



SIMPLY RELIABLE

# AUTOMATIC FLOW CONTROL VALVES

## DIAPHRAGM TYPE FCV



## PLUNGER TYPE FCV

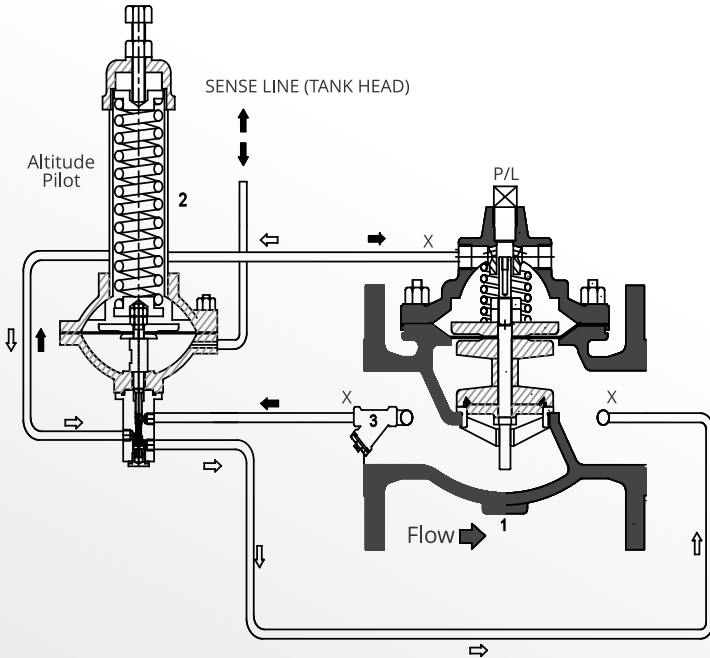


AUTOMATIC FLOW & PRESSURE CONTROL VALVES SCADA COMPATIBLE

# ALTITUDE VALVE- LEVEL CONTROL FOR OVERHEAD TANKS - F127 - 5

## VALVE FUNCTION

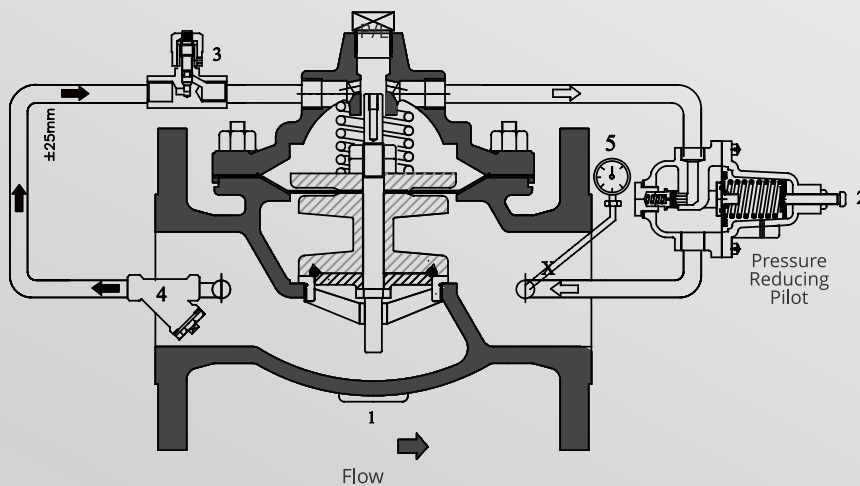
- Opens when reservoir level drops below pilot setting (adjustable)
- Closes when reservoir level reaches pilot setting • No Overflow of Overhead Tanks.
- Available Spring Range for 5' to 20' / 10' to 75' & 50' to 225' height.



