

exceptional quality, reliability and performance

### **Precise Control for Commercial & High Rise Applications**

### **Commercial Service**

Supplying water in commercial applications and high rise buildings has changed dramatically over the past few decades as architects and contractors design and build ever taller residential and commercial structures.

In 1965, the tallest building in the world was the Empire State Building in New York City, standing at 381 meters tall. Today, the tallest building is the Burj Khalifa in Dubai United Arab Emirates at 828 meters. Even this megatall structure is about to be eclipsed by the Kingdom Tower in Jeddah, Saudi Arabia. This mammoth building will reach 1,000 meters tall when completed in 2019.

Buildings that tall face many challenges with regard to supplying domestic water for drinking, bathing and sanitation, as well as water needed for cooling and fire fighting. Fortunately, Cla-Val has the complete range of products needed to meet the needs of today's megatall structures.





### **Typical Applications**

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

#### **Pressure Control - Hydraulic or Electronic**

- Pressure Reducing
- o Pressure Relief
- Pressure Sustaining
- Booster Pump Stations

**Surge Control** 

**Flow Control** 

**Pump Control** 

**Solenoid Control** 

**Level Control** 

**HVAC Chill Water Fluid Control** 

Fire Suppression System Deluge

**Fire Pump Casing Relief** 

Fire System Piping Breach Control

**Check Valves and Air Release 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 80 square meter 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 nearly 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.

### **Control Valves for High Rise Fire Protection Systems**

#### Model 90-21

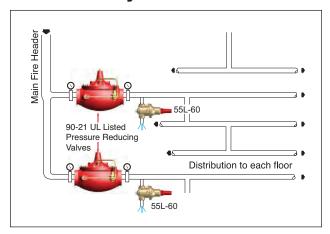




M E A APPROVED

#### **Pressure Reducing**

- Automatically reduce a higher inlet pressure to a steady lower outlet pressure
- Pilot control system automatically opens or closes to maintain the desired pressure setting



#### Model 50B-4KG1/2050-4KG1







In applications with high pressure differentials or where a high probability for cavitation exists, use the valve equipped with KOL anti-cavitation trim.

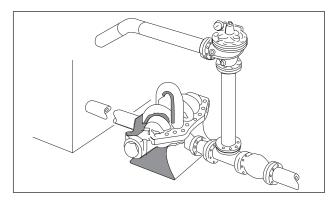
## Fire System Pressure Relief

- At pump start, the valve modulates to relieve excess pump capacity and maintain positive system pressure at the pump discharge
- When fire demand slows or ceases, the valve opens, diverting entire pump output to discharge, allowing fire pump to be stopped without causing surges in the pipeline









#### Model 55L-60

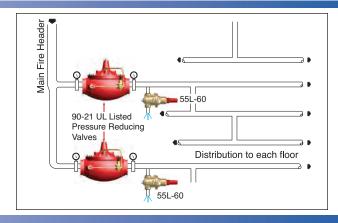




#### **Fire Pump Casing Relief**

- Used in a fire protection system to trim water pressure, preventing pressure build-up when line pressure exceeds the setting of the spring
- Relieves excess pressure to atmosphere preventing damage to the distribution network





## Model 33ATD

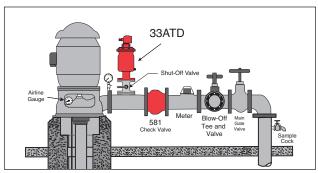




## 33ATD Air Release & Vacuum Breaker Valve with Air Throttling Device

- · Automatically eliminates air pockets
- · Easily serviced without removal from pipeline
- · Corrosion resistant internal parts
- Threaded and flanged inlet options available
- · Sizes 2", 3" and 4" UL Listed





### **Valves for High Rise Fire Protection Systems**

Cla-Val Pacific offers a complete range of check valves and strainers for commercial applications including potable water, fire protection and HVAC systems. The durable valves provide precise and reliable service in a wide variety of fluid applications. They complement our other product lines to create a comprehensive suite of control options in high-rise commercial and residential structures.

