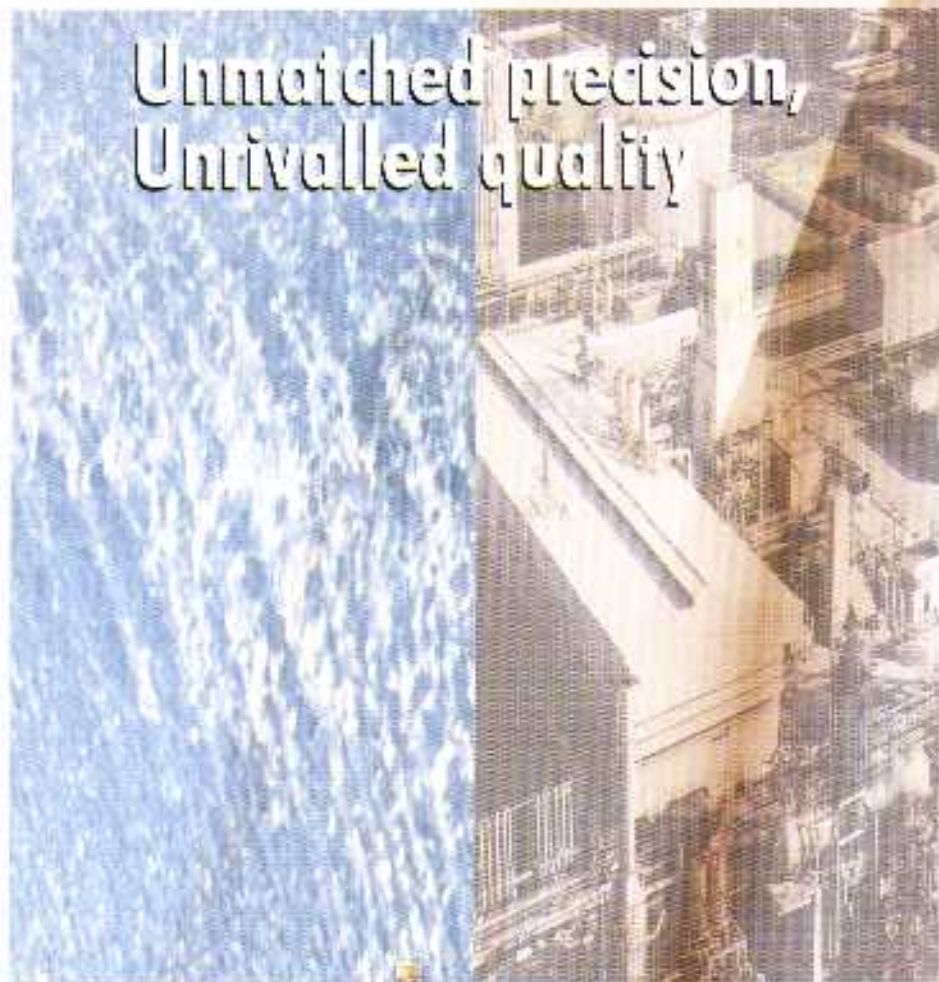


Unmatched precision,
Unrivalled quality



**Self Regulating
Automatic
Control Valve**

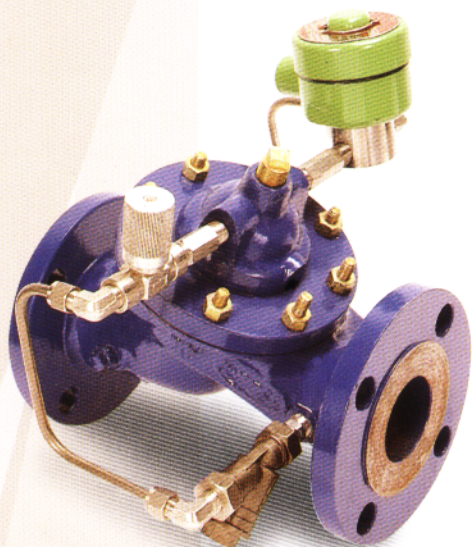
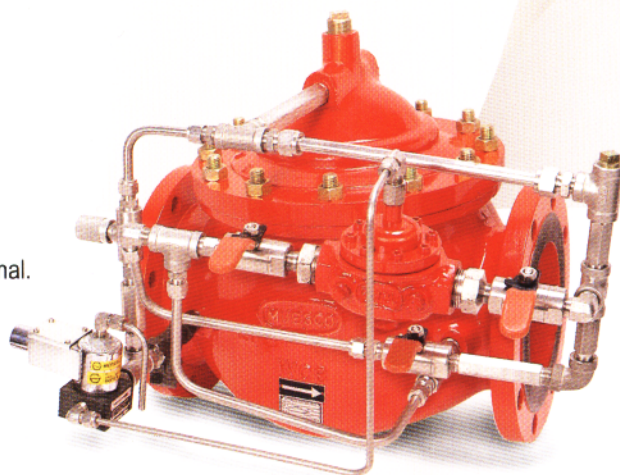


