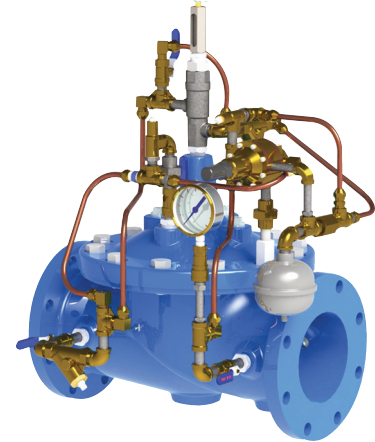




MODEL **98-06 (2"-10")**  
(Full Internal Port)  
**698-06 (3"-12")**  
(Reduced Internal Port)

# Hydraulic Pressure Management/ Water Savings Valve with Dual Setpoints

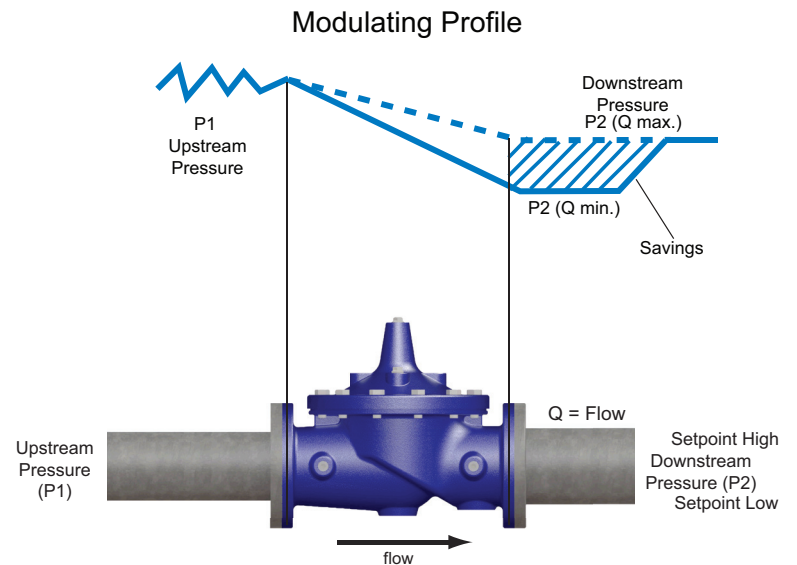
- Simple means to achieve measurable water savings
- Helps reduce consumption
- 100% hydraulic control
- Two adjustable downstream set points for high and low pressure
- Smooth transition between set point pressures
- Simple set-up
- Retrofits to existing valve without removal from pipeline



## How It Works

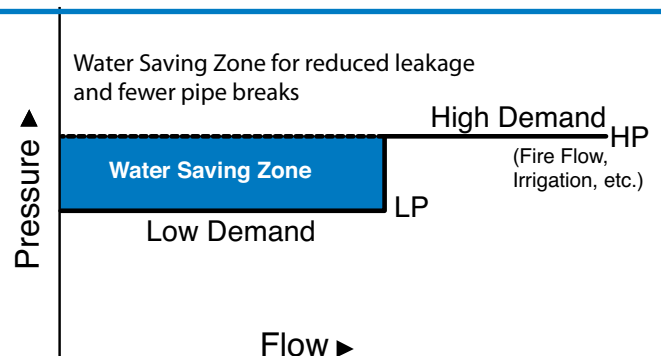
The Cla-Val Model 98-06/698-06 Water Saving Valve is a pressure reducing valve that uses two downstream set points to achieve optimum system pressure; i.e. the capability delivering only the pressure that is needed to meet current demand.

A high pressure set point is selected for high flow demand and a low pressure set point is selected for low demand. This dual set point arrangement allows for reduction in water consumption as well as unintentional water loss by keeping system piping from being over-pressurized during periods of low demand. It does this without inhibiting adequate pressure during high or fire demand. The design is 100% hydraulic and, in addition, to the dual pressure set points, the transition point at which the pressure changes based on the flow is also adjustable. The patented design of the valve allows for smooth transition from one set point to the other, providing optimum performance and measurable water savings by reducing consumption, minimizing leaks and lessening the potential for pipe breaks.



