The Model 127-5 has a wide range of applications: anywhere a pressure must be reduced to a manageable level and demand can diminish rapidly (dead end service). Typical examples include:
- High rise and commercial buildings
- Industrial process pressure control
- Zone pressure control in municipal water
- Hospitals and hotels with commercial laundry equipment

**SERIES FEATURES**
- Reduces a higher inlet pressure to a lower outlet pressure
- Constant outlet pressure over wide flow range
- Minimizes downstream pressure build-up in the event of sudden reduction in flow
- Pilot-operated main valve not subject to pressure fall off
- Can be maintained without removal from the line
- Adjustable opening/response speed
- Factory tested and can be pre-set to your requirements

**OPERATION**
The normally open, spring-loaded pilot, sensing downstream pressure, responds to changes in pressure and causes the main valve to do the same. The net result is a constant modulating action of the pilot and main valve to hold the downstream pressure constant. The pilot system is equipped with an opening speed control that fine tunes the valve response to the system variables.

A normally closed, spring-loaded pilot, also sensing downstream pressure, is installed between the valve inlet and the bonnet (cover), and is typically set 5-psi higher than the normal reducing control. If downstream pressure rises to the set point of this pilot, it opens to close the main valve very quickly, minimizing downstream pressure build-up.

**COMPONENTS**
The Model 127-5 consists of the following components, arranged as shown on the schematic diagram:
1.) Model 65 Basic Control Valve
2.) Model 1340 Pressure Reducing Valve
3.) Model 1330 Pressure Relief Pilot (Surge Control)
4.) Model 126 Ejector
5.) Model 141-3* Flow Control Valve
   Opening Speed Control
   *NOTE: Model 141-2 Needle Valve used on sizes 1-1/4" - 3"
6.) Model 159 Y-Strainer
   Protects pilot system from dirt/debris
7.) Model 141-4 Isolation Ball Valves
8.) Model 155 Visual Indicator (Optional)

**SIZING**
Sizing is a critical issue in the selection of pressure reducing valves. Definitive sizing information can be found in the OCV Catalog, Series 127 section and Engineering section Performance Charts. Consult the factory for assistance and a copy of the OCV ValveMaster Sizing program.

**MAX. PRESSURE**
The pressures listed below are maximum pressures at 100°F.

<table>
<thead>
<tr>
<th>END CONNECTIONS</th>
<th>DUCTILE IRON</th>
<th>STEEL/STN STL</th>
<th>LOW-LEAD BRONZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threaded</td>
<td>640 psi</td>
<td>640 psi</td>
<td>500 psi</td>
</tr>
<tr>
<td>Grooved</td>
<td>300 psi</td>
<td>300 psi</td>
<td>300 psi</td>
</tr>
<tr>
<td>150# Flanged</td>
<td>250 psi</td>
<td>285 psi</td>
<td>225 psi</td>
</tr>
<tr>
<td>300# Flanged</td>
<td>640 psi</td>
<td>740 psi</td>
<td>500 psi</td>
</tr>
</tbody>
</table>

TOLL FREE 1.888.628.8258 ● phone: (918)627.1942 ● fax: (918)622.8916 ● 7400 East 42nd Place, Tulsa, Ok 74145
email: sales@controlvalves.com ● website: www.controlvalves.com

Global performance. Personal touch.
SIZES GLOBE/ANGLE
Screwed Ends - 1 1/4” - 3”
Grooved Ends - 1 1/2” - 6” (globe);
1-1/2’’-4” (angle)
Flanged Ends - 1 1/4” - 24” (globe);
1 1/4” - 16” (angle)

SPRING RANGES (outlet setting)
5-30 psi, 20-80 psi, 20-200 psi, 100-300 psi

FLUID OPERATING TEMPERATURE RANGE
(Valve Elastomers)
EPDM 32°F - 230°F*

MATERIALS
- Body/Bonnet: Ductile Iron (epoxy coated), Carbon Steel (epoxy coated), Stainless Steel, low-lead Bronze
- Others available (consult factory)

Seat Ring: low-lead Bronze, Stainless Steel
- Stem: Stainless Steel, Monel
- Spring: Stainless Steel
- Diaphragm: EPDM*
- Seat Disc: EPDM*
- Pilot: Bronze, Stainless Steel
- Other pilot system components: low-lead Bronze/Brass, All Stainless Steel
- Tubing & Fittings: Copper/Brass, Stainless Steel

*Others available upon request.
**Valves 1-1/4” through 24” are certified to NSF/ANSI 372. Valves 4” through 24” are also certified to NSF/ANSI 61-G.

DESIGN
The pressure reducing/surge control valve shall function to reduce a higher upstream pressure to a constant, lower downstream pressure, and prevent the downstream pressure from rising too far in the event of sudden reduction of flow.

OPERATING CONDITIONS
The pressure reducing/surge control valve shall be suitable for reducing inlet pressures of \( X \times X \) psi to a constant outlet pressure of \( X \times X \) psi at flow rates ranging from \( X \times X \) gpm.

ACCEPTABLE PRODUCTS
The pressure reducing/surge control valve shall be a \(<size>\) Model 127-5, \(<globe pattern, angle pattern>, with \(<150# flanged, 300# flanged, threaded, grooved>\) end connections, as manufactured by OCV Control Valves, Tulsa, Oklahoma, USA.

U.S. DIMENSIONS - INCHES

For maximum efficiency, the OCV control valve should be mounted in a piping system so that the valve bonnet (cover) is in the top position. Other positions are acceptable but may not allow the valve to function to its fullest and safest potential. In particular, please consult the factory before installing 8” and larger valves, or any valves with a limit switch, in positions other than described. Space should be taken into consideration when mounting valves and their pilot systems.

A routine inspection & maintenance program should be established and conducted yearly by a qualified technician. Consult our factory @ 1-888-628-8258 for parts and service.

How to order your Model 127-5 valve
When Ordering please provide:
Fluid to be controlled - Model Number - Size
Globe or Angle - End Connection - Body Material
Trim Material - Pilot Options - Pressure Setting or Spring Range - Special Requirements / Installation Requirements