# PRESSURE REDUCING VALVE - F115

## VALVE FUNCTION

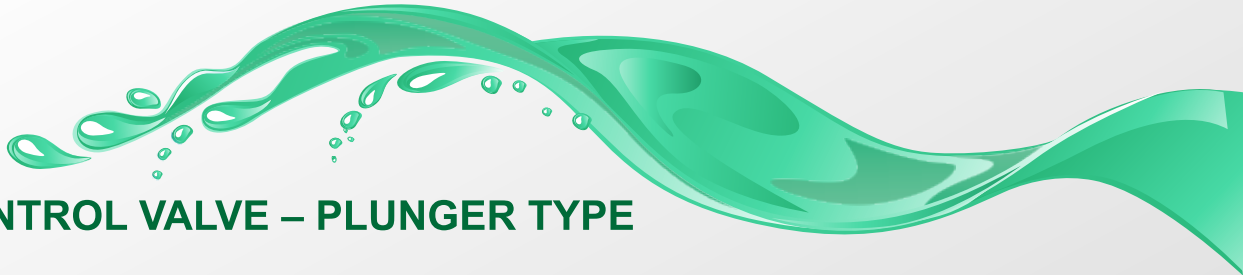
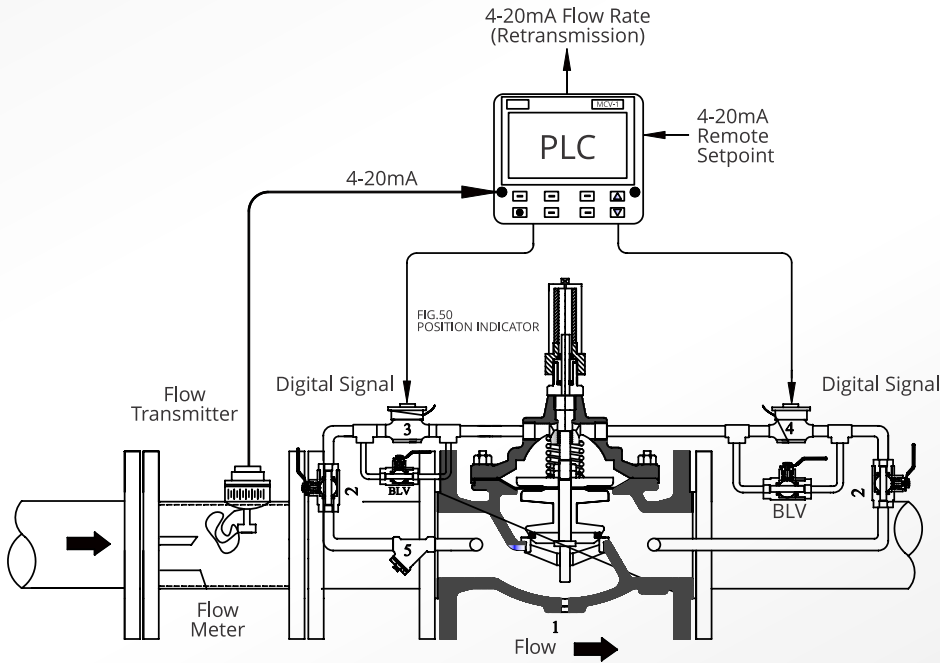
Reduces higher inlet pressure to constant lower outlet pressure (Adjustable).  
This is done Hydraulically-Self Regulating Type.



# FLOW CONTROL VALVE – DIAPHRAGM TYPE

## VALVE FUNCTION

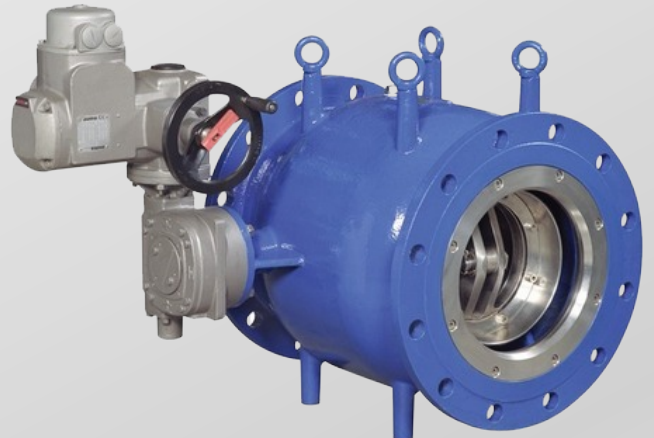
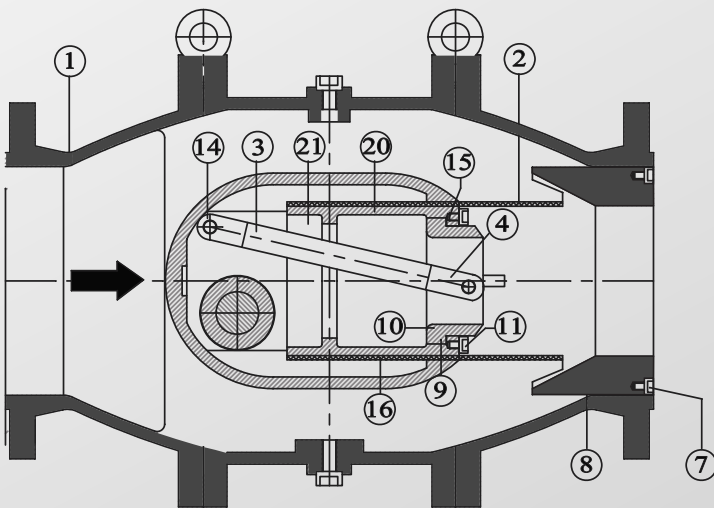
- Offers reliable and accurate flow control when utilized with a flow transmitter from flow meter.
- Flow Data is fed into PLC, which operates NO & NC Sol. Valve to control the flow rate.
- Sol. Valves has Manual By Pass Arrangement in case of Power Failure.



