



124-01
(Sizes 1/2" - 6" Full Internal Port)
MODEL
624-01
(Sizes 3" - 8" Reduced Internal Port)

Float Valve



- **Accurate and Repeatable Level Control**
- **On-Off or Non-Modulating Action**
- **Fully Adjustable High and Low Level Settings**
- **Simple Design, Proven Reliable**
- **Easy Installation and Maintenance**

The Cla-Val Model 124-01/624-01 Float Valve is a non-modulating valve that accurately controls the liquid level in tanks. This valve is 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.

This is a hydraulically operated, diaphragm valve with the pilot control and float mechanism mounted on the cover of the main valve. The float positions the pilot control to close the valve when the float contacts the upper stop. The high and low liquid levels are adjusted by positioning the stop collars on the float rod. The difference between high and low levels can be adjusted to as little as one inch, or to as much as eighteen inches.

Level settings can be as much as eleven and one half feet below the valve. The float mechanism may be located remotely from the main valve. See the technical data sheet on Model CF1-C1 Float Control for additional information.

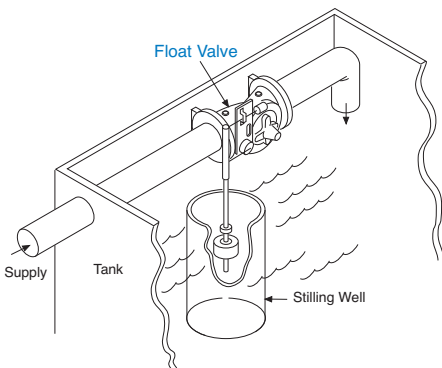
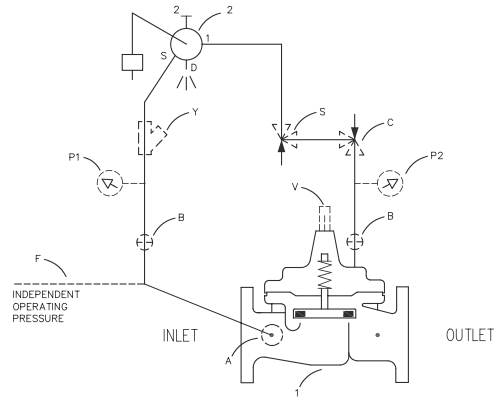
Note: For 8" and Larger Float Valve Sizes use Model 124-02/624-02

Schematic Diagram

Item	Description
1	100-01 Hytrol Main Valve
2	CF1-C1 Float Control

Optional Features

Item	Description
A	X46A Flow Clean Strainer
B	CK2 Isolation Valve
C	CV Flow Control (Closing)
F	Independent Operating Pressure
P	X141 Pressure Gauge
S	CV Speed Control (Opening)
V	X101 Valve Position Indicator
Y	X43 "Y" Strainer



Typical Applications

The Model 124-01/624-01 Float Valve is commonly mounted above the high water level in a tank. Globe pattern valves are supplied standard with the float control mounted on the cover as illustrated, with a horizontal discharge. Angle valves are configured to discharge downward.

- Note:**
1. We recommend protecting tubing and valve from freezing temperatures.
 2. Must be inspected periodically

A clear independent source of air or water may be used to operate the valve (option F). The pressure from this independent source must at all times be equal to or greater than pressure at the valve inlet.

If minimum flowing line pressure is less than 10 psi, consult factory.

If the float control is remotely mounted from the main valve, the control may be installed at any elevation above the valve, provided the flowing line pressure in psi is greater than the vertical distance in feet between the valve and the float control. See the technical data sheet on Model CF1-C1 for additional information.

Installation

A stilling well (8" minimum diameter) must be provided around the float. When the valve is mounted on top of the tank roof, a 2" clearance hole should be provided for side movement of the float rod where the rod goes through the top of the tank.

Product Dimensions Data:

For the 124-01 Main Valve (100-01) dimensions, see pages 17.
For the 624-01 Main Valve (100-20) dimensions, see pages 29.

