Air and Vacuum Valve is a multipurpose valve that combines the operation of both the Model 34 Air Release Valve and Model 35 Air and Vacuum Valve. It functions to exhaust large quantities of air in the pipeline during the filling cycle and to admit air, as necessary, to prevent potentially dangerous vacuum from forming when being emptied either intentionally or as a result of pipeline breakage.

- · Stainless Steel Standard
- · Stainless Steel Floats Guaranteed
- · Fully Ported Valves No Restrictions
- · Easily Serviced Without Removal From Pipeline





Products That Help Your System Operate at Peak Efficency

In addition to a complete line of Automatic Control Valves, Cla-Val also manufactures a wide range of complementaryproducts that can significantly improve the performance and stability of any fluid handling system. For a comprehensive overview of available valve accessories and enhancements, visit www.cla-val.com

Check Valve



580P Series Silent Wafer Check Valve







582P Series Two-Door Wafer Check Valve

580P, 581P & 582P Series Check Valves

- Valves close to prevent flow reversal
- Can be installed in vertical or horizontal positions with flow up or flow down
- Available in sizes 50mm to 250mm, 125 lb. or 250 # pressure class rating

583 Foot Valve

- Full Pipe Size Flow Area
- D

584 Flex Check Valve

- Full Pipe Size Flow Area
- Drip Tight Seating with Non-Slam Closure
- Fusion Bonded Epoxy NSF-61

585 Swing Check Valve

- · Full-flow body allows unrestricted flow
- Available in sizes 50mm through 1220mm

583 Series Foot Valve





585 Series Swing Check Valve





Cavitation Protection



KO Trim

Cla-Val's KO anti-cavitation trim fight cavitation invalve applications with extreme pressure differentialsand high velocity flow conditions.

- 316 Stainless Steel construction
- · Significantly reduces noise and vibration
- · Helps improve reliability and performance
- · Extends valve life



Pressure Gauge



The Stainless Steel X141 Pressure Gauge, available insizes 2.5 and 4-inches, is an easily retrofittable solutionin applications where visual pressure indication isdesired.

Typical Installation



In-Line Strainer



- · Provides an effective means of removing unwanted solid particles in pipeline flow
- · Low Pressure Drop
- Ductile Iron Fusion Bonded Epoxy Coated Construction with a 316 Stainless Steel Strainer
- · Large Flow Area H-Style Design
- · Service Without Removal From Line



X43 H-Strainer

Preventive or emergency service performed by factory-trained technicians

One of the best ways to ensure that your system operates at peak efficiency is to perform preventive maintenance on a regular basis. When it comes to Cla-Val automatic control valves, no one can do a better job at keeping your valves in tip-top shape than our own in-house team of factory trained field service technicians.

Service Capabilities

- Emergency repairs performed by certified technicians on call, 24 hours a day, 7 days a week
- Periodic inspection, maintenance and cleaning of installed valves, without removal from the pipeline
- Complete on-site valve refurbishment, including replacement of rubber goods and change-out of metal parts
- · Complete valve rebuilds in the shop
- Field retrofits of a wide array of accessories and components to enhance valve function
- · Factory trained and knowledgeable field technicians
- Safe work practices performed by confined space certified technicians
- Fully equipped service vehicles, outfitted with cranes for heavy lifting
- · Complete inventory of replacement parts, direct from the factory
- · Technical and Engineering Support
- · Customer-oriented approach to maintenance and repair
- Backed by the assurance that comes with working with the industry leader and the only control valve company with manufacturing in New Zealand



Fully stocked service trucks



Factory certified parts



Extensive Field Experience



Preventative Maintenance and Emergency Service