ISO 9001 CERTIFIED

DELUGE VALVE

F 100 D-F

- To open instantly in case of fire by receiving an Electrical signal.
- Deluge Valves are TAC approved and manufactured conforming to UL specification.
- Valve is compatible to all types of Fire Detection System.
- Pneumatic / Hydraulic Trims are also available.
- Quick opening compared to conventional Deluge Valve.
- Factory assembled Trim avoiding piping work at site.



ELECTRICAL ON/OFF VALVE

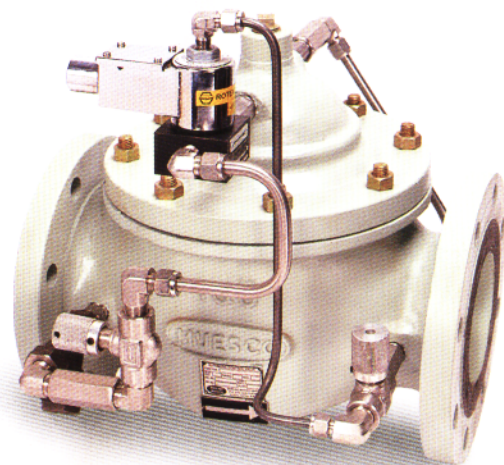
F 113 (GLOBE) / F 1113 (ANGLE PATTERN)

- Electrical On/Off using any kind of AC or DC Electrical signal
- Using NC Solenoid Valve, makes the valve to remain normally close and energized to open. With NO-Solenoid valve, valve can be normally open, energized to close.
- The high capacity accelerator control ensures very quick opening or closing of the Valve irrespective of the Valve size.
- Valve may be remotely operated by timers, Relays, Probes or any other such solenoid valve triggering devices.

BOOSTER PUMP CONTROL VALVE

F 113-21(GLOBE) / F 1113-21(ANGLE)

- For controlled opening and closing of Valve on pump start up and shut down.
- Hydraulic check feature closes valve and ensures safety of pump on flow reversal.
- Valve and pump are interlocked with limit switch assembly.



DIGITAL CONTROL VALVE

Multi Stage Set - Stop Valve

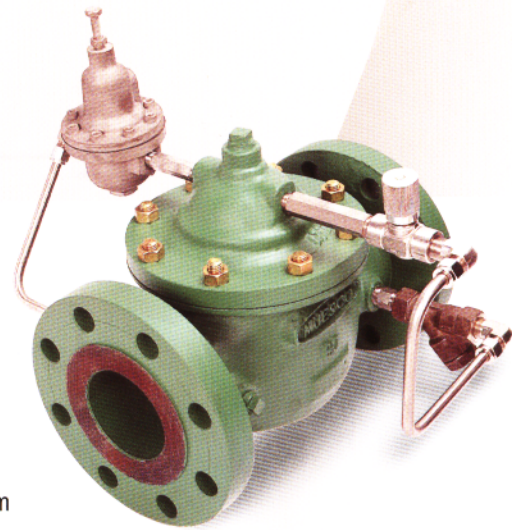
F 113 - 40 R (GLOBE) / F 2113 - 40 R (Y- PATTERN)

- Digital Control Valve is Electro - Hydraulically actuated diaphragm operated.
- It has two Solenoid Valves receiving signal from batch controller to position the valve for low flow / Medium flow / high flow condition as programmed.
- Used in loading terminal automation of Tankers & Wagons.

