



Model 108-34 ▲



The Model 108-34 is applicable anywhere there is a need to maintain a minimum back pressure, combined with the requirement of backflow prevention and an on/off electrical operation.

Typical examples include:

- ▶ Pump systems
- ▶ Fuel distribution systems
- ▶ Hydrant refueling system back pressure control valve (BPCV)

SERIES FEATURES

- ▶ Pressure Sustaining: Prevents inlet pressure from dropping below a predetermined minimum
- ▶ Electrically operated solenoid allows valve to open (control pressure) or shut off (close)
- ▶ Automatic closure on pressure reversal
- ▶ Operates over a wide flow range
- ▶ Set pressure is adjustable with single screw
- ▶ Quick opening and adjustable closing speed
- ▶ Can be maintained without removal from the line
- ▶ Factory tested and can be pre-set to your requirements

OPERATION

When closed, a two-way solenoid causes the main valve to close. Opening the solenoid opens the valve and allows the normally closed, spring-loaded pilot to sense upstream pressure and respond to changes in pressure levels, causing the main valve to do the same. The net result is a constant modulating action of the pilot and main valve to hold the upstream pressure constant. The pilot system is equipped with a closing speed control that fine tunes the valve's response to the system variables. The valve closes automatically if outlet pressure becomes greater than inlet pressure.

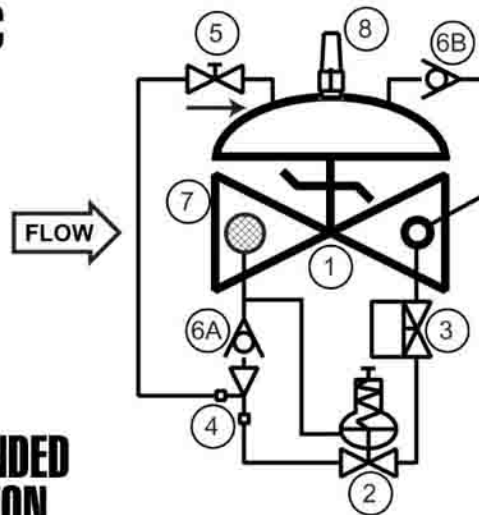
The solenoid may be supplied normally closed (energize to enable) or normally open (energize to close).

COMPONENTS

The Model 108-2 consists of the following components, arranged as shown on the schematic diagram:

- 1.) Model 65 Basic Control Valve
- 2.) Model 1330 Pressure Relief Pilot
- 3.) Model 451 Two-Way Solenoid Pilot
- 4.) Model 126 Ejector
- 5.) Model 141-3 Flow Control Valve
- 6.) Model 141-1 Check Valve
- 7.) Model 123 Inline Strainer
- 8.) Model 155L Visual Indicator

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" (DN200) 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.
- ▶ Following main valve installation, the solenoid must be wired into the user's control system. This is a simple two-wire (plus ground) connection.

SIZING

Pressure sustaining valves should be limited to a maximum velocity of 7.5 meters/second. Definitive sizing information can be found in the OCV catalog, Series 108 section, and the Engineering section Performance Charts. Consult factory for assistance.

MAX. PRESSURE

Note: Working pressures of solenoids vary greatly, consult factory on application of OCV Model 108-34.

END CONNECTIONS	DUCTILE IRON	STEEL WCB	STEEL LCB	Stn. Stl. CF8M	ALUMINUM
Threaded	44.1 bar	44.1 bar	44.1 bar	44.1 bar	19.7 bar
Grooved	20.7 bar	20.7 bar	20.7 bar	20.7 bar	13.8 bar
150# Flanged	17.2 bar	19.7 bar	18.4 bar	19.0 bar	19.7 bar
300# Flanged	44.1 bar	51.0 bar	48.0 bar	49.6 bar	----

SIZE, DN	32-40	50	65	80	100	150	200	250	300	350	400	600
FLOW@7.5 M/S, M3/HR	26-36	59	85	130	227	510	886	1390	1990	2410	3125	7100

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Model 108-34 Back Pressure / Check / Solenoid Shut-Off Valve METRIC