# FLOW CONTROL VALVE – PLUNGER TYPE

## VALVE FUNCTION

- Plunger valves are designed to fulfill regulating function in city water supply systems where absolute flow control is required even in high pressure drop system.
- They meet special requirements of regulating operations by annular sliding of plunger, Inside the valve body where plunger moves axially in flow direction by a crank gear towards the sealing seat of the valve.
- They are electrically actuator operated and are SCADA compatible.
- Sizes available from 50 mm(2") to 1200 mm (48") in PN-10 & PN-16 rating.



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# FLOW DATA

## DIAPHRAGM TYPE FCV

VALVE SIZE (mm)	F/F DISTANCE (GLOBE) F-100 150# (mm)	Cv VALUE (GLOBE) F-100 (G.P.M. @ 1 PSIΔP)	Kv VALUE (GLOBE) F-100 (M3/hr @ 1 BarΔP)
25	152	14	12
40	179	37	32
50	238	55	47
65	241	90	77
80	305	125	107
100	381	220	188
125	385	240	205
150	462	460	394
200	645	840	718
250	756	1400	1200
300	864	1730	1482
350	991	2300	1970
400	1075	2950	2528
450	1168	3625	3106
500	1321	5250	4499
600	1562	7500	6426
700	1662	8600	7369
800	1800	12500	10711
900	1900	15800	13540

## PLUNGER TYPE FCV

VALVE SIZE (mm)	Face To Face (mm)	Cv Value (Plunger) (GPM @ 1 PSIΔP)	Kv Value (Plunger) (M3/Hr @1 Bar Δ P)
50	254	50	43
65	280	70	60
80	280	104	90
100	300	214	185
125	325	240	208
150	350	358	310
200	400	705	610
250	450	902	780
300	500	1514	1310
350	550	2212	1827
400	600	3491	3020
450	650	3860	3339
500	750	4231	3660
600	900	5982	5175
700	1050	8497	7350
800	1200	10230	8850
1000	1500	16010	13850
1200	1800	23120	20000
1400	2100	31385	27150

- Maximum Continuous flow based on pipe line velocity of 6.0 meter per Second. (20 ft. per Second.)
- Maximum Intermittent flow based on pipe line velocity of 7.5 meter per Second. (25 ft. per Second.)
- Cv = Flow rate in US Gallons / Min, at 60 degrees F at 1 Psi pressure drop.
- Kv = Flow rate in M3/hr at 30 degrees C at 1 Bar pressure drop.
- The factors stated are based on a fully open valve.
- Cv factor can be used in the following equations
- $Cv = Q (\text{flow}) / \sqrt{\Delta P}$
- $\Delta P (\text{Pressure drop}) = (Q/Cv)^2$
- $Q = Cv \times \sqrt{\Delta P}$
- $V = \text{Velocity (ft/sec.)} = 0.4085 \times Q/d^2$  Where: Q= Flow in GPM. d= Inside pipe dia in inches
- $Cv = 1.17 \times Kv$

## OUR ESTEEMED CUSTOMERS



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