129-01

(Full Internal Port)

MODEL

629-01

(Reduced Internal Port)

Float Valve



- **Accurate and Repeatable Level Control**
- **Proportional Flow**
- **Reliable Hydraulic Operation**
- **Drip-Tight Positive Shut-Off**
- **Completely Automatic Operation**

The Cla-Val Model 129-01/629-01 Float Valve maintains a relatively constant level in storage tanks and reservoirs by admitting flow into the tank in direct proportion to the flow out of the tank. It is a hydraulically operated, pilot controlled, diaphragm valve. The rotary disc type float operated pilot control is installed at the high liquid level in the reservoir and is connected via tubing or pipe to the main valve. As the liquid level changes, the float control proportionally opens or closes the main valve, keeping the liquid level nearly constant. If the check feature option "D" is added and a pressure reversal occurs, the downstream pressure is admitted into the main valve cover chamber and the valve closes to prevent return flow.

Schematic Diagram

Item	Description
1	100-01 Hytrol Main Valve
2	X47A Ejector
3	Bell Reducer
4	CFM2 Float Control

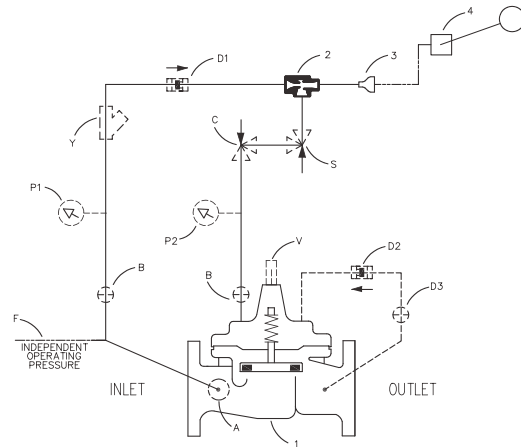


**NSF/ANSI 372:
National Lead Free
Mandate "Reduction
of Lead in Drinking
Water Act"**



Optional Features

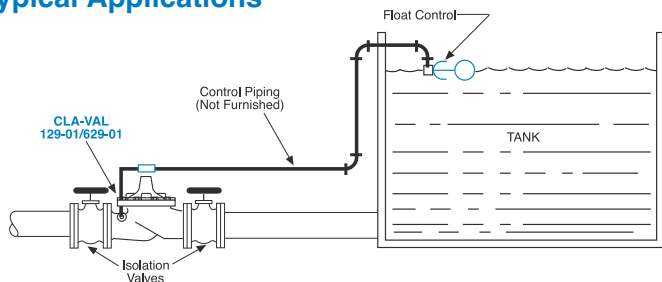
Item	Description
A	X46A Flow Cleaner Strainer
B	CK2 Isolation Valve
C	CV Flow Control (Closing)
D	Check Valves With Isolation Valve
F	Independent Operating Pressure
P	X141 Pressure Gauge
S	CV Speed Control (Opening)
V	X101 Valve Position Indicator



Product Dimensions Data:

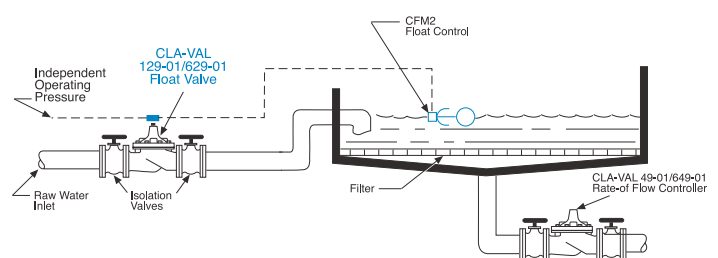
For the 129-01 Main Valve (100-01) dimensions, see pages 17.
For the 629-01 Main Valve (100-20) dimensions, see pages 29.

Typical Applications



Piping and Tank Sizing

Install valve and control as shown in the diagram above. The float control should be located in a still liquid surface. If it is necessary to obtain this condition, a stilling well should be constructed. Mount the float control on the connecting piping with the outlet port at the desired high water level. When a separate source of supply pressure (Option F) is used by the pilot control system, that pressure must at all times be constant and equal to or greater than the pressure at the valve inlet.