#### Model GF50



## Resilient Seated, Flanged End Check Valve

- Sizes: DN50 DN300
- · Working Pressure: 14 / 17 / 21
- Meets AWWA C508 Standards

#### Materials:

Body: Ductile Iron



#### Model GG50



## Resilient Seated, Grooved End Check Valve

- Sizes: DN50 DN200
- Working Pressure: 14 / 17 / 21
- · Meets AWWA C508 Standards
- UL/FM Pending
- Materials:
- · Body: Ductile Iron

#### **Model GF70**



#### Y-Strainer Double Flanged Ends

- Sizes: DN50 DN300
- · Working Pressure: 14 / 17 / 21

#### Materials:

· Body: Ductile Iron



#### Model GC50



#### Y-Strainer Flange- Grooved Ends

- Sizes: DN50 DN300
- Working Pressure: 14 / 17 / 21

#### Materials:

· Body: Ductile Iron



#### **Model GG70**



#### Y-Strainer Grooved Ends

- Sizes: DN50 DN300
- Working Pressure: 14 / 17 / 21

#### Materials:

· Body: Ductile Iron



#### **Model GG25**



## Resilient Seated, Grooved End Butterfly Valve

- Sizes: DN50 DN300
- Working Pressure: 14 / 17 / 21
- UL/FM Pending

#### Materials:

· Body: Ductile Iron

#### Model GW25



## Resilient Seated, Grooved End Butterfly Valve

- Sizes: DN50 DN300
- · Working Pressure: 14 / 17 / 21
- UL/FM Pending

#### Materials:

· Body: Ductile Iron

#### Model GF31



## Resilient Seated, Flanged Ends OS&Y Gate Valve

- · Sizes: DN50 DN300
- Working Pressure: 14 / 17 / 21
- Meets AWWA C515/BS5163

#### Materials:

· Body: Ductile Iron



### **Control Valves for Domestic Water Applications**

#### **Master Pressure Reducing Valve Set**

- Valve set contains Pressure Reducing Valves, Excess Pressure Safety Valves, Pressure Gauges, Strainers and Isolation Ball Valves
- Cla-Val Products featured:
  - Model 90G-01
  - Model 50G-33

#### Cla-Val 90G-01 Pressure Reducing

**Valve** This valve is a highly accurate regulator capable of holding downstream pressure to a predetermined setting, regardless of upstream pressure fluctuations.



## Cla-Val 50-33 Excess Pressure Safety Shut-Off Valve

This valve automatically protects the downstream distribution piping and fixtures from experiencing excess unsafe pressures in the event that outlet pressure of the high flow PRV rises above an acceptable level.





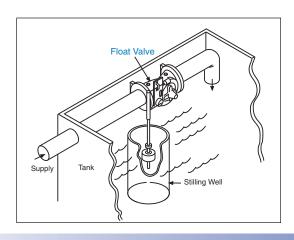
#### Float Control/Level Control On-Off Service



- Use this level control valve when a domestic or fire reserve water storage is used in a highrise building
- Ideal for gravity fed or suction tanks as part of a fire protection system in a high-rise structure

#### **124 Series Float Control Modulating Valves**

- 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





### **Control Valves for Domestic Water 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



#### 50 Series



#### **Available Models**

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

#### **Pressure Relief/Sustaining**

- 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



SC-22D Elelctronic Surge Control Panel



#### 60 Series



#### **Pump Control Valves**

- Designed to meet critical pump control application requirements with precise performance and maximum durability.
- Use on the discharge of a booster pump to prevent pipeline surges caused by starting or stopping of the pump
- PC-22D Pump Control Panel for optimum control





### Cla-Val Condo-Valve Product Line

In addition to Cla-Val's main product line, we also offer a line of products that are uniquely suited for use in condominium buildings. Compact, durable and reliable, these valves offer a cost-effective means to control flow and pressure in high-density residential structures.