PRESSURE REDUCING VALVE

F 115 (GLOBE) / F 1115 (ANGLE PATTERN)

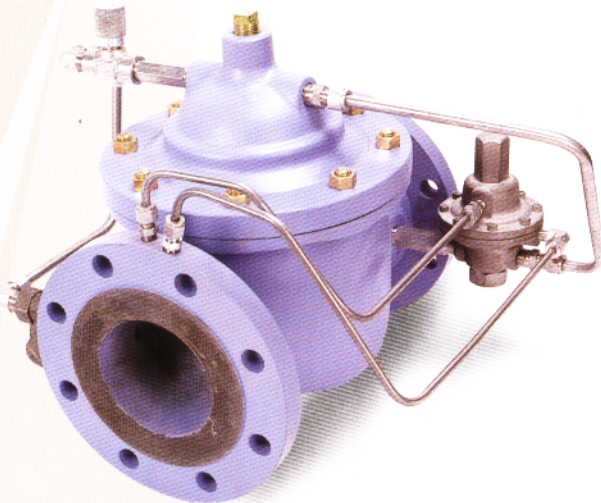
- Automatically reduces a higher inlet pressure to a constant lower outlet pressure.
- The valve consists of a main valve and a Fig. 15 pressure reducing control pilot. Slight changes in downstream pressure acts on topside of control diaphragm causing main valve to counteract pressure changes and hold a constant outlet pressure.
- The regulator will reduce the upstream pressure to a constant downstream Pressure regardless of the change in flow rates/ or inlet pressure. The pilot is a Normally - Open valve that senses the downstream pressure.
- Spring Range : Standard : 20-175 psig. Optional : 5-35 psig.



RATE OF FLOW CONTROL VALVE

F 114(GLOBE) / F 1114(ANGLE)

- Maintains steady flow rate on Downstream irrespective of any changes in upstream flow.
- The valve consists of rate of flow control pilot, in built orifice plate and necessary tubing.
- The pressure drop created by orifice plate regulates the pilot to maintain set flow rate.
- Can be used in conjunction with other pilot for multiple functions.

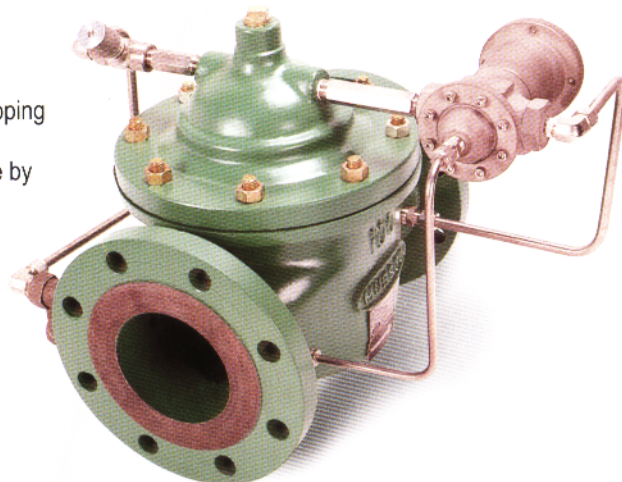


PRESSURE RELIEF

Back Pressure / Pump by-pass / Auto Recirculation

F 116 (GLOBE) / F 1116(ANGLE PATTERN)

- When installed in Main line, it prevents upstream pressure dropping below preset valve.
- When installed on a By-Pass line, it controls main line pressure by relieving excess pressure in by-pass / sump.
- Ideal for pump by pass to protect the downstream equipments.
- Auto Re-Circulation in loading Terminals of Tankers & Wagons when more than one Bay are loaded from a single pump.
- Relief pilot (F16) is normally closed due to spring tension.
- With increase in upstream pressure above set value, Pilot (F 16) opens which makes Main Valve to open fully.
- Spring Range : Standard : 20-200 psig. Optional : 5-30 psig.

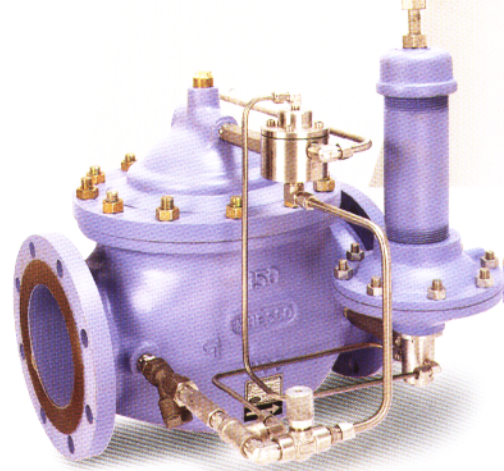


ALTITUDE VALVE

High rise water tank level control valve

F127 - 1 (GLOBE) / F1127 (ANGLE)

- Ensures automatic filling of high rise / elevated tanks or reservoirs.
- When the level in the tank, drops below set value, this pressure drop is sensed by Altitude pilot, which opens the valve.
- When the tank is filled up / reaches at set level, this high pressure is sensed by Altitude - pilot, which closes the main valve and prevents overflow.
- Higher water saving by low cost automation.



