

Model 128 ▲

The Model 128 can be employed anywhere excessive flow rates must be positively prevented. It is particularly useful as a protective device against downstream line rupture.

## SERIES FEATURES

- ▶ Valve trips closed when predetermined flow rate is detected
- ▶ Built-in orifice plate for sensing flow rate
- ▶ Valve must be manually reset to reopen
- ▶ 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 latched open, spring loaded pilot, sensing the differential across the integral orifice plate, located in the valve inlet flange, remains open as long as the flow rate is below a pre-determined trip point. If flow rate rises to the trip point, the pilot closes, causing the main valve to close. The pilot remains closed until manually reset by pushing the reset button on the end of the pilot.

## COMPONENTS

The Model 128 consists of the following components, arranged as shown on the schematic diagram:

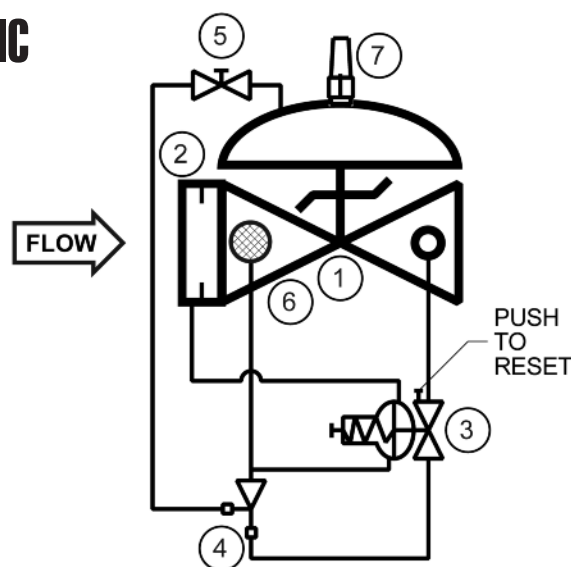
- 1.) Model 65 Basic Control Valve (Fail Closed)
- 2.) Orifice Plate
- 3.) Model 1380 Excess Flow Pilot
- 4.) Model 126 Ejector
- 5.) Model 141-2 Needle Valve
- 6.) Model 123 Inline Strainer
- 7.) Model 155 Visual Indicator (optional)

## SIZING

The following chart states the minimum and maximum flow rate with standard bore orifice plate, based on a fluid specific gravity of 0.8. 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 bore and all ranges are adjustable within a 4:1 ratio (high to low flow). Consult the factory for assistance.

SIZE	1 1/4", 1 1/2"	2"	2 1/2"	3"	4"	6"	8"	10"	12"	14"	16"	24"
MIN. FLOW, GPM	38	63	88	145	250	560	940	1310	1875	2250	3000	8750
MAX. FLOW, GPM	152	252	352	580	1000	2240	3760	5240	7500	9000	12000	35000

## SCHEMATIC



## RECOMMENDED INSTALLATION

- ▶ Install the valve with adequate space above and around the valve to facilitate servicing. Refer to the Dimension Table.
- ▶ Valve should be installed with the bonnet (cover) at the top, particularly 8" and larger valves, and any valve with a limit switch.
- ▶ Shut-off valves should be installed upstream and downstream of the control valve. These are used to isolate the valve during start-up and maintenance.
- ▶ In order to properly set the flow rate, a meter, or some other means of measuring flow, should be installed in series with the control valve.

## MAX. PRESSURE (The pressures listed here are maximum working pressures at 100°F)

END CONNECTIONS	DUCTILE IRON	STEEL/STN STL	ALUMINUM
150# Flanged	250 psi	285 psi	285 psi
300# Flanged	640 psi	740 psi	---

**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

# Model 128 (Terminal Services)



## SIZES

GLOBE/ANGLE

Flanged Ends -

1 1/4" - 24" (globe); 1 1/4" - 16" (angle)

## FLUID OPERATING TEMPERATURE RANGE

(Valve Elastomers)

Buna-N -20°F to 180°F

Viton 20°F to 230°F

Fluorosilicone -40°F to 150°F

EPDM 0°F to 230°F

## MATERIALS

Consult factory for others.

