SURGE ANTICIPATING VALVE

Model 735-M-M5/M5L/M6

Hydraulically operated, diaphragm actuated, off-line surge anticipating valve that immediately opens in response to the pressure drop associated with abrupt pump stoppage. The pre-opened valve dissipates the returning high pressure wave, eliminating the surge. The valve smoothly closes drip tight as quickly as the relief feature allows, thereby preventing closing surge. The valve also relieves excessive system pressure.

The BERMAD 700 Series large size control valves are hydraulically operated, diaphragm actuated type. Unique hydro-dynamic globe valve design with a special open plug provides high flow capabilities. The valves are available in the standard configuration or with an Independent Check Feature code "2S".

Click here for control accessories

HOME VIEW

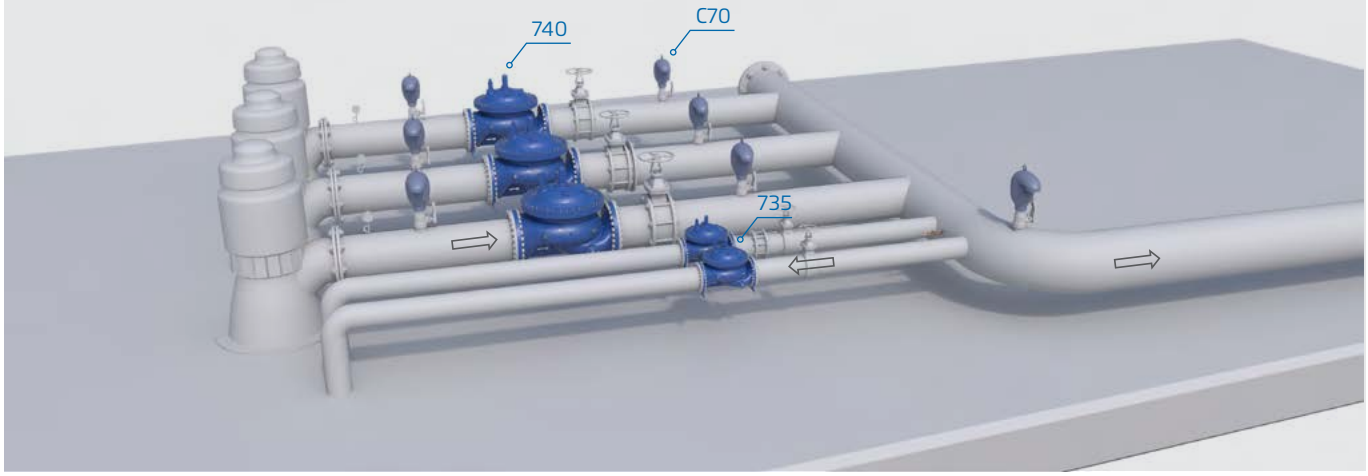
Features and Benefits

- Hydrodynamic wide globe valve body provides:
  - Higher flow (Kv; Cv) than standard globe valves
  - Higher resistance to cavitation damage
- In-line serviceable
- Valves are suitable for working with all types of command: Hydraulic, Electric and Pneumatic.
- Self-operated valves that can work without an external source of power.
- Wide range of options and accessories:
  - One-way or two-way flow direction
  - V-Port
  - Cavitation cage
  - Visual position indicator
  - Limit switches
  - Analog opening output
  - Large selection of control accessories
  - Double chamber actuation (700-M6)
  - Large inspection and service ports (700-M5L)

Major Additional Features:

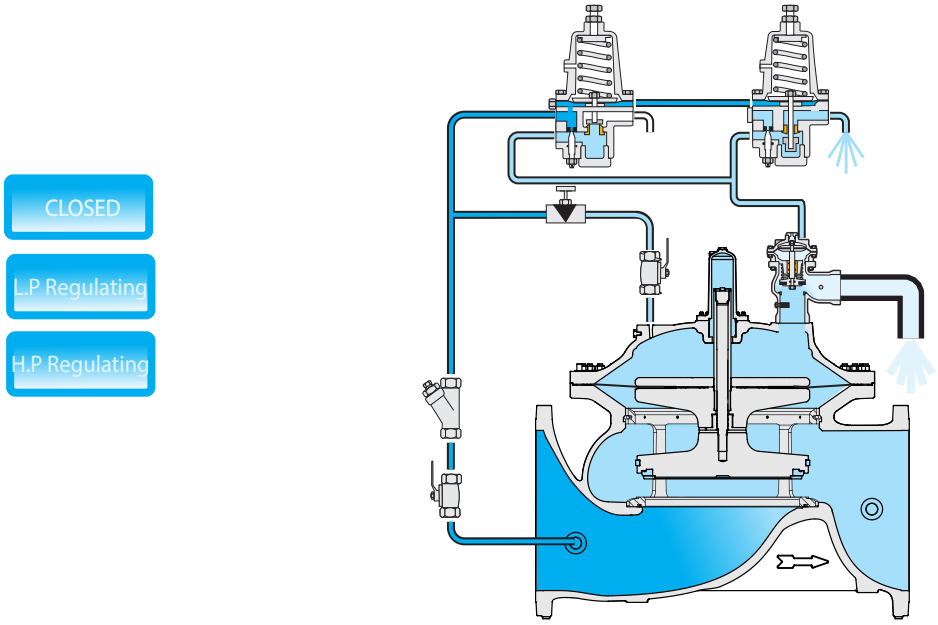
- Solenoid control – 735-55-M-M5/M5L/M6
- Quick pressure relief valve – 73Q-M5/M5L/M6
- Hydraulic/Electric override – 735-55-09-M-M5/M5L/M6
- Independent Check Feature – 735-M-2S- M5/M5L/M6
  See relevant BERMAD publication

Typical Installation



All images in this catalog are for illustration only

Link to Animation



Main Valve

Valve Pattern: Globe
Size Range: DN 500-1200; 20"-48"
Pressure Rating: 40 bar; 600 psi
End Connections: Flanged
Temperature Rating: 60°C; 140°F for Cold water applications.
Optional higher temperature: Available on request
Coating: Dark blue Fusion bonded epoxy

Control System

Standard Materials:
Accessories: Stainless Steel, Bronze & Brass
Tubing: Stainless Steel or Copper
Fittings: Stainless Steel or Brass

Pilot standard materials:
Body: Stainless Steel, Bronze or Brass
Elastomers: Synthetic Rubber
Spring: Stainless Steel
Internals: Stainless Steel

Required data for surge analysis:
Pipe profile and characteristic, pumping station full details, valves and reservoirs.

Notes

- Full system data is required for surge analysis and optimal valve sizing.
- A flow stem enables limiting valve opening stroke, adjusting precisely the required flow through the valve.
- Recommended maximum flow velocity: 15 m/sec; 50 ft/sec.
- Minimum operating pressure: 0.7 bar/10 psi. For lower pressure requirements consult factory.

For detailed Engineering & Specification data, IOM and CAD Drawings, visit the Model Page on the BERMAD website.

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