LEVEL CONTROL VALVE (Float Operated)

F 110-14(GLOBE) / F 1110-14 (ANGLE)

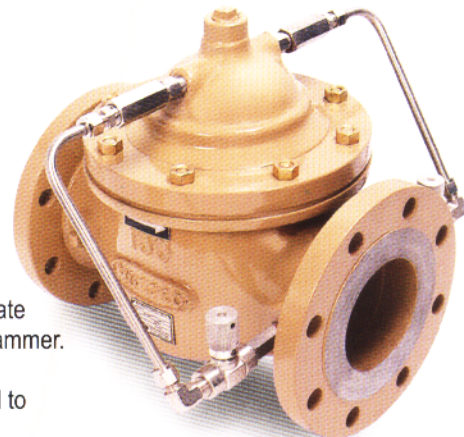
Level Control On / Off with Adjustable High/Low level

- The level is controlled by a Float used with 3-way Rotary Pilot (F10-13).
- Connecting Rod has adjustable stoppers to adjust the high & low level of tank.
- The valve opens when the float reaches lower stopper (adjustable) and valve closes, when the upper level (adjustable) is reached.
- High & Low both levels are adjustable with the help of a Rod & Stopper.
- Pilot assembly is to be installed at the Tank. However, the valve can be installed at a distance place by connecting tubing to the valve.

SLOW ACTING CHECK VALVE

F 118-3R

- Non return function, closes automatically in case of reversal flow.
- The valve allows flow when inlet pressure is higher than outlet pressure.
- In case of reverse flow, the valve closes within appropriate time to ensure it does not generate any surge / water hammer.
- Ideal for Air craft fuelling application.
- Valve opens and closes at controlled (adjustable) speed to ensure smooth flow.



FLOW DATA - ACV 100 (GLOBE) / 1100 (ANGLE)

Valve Size	Inches	1"	1.1/2"	2"	2. 1/2"	3"	4"	6"	8"	10"	12"	14"	16"
	mm.	25	40	50	65	80	100	150	200	250	300	350	400
Maximum continuous Flow Rate GPM (Water)		60	120	205	300	460	800	1800	3100	4900	7000	8500	11000
Maximum Intermittent Flow Rate GPM(Water)		85	158	260	370	570	1000	2300	3900	6000	8600	10500	14000
Cv Value-Globe		14	37	55	90	125	220	460	840	1400	1700	2350	2950
Cv Value-Angle		-	45	65	102	150	260	570	990	1600	2500*	3060*	4210*
F/F Distance-150#(mm)		152	175	203	241	305	343	432	559	757	864	991	1060
Weight (kg.) - approx.		6	14	20	24	28	55	115	182	375	500	728	1025

* ESTIMATED

Specifications are subject to change due to technical modification.

Maximum continuous flow based on pipe line velocity of 20 ft. per second.

Maximum intermittent flow based on pipe line velocity of 25 ft. per second.

The Cv factor of a valve is the flow rate in USGPM at 60 degrees F that will cause a one psi drop in pressure.

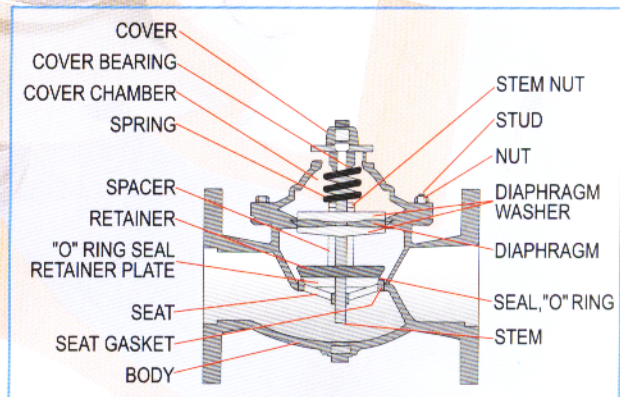
The factors stated are based on a fully open valve.

