The Model 127-32 controls the filling of downstream piping in systems where lines have been drained. Once lines are filled, it reduces a higher inlet pressure to a constant, lower outlet pressure. Typical examples include:
- Irrigation systems
- Industrial spray systems
- Dust control
- Wash / cleaning

**SERIES FEATURES**
- Prevents hydraulic shock by providing a two-stage / low-flow filling of downstream piping system
- Reduces a higher inlet pressure to a lower outlet pressure
- Constant outlet pressure over wide flow range
- Pilot-operated main valve not subject to pressure fall off
- Outlet pressure is adjustable with single screw
- Can be maintained without removal from the line
- Adjustable opening/response speed
- Factory tested and can be pre-set to your requirements

**OPERATION**
**Two-stage Opening**
On initial startup, the main valve opening is controlled by a pressure sensing pilot and an adjustable, variable orifice pilot. These pilots route inlet pressure into the main valve bonnet, which maintains pressure on the diaphragm to limit the amount of opening of the main valve until downstream piping is filled; pressure reaches a preset amount.

**Pressure Reducing**
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’s response to the system variables.

**COMPONENTS**
The Model 127-32 consists of the following components, arranged as shown on the schematic diagram:
1.) Model 65 Basic Control Valve
2.) Model 1340 Pressure Reducing Pilots
3.) Model 2100 Variable Orifice Pilot
4.) Model 126 Ejector - Fixed orifice pilot system supply restrictor
5.) Model 141-3* Flow Control Valve - Adjustable opening speed control
6.) Model 159 Y-Strainers - Protects pilot system from dirt/debris
7.) Model 141- 4 Isolation Ball Valves
8.) Model 155 Visual Indicator

**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>
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<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>
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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
SIZES GLOBE/ANGLE
Screwed Ends - 1 1/4" - 3"; Grooved Ends - 1 1/2" - 6" (globe); 1 1/2" - 6" (angle)
Flanged Ends - 1 1/4" - 16" (globe; consult factory for larger sizes); 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
- Consult factory for others

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: low-lead 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 two-stage / low-flow start pressure reducing valve shall function to hydraulically limit valve opening until downstream piping has reached a preset, adjustable level. It shall then reduce a higher upstream pressure to a constant, lower downstream pressure regardless of fluctuations in supply or demand.

MATERIALS OF CONSTRUCTION
The main valve body and bonnet shall be ductile iron per ASTM A536, Grade 65-45-12. All ferrous surfaces shall be coated with 4 mils of epoxy. The main valve seat ring shall be low-lead Bronze. Elastomers (diaphragms, resilient seats and O-rings) shall be EPDM. The control pilot shall be low-lead Bronze. The opening speed control and isolation ball valves shall be brass and control line tubing shall be copper.

OPERATING CONDITIONS
The two-stage / low-flow start pressure reducing valve shall be suitable for reducing inlet pressures of <X to X> psi to a constant outlet pressure of <X> psi at flow rates ranging from <X to X> gpm.

ACCEPTABLE PRODUCTS
The two-stage / low-flow start pressure reducing valve shall be a <size> Model 127-32, <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

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*GROOVED END NOT AVAILABLE IN 1 1/4"