



▲ Model 127-3

The Model 127-3 has a wide range of applications: anywhere a pressure must be reduced to a manageable level. Typical examples include:

- High rise and commercial buildings
- Pump systems
- Zone pressure control in municipal and industrial water
- Irrigation systems

SERIES FEATURES

- ▶ 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

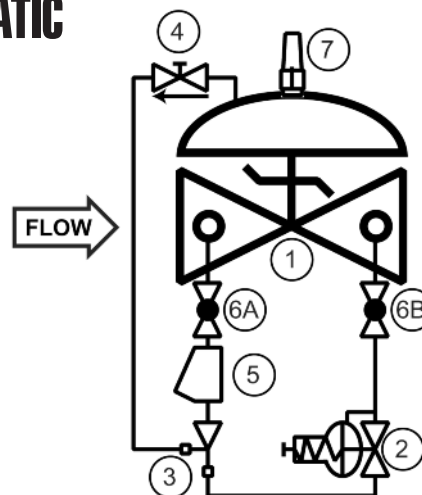
The normally open, spring loaded pilot, sensing downstream pressure, responds to changes in pressure and causes the main valve to do the same. The net result is a constant modulating action of the pilot and main valve to hold the downstream pressure constant. The pilot system is equipped with an opening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

COMPONENTS

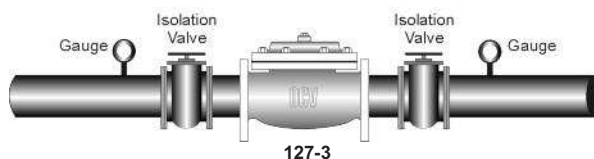
The Model 127-3 consists of the following components, arranged as shown on the schematic diagram:

- 1.) Model 65 Basic Control Valve
- 2.) Model 1340 Pressure Reducing Pilot
- 3.) Model 126 Ejector -
Fixed orifice pilot system supply restrictor
- 4.) Model 141-3 Flow Control Valve -
Adjustable opening speed control
- 5.) Model 159 Y-strainer -
Protects pilot system from dirt/debris
- 6.) Model 141- 4 Isolation Ball Valves
- 7.) Model 155 Visual Indicator (Optional)

SCHEMATIC



RECOMMENDED INSTALLATION



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

END CONNECTIONS	DUCTILE IRON	STEEL/STN STL	BRONZE
Threaded	44.1 bar	44.1 bar	34.5 bar
Grooved	20.7 bar	20.7 bar	20.7 bar
150# Flanged	17.2 bar	19.6 bar	15.5 bar
300# Flanged	44.1 bar	51.0 bar	34.5 bar

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email: sales@controlvalves.com • website: www.controlvalves.com

SIZES

GLOBE/ANGLE

Screwed Ends: 1 1/4" - 3" (DN32-DN80)

Grooved Ends: 1 1/2" - 4" (DN40-DN100)

Flanged Ends:

1 1/4" - 24" (DN32-DN600) (globe);

1 1/4" - 16" (DN32-DN400) (angle)

TEMPERATURE RANGE (Valve Elastomers)

Buna-N 0° C - 82° C

Viton 0° C - 204° C

EPDM 0° C - 149° C

SPRING RANGES (outlet setting)

.3 bar - 2.1 bar, 1.4 bar - 5.5 bar, 4.5 bar - 12.4

bar, 6.9 bar - 20.7 bar

MATERIALS

Body/Bonnet: Ductile Iron (epoxy coated), Carbon

Steel (epoxy coated), Stainless Steel, Bronze

-Others available (consult factory)

Seat Ring: Bronze, Stainless Steel

Stem: Stainless Steel, Monel

Spring: Stainless Steel

Diaphragm: Nylon Reinforced, Buna-N, Viton,

EPDM

Seat Disc: Buna-N, Viton, EPDM

Pilot: Bronze, Stainless Steel

Other pilot system components:

Bronze/Brass -All stainless steel

Tubing & Fittings: Copper/Brass,

Stainless Steel

SPECIFICATIONS (Typical Water Application)

The pressure reducing valve shall function to reduce a higher upstream pressure to a constant, lower downstream pressure regardless of fluctuations in supply or demand.

DESIGN

The pressure reducing valve shall be a single-seated, line pressure operated, diaphragm actuated, pilot controlled globe valve. The valve shall seal by means of a corrosion-resistant seat and a resilient, rectangular seat disc. These, and other parts, shall be replaceable without removing the valve from the line. The stem of the main valve shall be guided top and bottom by integral bushings. Alignment of the body, bonnet and diaphragm assembly shall be by precision dowel pins. The diaphragm shall not be used as a seating surface, nor shall pistons be used as an operating means. The pilot system shall be furnished complete and installed on the main valve. It shall include an opening speed control, Y-strainer and isolation ball valves. The pressure reducing valve shall be operationally and hydrostatically tested prior to shipment.

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 bronze. Elastomers (diaphragms, resilient seats and O-rings) shall be Buna-N. Control pilot shall be bronze. The opening speed control and isolation ball valves shall be brass, and control line tubing shall be copper.

OPERATING CONDITIONS

The pressure reducing valve shall be suitable for reducing inlet pressures of <X to X> bar to a constant outlet pressure of <X> bar at flow rates ranging from <X to X> M3/HR.

ACCEPTABLE PRODUCTS

The pressure reducing valve shall be a <size> Model 127-3, <globe pattern, angle pattern>, with <150# flanged, 300# flanged, threaded, grooved> end connections, as manufactured by OCV Control Valves, Tulsa, Oklahoma, USA.

METRIC CONVERSION - MM

DIM	END CONN	DN32 - DN40	DN50	DN65	DN80	DN100	DN150	DN200	DN250	DN300	DN350	DN400	DN600
A	SCREWED	222	251	267	330								
	GROOVED	222	251	267	330	387	508						
	150# FLGD	216	238	267	305	381	451	644	756	863	990	1025	1575
	300# FLGD	222	251	282	324	397	473	670	790	902	1029	1067	1619
C	SCREWED	111	121	152	165								
	GROOVED	111	121	152	165	194							
	150# FLGD	108	121	152	152	190	254	322	379	432		525	
	300# FLGD	111	127	162	162	198	267	335	395	451		549	
D	SCREWED	79	98	102	114								
	GROOVED	79	98	102	114	143							
	150# FLGD	76	98	102	102	140	152	203	289	279		398	
	300# FLGD	79	105	111	111	147	165	216	305	298		419	
E	ALL	152	152	178	165	203	254	302	390	432	457	482	686
	H	ALL	254	279	279	305	330	355	432	457	508	508	724

*GROOVED END NOT AVAILABLE IN DN32

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" (DN200) 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 127-3 valve

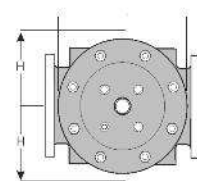
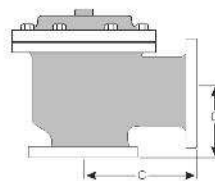
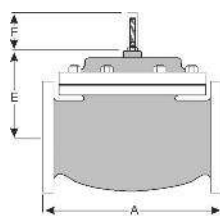
When Ordering please provide:

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.



QUALITY SYSTEM
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ISO 9001

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