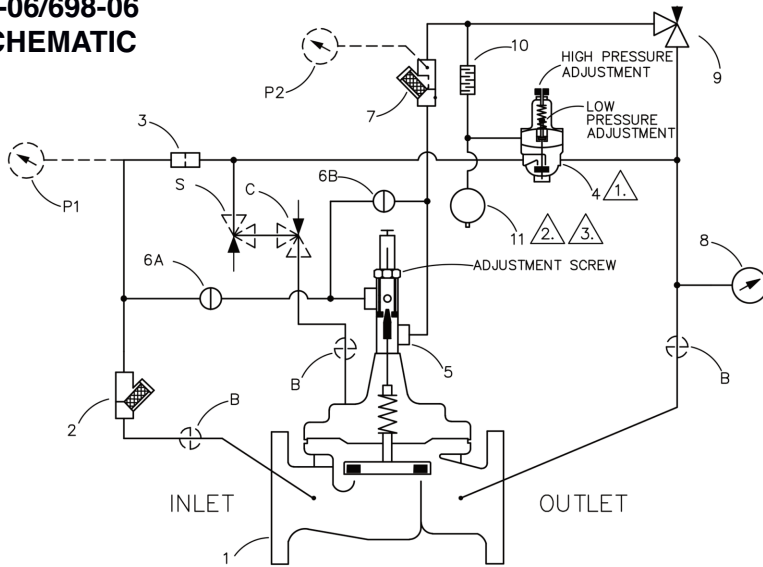
## Typical Performance

A dual system pressure with reduced system pressure during low demand periods is illustrated in the chart. At low flows, a minimum pressure is maintained and as flow increases to the switch point, delivery pressure increases to the maximum pressure set point for switch. The point between low pressure and high pressure setpoints is adjustable to fine-tune the valve to system requirements. The "water saving zone" below maximum pressure line represents valve effectiveness in reducing water losses and frequency of pipe breaks in a system.



Go to [www.cla-val.com](http://www.cla-val.com) for Purchase Specification

**98-06/698-06**  
**SCHEMATIC**



**Schematic Diagram**

- | Item | Description  |
|------|--|
| 1    | Hytrol (Main Valve)  |
| 2    | X43 "Y" Strainer   |
| 3    | X58C Restriction Assembly                                    |
| 4    | CPM-A Pressure Management Control                            |
| 5    | X78-4 Stem Assembly + X101 Valve Position Indicator Assembly |
| 6    | CK2 (Isolation Valve)  |
| 7    | X44A Strainer Orifice Assembly                               |
| 8    | X141 Gage Assembly   |
| 9    | CV Speed Control   |
| 10   | X58E Restriction Assembly                                    |
| 11   | Accumulator (Air Charged)                                    |

**Optional Features**

- | Item | Description               |
|------|---------------------------|
| B    | CK2 (Isolation Valve)     |
| C    | CV Flow Control (Closing) |
| P    | X141 Gage Assembly        |
| S    | CV Flow Control (Opening) |

98-06 Valve Selection	100-01 Pattern: Globe (G), Angle (A), End Connections: Threaded (T), Grooved (GR), Flanged (F) Indicate Available Sizes							
	Inches	2	2½	3	4	6	8	10
	mm	50	65	80	100	150	200	250
Basic Valve 100-01	Pattern	G, A	G, A	G, A	G, A	G, A	G, A	G, A
	End Detail	T, F, Gr	T, F, Gr*	T, F, Gr	F, Gr	F, Gr*	F, Gr*	F
Suggested Flow (gpm)	Maximum	210	300	460	800	1800	3100	4900
	Maximum Intermittent	260	370	580	990	2250	3900	6150
	Minimum	1	2	2	4	10	15	35
Suggested Flow (Liters/Sec)	Maximum	13	19	29	50	113	195	309
	Maximum Intermittent	16	23	37	62	142	246	387
	Minimum	.06	.09	0.13	0.25	0.63	0.95	2.2

100-01 Series is the full internal port Hytrol. For Lower Flows Consult Factory \*Globe Grooved Only

698-06 Valve Selection	100-20 Pattern: Globe (G), Angle (A), End Connections: Flanged (F) Indicate Available Sizes						
	Inches	3	4	6	8	10	12
	mm	80	100	150	200	250	300
Basic Valve 100-20	Pattern	G	G, A	G, A	G, A	G	G
	End Detail	F	F	F	F	F	F
Suggested Flow (gpm)	Maximum	260	580	1025	2300	4100	6400
	Minimum	1	2	4	10	15	35
Suggested Flow (Liters/Sec)	Maximum	16	37	65	145	258	403
	Minimum	.06	.13	.25	.63	.95	2.2

100-20 Series is the reduced internal port size version of the 100-01 Series. For Lower Flows Consult Factory

Many factors should be considered in sizing pressure reducing valves including inlet pressure, outlet pressure and flow rates. For sizing questions or cavitation analysis, consult Cla-Val with system details. Not Recommended for Dead-end Service

**Pilot System Specifications**

- Outlet Pressure Adjustment Range:** **Materials**
- High Flow Pressure Setting:** 15-75 psi Maximum
- Low Flow Pressure Setting:** Up to 30 psi below high setting
- Temperature Range:** Water: to 180°F
- Standard Pilot System Materials**  
 Pilot Control: Bronze ASTM B62  
 Trim: Stainless Steel Type 303  
 Rubber: Buna-N® Synthetic Rubber

**When Ordering, Please Specify**

1. Catalog No. 98-06 or 698-06
2. Valve Size
3. Pattern - Globe or Angle
4. Pressure Class
5. Threaded or Flanged
6. Trim Material
7. Desired Options
8. When Vertically Installed