Cv factor can be used in the following equations to determine flow (Q) and Pressure Drop (ΔP):

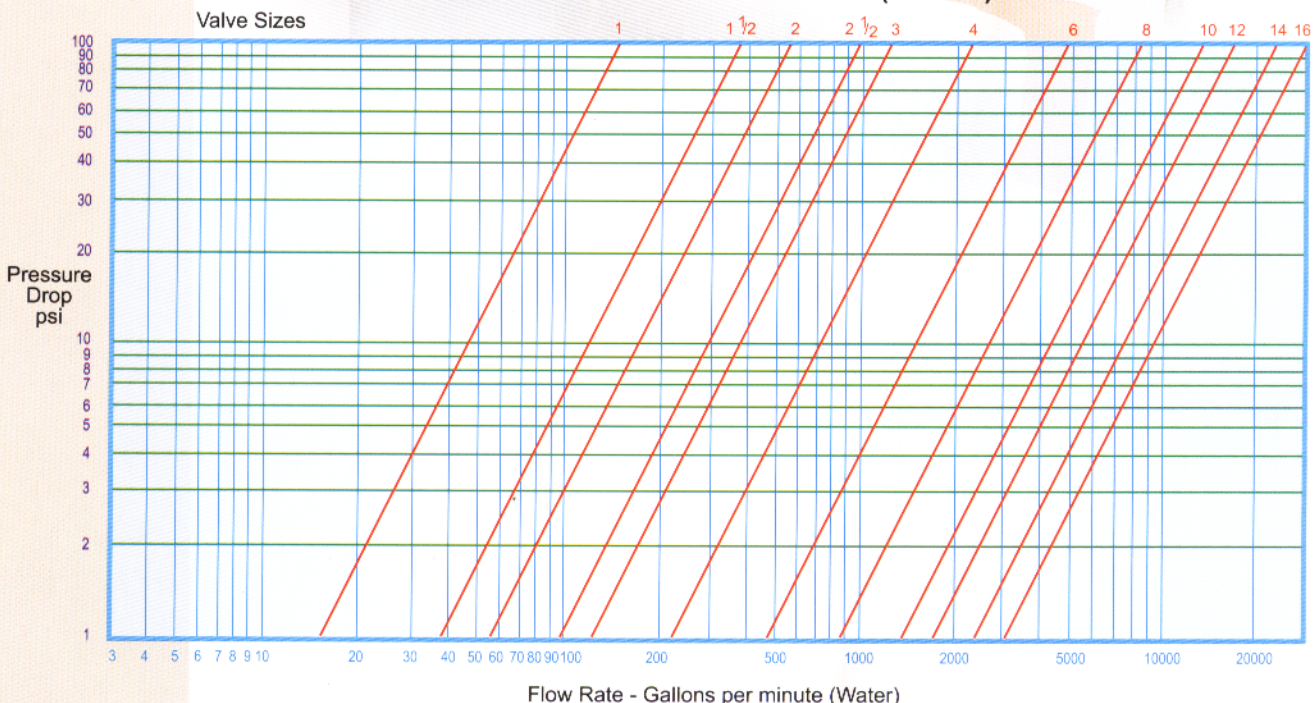
$$Q \text{ (flow)} = Cv \sqrt{\Delta P} \quad \Delta P \text{ (Pressure drop)} = (Q / Cv)^2$$

UNIQUE DESIGN IN SELF ACTUATING VALVE TECHNOLOGY

- Valve opens fully when there is no pressure in the cover chamber
- Valve closes, when line pressure is directed in to Valve Cover chamber, above Diaphragm
- Valve modulates to the required function by installing a proper Pilot System to the main valve.
- Gland less design, Bubble Tight Shut-off to zero leakage
- Fusion bonded epoxy coating inside and outside



PRESSURE DROP CHART ACV 100 (GLOBE)





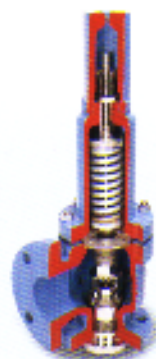
OTHER RANGE OF PRODUCTS



Motorised Control Valve



Pneumatic Control Valve



Safety Relief Valve



Steam Safety Valve



Press. Red. Valve



Digital Control Valve



UNIT-II



UNIT-I

ISO 9001 CERTIFIED

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