



▲ Model 120

The Model 120 has a wide range of applications: anywhere the flow rate must be controlled or limited.

Typical examples include:

- Pump systems
- Zone flow control in municipal and industrial water
- Filter backwash control
- Fuel metering systems

SERIES FEATURES

- ▶ Controls or limits flow to a predetermined rate
- ▶ Built-in orifice plate for sensing flow rate
- ▶ Extra-sensitive differential pilot
- ▶ Flow rate is adjustable with single screw
- ▶ Adjustable response speed
- ▶ Can be maintained without removal from the line
- ▶ Factory tested and can be pre-set to your requirements

OPERATION

The normally open, spring loaded pilot, sensing the differential across the integral orifice plate, located in the valve inlet flange, responds to changes in differential and causes the main valve to do the same. Increased differential (flow rate) works to close the pilot and main valve, whereas decreased differential works to open them. The net result is a constant modulating action of the pilot and main valve to hold the differential, hence the flow rate, constant. The pilot system is equipped with a needle valve that fine tunes the valve response to the system variables.

COMPONENTS

The Model 120 consists of the following components, arranged as shown on the schematic diagram:

- 1.) Model 65 Basic Control Valve
- 2.) Orifice Plate
- 3.) Model 2450 Rate of Flow Control Pilot
- 4.) Model 126 Ejector - Fixed orifice pilot system supply restrictor
- 5.) Model 141-2 Needle Valve - Adjustable response speed
- 6.) Model 159 Y-strainer - Protects pilot system from dirt/debris
- 7.) Model 141-4 Isolation Ball Valves
- 8.) Model 155 Visual Indicator (Optional)

MAX. PRESSURE

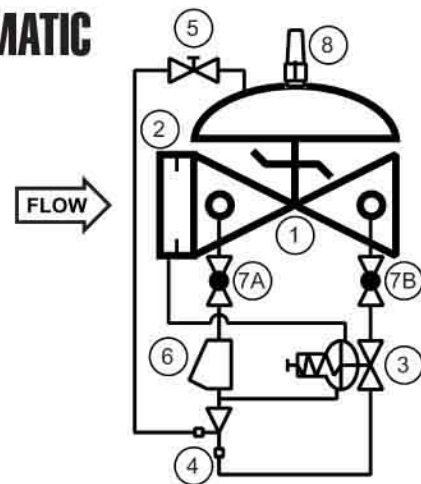
END CONNECTIONS	DUCTILE IRON	STEEL/STN STL	BRONZE
150# Flanged	250 psi	285 psi	225 psi
300# Flanged	640 psi	740 psi	500 psi

SIZING

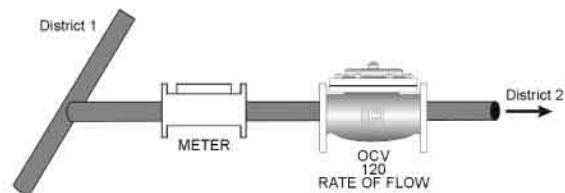
The following chart states the minimum and maximum flow rate with standard bore orifice plate. This means the valve can be adjusted to control within the ranges shown. Lower flow ranges are possible through the use of smaller orifice plate bores. All ranges are adjustable within a 4:1 ratio (high to low flow). Consult the factory for assistance and a copy of the OCV ValveMaster Sizing program.

SIZE	1 1/4"-1 1/2"	2"	2 1/2"	3"	4"	6"	8"	10"	12"	14"	16"	24"
MIN. FLOW GPM	30	50	70	115	200	450	750	1050	1500	1800	2400	7000
MAX. FLOW GPM	120	200	280	460	800	1800	3000	4200	6000	7200	9600	28000

SCHEMATIC



RECOMMENDED INSTALLATION



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Model 120 Rate of Flow Control Valve