#### 80-960 Series



#### **Direct Acting Pressure Reducing Valve**

- · Automatic operation
- · Easy adjustment and maintenance
- Reduces a higher inlet pressure to a lower downstream pressure, regardless of pressure fluctuations
- · Sizes: DN 40 to DN 150
- · Upstream pressure: 40 bar maximum
- Downstream pressure: 2 to 14 bar



#### Model CRD-L



#### **Compact Pressure Reducing Valve**

- Automatically reduces a higher inlet pressure to a steady, lower downstream pressure
- Accurate regulator for holding downstream pressure to a pre-set level, regardless of upstream pressure fluctuations
- Use CRD-L Pressure Reducing Valves in various high rise water systems (potable water, boiler feed air conditioning, etc.) to control pressure fluctuations between floors



W Series



#### **Hydraulic Control Valve**

- Configurations available for a variety of applications:
  - Pressure Reducing
  - Pressure Sustaining
  - Remote Control and other combinations
- · Sizes: DN 25 DN 200
- · Maximum pressure 16 bar
- · Maximum temperature 79° C



362 Series



#### **Automatic Air Vent Valve**

- Use is heating and air conditioning systems to remove excess air
- Available in sizes 10mm 25mm nd a variety of configurations
- Maximum working pressure 110° C
- · Durable nickel-plated brass body



### **Products That Help Your System Operate at Peak Efficiency**

In addition to a complete line of Automatic Control Valves, Cla-Val also manufactures a wide range of complementary products 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-valpacific.com

#### **Check Valves**







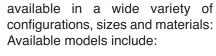
Model 580P



Model 581P



Model 582P



Cla-Val Pacific Check Valves are

- 501 Wafer Swing Check
- 580P Silent Wafer Check
- 582P Double Door Wafer Check
- 583P Foot Valve
- 584P Flex Check
- 585P Swing Check



Model 583



Model 584P



Model 585P

#### **Cavitation Protection**



Cla-Val's KO anti-cavitation trim fight cavitation in valve applications with extreme pressure differentials and high velocity flow conditions.

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



**KO Trim** 

#### Air Release and Vacuum Breaker Valves



Model 33ATD - with Throttling Device

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, for higher pressure applications, consult factory
- Used in both Domestic Water and Fire Protection piping systems



Model 33A -Threaded

#### 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

### **Butterfly Valves for Commercial Applications**

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 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

#### **Model 2122**



#### **U-Type Butterfly Valve**

Sizes: DN150 - DN1200
Working Pressure: ≤ 16 Bar
Working Temp: -20°C to 150°C

Materials:

Body: Ductile Iron / WCBDisc: DI / SS / Bronze

Seat: EPDM / NBR / FPM / PTFE

#### **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 IronDisc: DI / SSSeat: EPDM / NBR

#### **Model 2123**



#### **Double Flanged Butterfly Valve**

Sizes: DN50 - DN3000
Working Pressure: ≤ 16 Bar
Working Temp: - 20°C to150°C
Materials:

Body: Ductile IronDisc: DI / SS

· Seat: EPDM / NBR / FPM

#### **Model 2688**



#### **Double Eccentric Butterfly Valve**

Sizes: DN100 - DN2000
Working Pressure: ≤ 25 Bar
Working Temp: - 10°C to120°C

Materials:

Body: Ductile IronDisc: DI / SS

• Rubber Seals: EPDM / NBR

#### **Model 2986**



#### **Triple Eccentric Butterfly Valve**

Sizes: DN50 - DN2800Working Pressure: ≤ 63 Bar

• Working Temp: -196°C to 550°C **Materials:** 

Body: WCB / CF8M / WC6/ LCB
 Disc: WCB / CF8M / WC6/ LCB

· Seat: SS304+Graphite

visit www.cla-valpacific.com to learn more about our complete line of fluid control solutions

## **Valves for Commercial Applications**

Cla-Val Pacific offers a variety of companion products for commercial applications including potable water, fire protection and HVAC systems. The products are constructed of top quality materials in an ISO 9000 certified facility, governed by a rigorous quality control program to ensurance durability and reliable performance.

