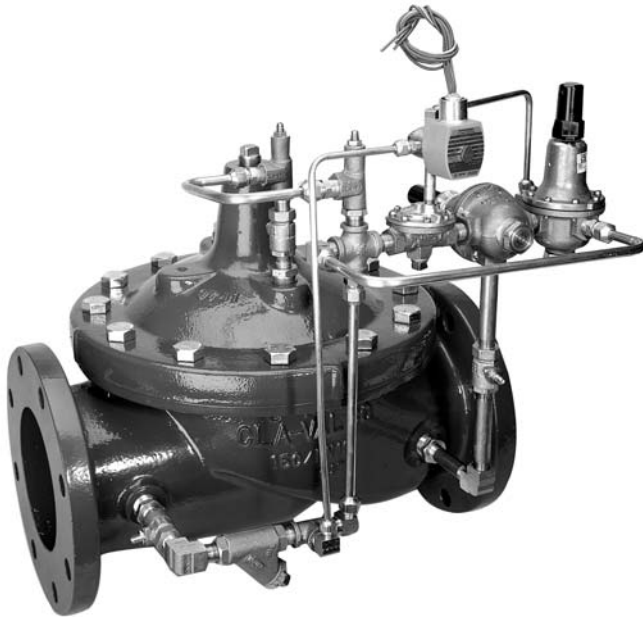




**90-11**  
 (Full Internal Port)  
**690-11**  
 (Reduced Internal Port)  
**790-11**

— MODEL —

# Pressure Reducing Valve with Two Stage - Solenoid Selected Pressure



- **Two Adjustable Setpoints**
- **Sensitive and Accurate Pressure Control**
- **Ideal For Use with SCADA System**
- **Low Power Required**
- **Low Maintenance Cost**

The Cla-Val Model 90-11 Two-Stage Pressure Reducing Control valve allows selection between two different pressure-reducing set points. It has one pilot set at a higher pressure setting; a second pilot set at a lower pressure setting and a solenoid control to select the active pilot control for the main valve. The valve smoothly changes setpoint and will control pressure regardless of inlet pressure fluctuations or downstream demand changes. Set point switching is achieved by energizing the solenoid control for the desired time that the low pressure is needed. The two set points are easily changed in the field.

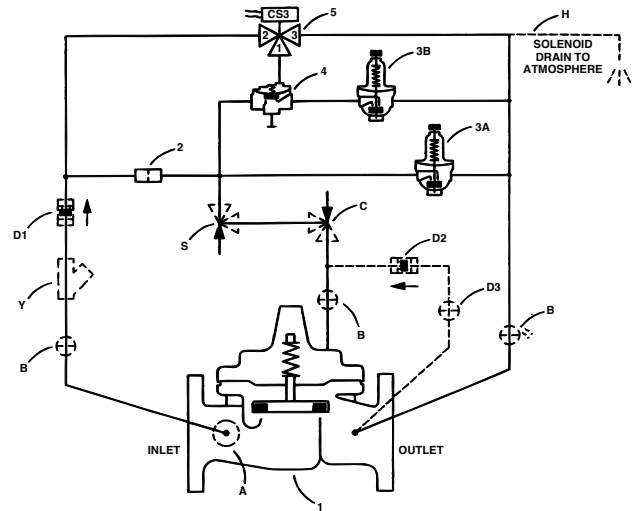
This valve is suitable for many pressure control applications where downstream conditions change sufficiently to require a lowered pressure during part of the time. A variety of electronic controls can be use with the 90-11 ranging from a simple battery powered timer to extensive SCADA systems. In leakage abatement applications, the 90-11 offers simplified two-pressure control of a distribution zone. For times of high demand, the higher pressure control is used and for times of low demand, the lower pressure control is selected.

## Schematic Diagram

Item	Description
1	Hytrol (Main Valve)
2	X58 Restriction Fitting
3	CRD Pressure Reducing Control
4	100-01 Auxiliary Hytrol (Reverse Flow)
5	CS3 Solenoid Control

## Optional Features

Item	Description
A	X46A Flow Clean Strainer
B	CK2 (Isolation Valve)
C	CV Flow Control (Closing)
D	Check Valves with Isolation Valve
H	Solenoid Drain to Atmosphere
S	CV Flow Control (Opening)
Y	X43 "Y" Strainer



## Typical Application

The valve can be used to conserve water by lowering the system pressure during low demand periods. The valve is designed to be used with a SCADA system that will select which setpoint to use. The customer must provide a control system to determine when to shift the solenoid so as to prevent holding the low pressure set point during unforeseen high flow demands such as fire flow.