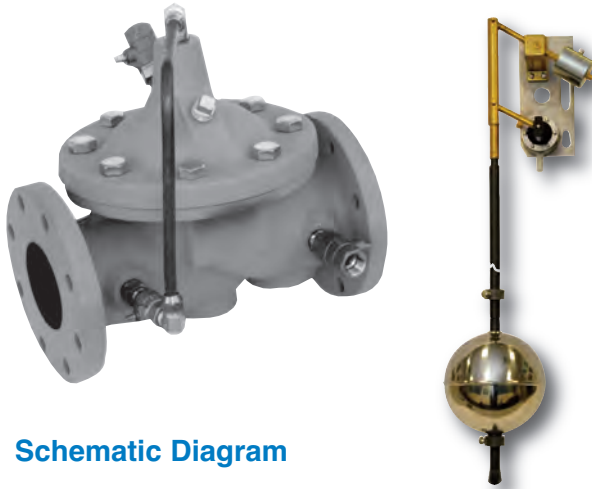
Filter Liquid Level Control

Maintains constant level in rapid sand filter. Usually requires the use of an independent operating pressure as shown.

DO NOT USE FOR ON-OFF SERVICE.

Note: We recommend protecting tubing and valve from freezing temperatures.

Modulating Float Valve



- **Accurate Level Control**
- **Completely Automatic Operation**
- **Simple Operation**
- **Easy Installation and Maintenance**

The Cla-Val Model 428-01/628-01 Float Valve modulates to maintain a constant liquid level in a storage tank by compensating for variations in supply or demand. It can be installed to control the flow into or out of the tank by either closing on a rising level or opening on a rising level. This valve is a hydraulically operated, pilot controlled diaphragm valve.

The pilot control system consists of an integral variable orifice in the main valve cover and a remotely mounted float control. A slight change in liquid level moves the float control. This action varies the pressure in the valve cover, causing the main valve to seek a new position. The integral variable orifice automatically regulates the flow into the cover chamber until the valve reaches a position that is in direct relation to the position of the float control.

Schematic Diagram

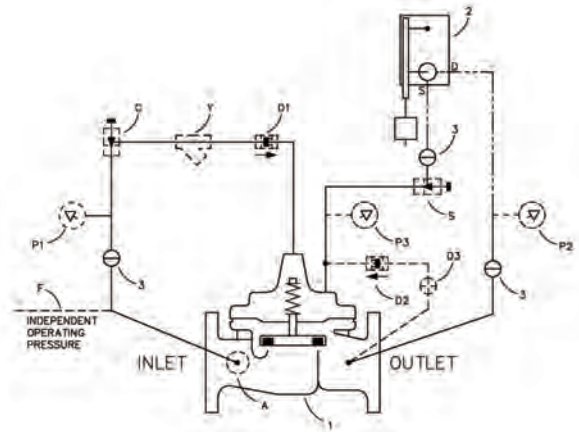
Item	Description
1	Hytrol Main Valve
2	CFM-9 Float Control
3	CK2 Isolation Valve

Optional Features

Item	Description
A	X46A Flow Clean Strainer
D	Check Valves with Isolation Valve
F	Independent Operating Pressure
P	X141 Pressure Gauge
Y	X43 "Y" Strainer

Product Dimensions Data:

For the 428-01 Main Valve (100-32) dimensions, see pages 17.
For the 628-01 Main Valve (100-33) dimensions, see pages 29.



Installation Data

The valve may be installed in any position. The remote float control may be mounted at any convenient location above the liquid level. Float rods are available in lengths from 2' to 12' in one-foot increments.

A stilling well (8" min. diameter) should be provided around the float if the liquid surface is subject to turbulence, ripples or wind.

The float control may be installed at any elevation above the valve providing that the amount of flowing line pressure (in psi) is equal to or greater than the vertical distance in feet between the valve and the float control.

When a separate source of supply pressure (Option F) is used by the pilot control system, that pressure must at all times be constant and equal to or greater than the pressure at the valve inlet.

DO NOT USE FOR ON-OFF SERVICE.

Note: We recommend protecting tubing and valve from freezing temperatures.

Typical Applications