#### Model 7101



#### Y Type Strainer

Sizes: DN50 - DN650

Working Pressure: 16 / 25 Bar

#### Materials:

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

#### **Model 7105**

### **Basket Type Strainer**

· Sizes: DN50 - DN600

· Working Pressure: 16 / 25 Bar

#### Materials:

· Body: Ductile Iron / Cast Iron · Cover: Ductile Iron / Cast Iron

• Screen: SS 304 / SS 316

#### Model 5101/5102



#### **BS/MSS Metal Seated Flange Type Swing Check Valve**

Standard BS 5153

Sizes: DN50 - DN600

· Working Pressure: 16 Bar

Working Temp: -10°C to 120°C

#### Materials:

· Body: Cast Iron · Disc: Cast Iron

· Seat Ring: Bronze

#### **Model 5203**



#### Flange Type Lifting Check Valve

Standard F-F to DIN 3202 F1

Sizes: DN15 - DN300

Working Pressure: 16 Bar

Working Temp: -10°C to 120°C

#### Materials:

· Body: Cast Iron · Disc: Cast Iron Seat: SS420

#### Model 1209-BT



#### **Fixed Orifice Double Regulating Valve**

Standard BS 7350

Sizes: DN15 - DN50

Working Pressure: 150 Class

Working Temp: -10°C to120°C

#### Materials:

· Body: Bronze

· Ends: NPT Threaded

#### Model 1209-DF



#### **Fixed Orifice Double Regulating Valve**

· Standard BS 7350

Sizes: DN65 - DN500

· Working Pressure: 250 / 300 Class

• Working Temp: -10°C to120°C

#### Materials:

· Body: Ductile Iron

• Flange: Class 150 / Class 250

#### Model 1210-DF



#### **Fixed Orifice Double Regulating Valve**

· Standard BS 7350

Sizes: DN65 - DN500

· Working Pressure: 250 / 300 Class

Working Temp: -10°C to120°C

#### Materials:

· Body: Ductile Iron

Flange: Class 150 / Class 250

#### Model 1200SSW



#### **Double Flow Measurement Device**

Sizes: DN65 - DN600

Working Pressure: ≤ 25 Bar

Working Temp: -10°C to 120°C

#### Materials:

· Orifice and Carrier: SS

Pressure Test Valves: Brass

### **Valves for Commercial Applications**

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 3233**



#### 3233 BS OS&Y Resilient Gate Valve

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

#### Materials:

· Body: Ductile Iron

· Disc: EPDM Coated Ductile Iron

#### Model 3243B



#### **LBS NRS Resilient Seat Gate Valve**

Standard BS 5163 / AWWA C509Sizes: DN50 - DN400Working Pressure: 16 Bar

• Working Temp: -20°C to 120°C

#### Materials:

· Body: Ductile Iron

· Disc: EPDM Coated Ductile Iron

#### **Model 3246**



#### **DIN F4 NRS Resilient Seat Gate Valve**

Standard: DIN 2252 F4
Sizes: DN50 - DN600
Working Pressure: 16 Bar
Working Temp: -20°C to 120°C

#### Materials:

· Body: Ductile Iron

Disc: EPDM Coated Ductile Iron

#### **Model 3126**



#### **DIN F4 NRS Resilient Seat Gate Valve**

• Standard DIN 3352 F4 Heavy Pattern

Sizes: DN40 - DN400
Working Pressure: 10 Bar
Working Temp: -10°C to 120°C

#### Materials:

Body: Cast IronDisc: Cast IronSeat: Brass

#### **Model 3213**



#### **DIN F4 OS&Y Metal Seated Gate Valve**

Standard DIN 3352 F4
Sizes: DN40 - DN300
Working Pressure: ≤ 16 Bar
Working Temp: -10°C to 120°C

#### Materials:

Body: Cast Iron / Ductile IronDisc: Cast Iron / Ductile Iron

· Seat: Brass

#### **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 to120°C

#### Materials:

Body: Ductile IronDisc: Ductile IronSeat: SS 316 / Bronze

#### **Model 6123**



#### BS / MSS OS&Y Globe Valve

 Standard BS EN 13789 (BS 5152) and MSS SP-85

Sizes: DN50 - DN300
Working Pressure: 16 Bar
Working Temp: -10°C to 120°C

#### **Model 6125**



#### DIN OS&Y Globe Valve

Standard: DIN 3356
Sizes: DN15 - DN300
Working Pressure: 16 Bar
Working Temp: -10°C to 120°C

#### Materials:

Body: Cast Iron

• Disc: WCB / CF8M / WC6/ LCB

Seat: SS304+Graphite



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**B-Valve Solutions for Commercial Applications** Cla-Val Pacific (R- 06/2018)