**Body/Bonnet:** Ductile Iron (epoxy coated),  
Carbon Steel (epoxy coated), Stainless Steel,  
Aluminum

**Seat Ring:** Stainless Steel,  
Bronze

**Stem:** Stainless Steel, Monel

**Spring:** Stainless Steel

**Diaphragm:** Buna-N, Viton, (Nylon reinforced)

**Seat Disc:** Buna-N, Viton

**Pilot:** Stainless Steel, Bronze

**Other pilot system components:** Stainless  
Steel, Bronze/Brass

**Tubing & Fittings:**

Stainless Steel, Copper/Brass

## SPECIFICATIONS (Typical Terminal Services Application)

The excess flow shutoff valve shall close when the flow rate set point is exceeded. Manual reset shall be required to reopen the valve.

### DESIGN

The excess flow shutoff 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 the pistons be used as an operating means. The orifice plate shall be integrally installed in the valve inlet flange. The pilot system shall be furnished complete, installed on the main valve and include a needle valve speed control and an inline strainer. The excess flow shutoff valve shall be operationally and hydrostatically tested prior to shipment.

### MATERIALS OF CONSTRUCTION

The main valve body and bonnet shall be ductile iron. All ferrous surfaces shall be coated with 4 mils of epoxy. The main valve seat ring shall be stainless steel. Elastomers (diaphragms, resilient seats and O-rings) shall be Buna-N. The control pilot shall be stainless steel, while the opening speed control and control line tubing shall be stainless steel. The orifice plate shall also be stainless steel.

### OPERATING CONDITIONS

The excess flow shutoff valve shall be suitable for shutting off the flow over a range of <X to X (limited to 4:1)> gpm at pressures ranging from <X to X> psi.

### ACCEPTABLE PRODUCTS

The excess flow shutoff valve shall be a <size> Model 128, <globe pattern, angle pattern>, with <150# flanged, 300# flanged> end connections, as manufactured by OCV Control Valves, Tulsa, Oklahoma, USA.

U.S. DIMENSIONS - INCHES

DIM	END CONN.	1 1/4-1 1/2	2	2 1/2	3	4	6	8	10	12	14	16	24
A	150# FLGD	8 1/2	9 3/8	10 1/2	12	15	17 3/4	25 3/8	29 3/4	34	39	40 3/8	62
	300# FLGD	8 3/4	9 7/8	11 1/8	12 3/4	15 5/8	18 5/8	26 3/8	31 1/8	35 1/2	40 1/2	42	63 3/4
C	150# FLGD	4 1/4	4 3/4	6	6	7 1/2	10	12 11/16	14 7/8	17	--	20 13/16	--
	300# FLGD	4 3/8	5	6 3/8	6 3/8	7 13/16	10 1/2	13 3/16	15 9/16	17 3/4	--	21 5/8	--
D	150# FLGD	3	3 7/8	4	4	5 1/2	6	8	11 3/8	11	--	15 11/16	--
	300# FLGD	3 1/8	4 1/8	4 3/8	4 3/8	5 13/16	6 1/2	8 1/2	12 1/16	11 3/4	--	16 1/2	--
E	ALL	6	6	7	6 1/2	8	10	11 7/8	15 3/8	17	18	19	27
F (OPT)	ALL	3 7/8	3 7/8	3 7/8	3 7/8	3 7/8	3 7/8	6 3/8	6 3/8	6 3/8	6 3/8	6 3/8	8
H	ALL	10	11	11	11	12	13	14	17	18	20	20	28 1/2

\*GROOVED END NOT AVAILABLE IN 1 1/4"

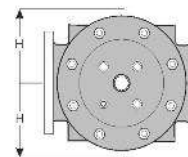
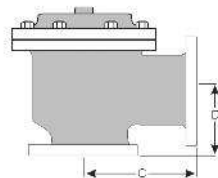
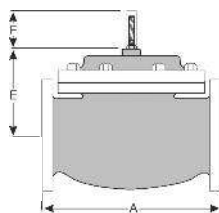
For maximum efficiency, the OCV control valve should be mounted in a piping system so that the valve bonnet (cover) is in the top position. Other positions are acceptable but may not allow the valve to function to its fullest and safest potential. In particular, please consult the factory before installing 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 128 valve

When ordering please provide:

Fluid to be controlled - Model Number - Size -  
Globe or Angle - End Connection - Body Material  
-Trim Material - Pilot Options - Flow Rate Setting  
or Range - Special Requirements / Installation  
Requirements



QUALITY SYSTEM  
REGISTERED TO  
ISO 9001

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