LEVEL AND FLOW CONTROL VALVE

With 3-Way Altitude Pilot

Model 757-80-U-M5-M5M

Hydraulically operated control valve that controls reservoir filling and reservoir level. During filling, the valve limits the flow to a pre-set maximum, regardless of fluctuating upstream pressure or reservoir level and protects the valve from cavitation damage. The valve shuts off at a pre-set reservoir high level and fully opens in response to an approximately one meter (3 ft) level drop, as sensed by the 3-Way altitude pilot mounted on the main valve.

The BERMAD 700 Series large control valves are hydraulically operated and diaphragm actuated. Their unique hydro-dynamic globe design with an open plug ensures high flow capabilities.

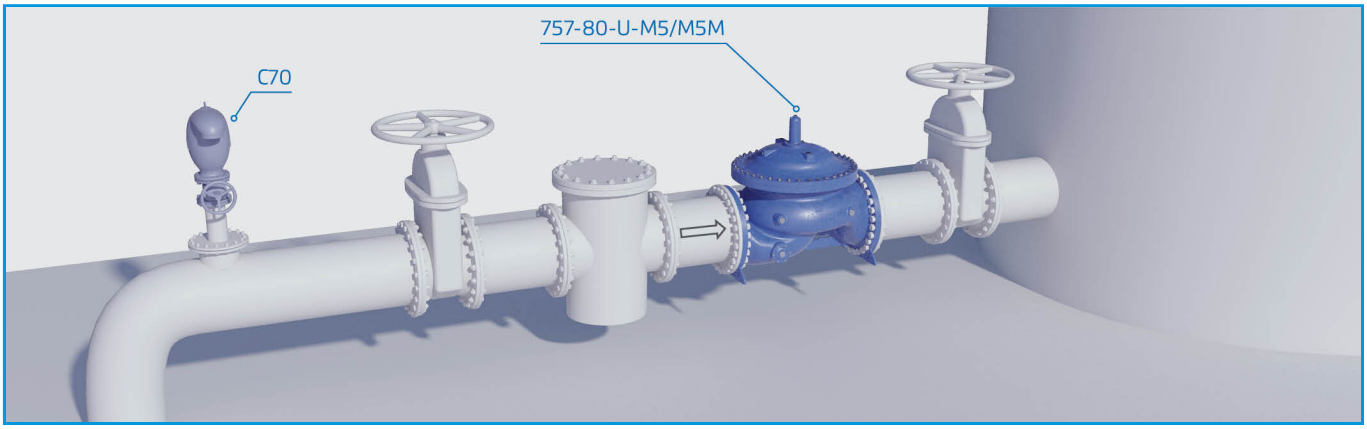
Features & Benefits

- Hydrodynamic wide globe valve body provides:
  - Higher flow coefficient (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:
  - Visual position indicator
  - Limit switches
  - Analog opening output
  - Large selection of control accessories
  - Large inspection and service ports (700-M5L)

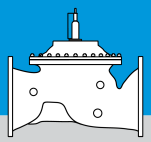
Typical Applications

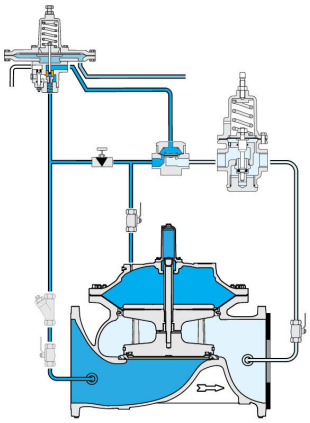
- Municipal systems - Level control for water towers and elevated reservoirs
- Reservoir filling flow control and cavitation prevention
- Bi-Level control for water refreshment
- District Cooling Plants (DCP) - Process control

Typical Installation

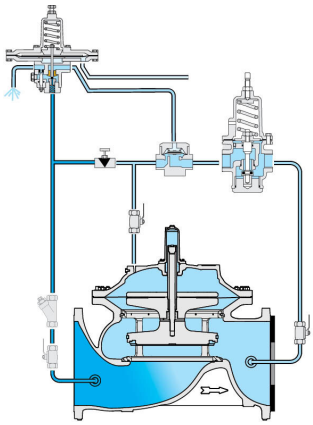


All images in this catalog are for illustration only





Closed



Regulating

Main Valve

Size Range: 20"-24"; DN500-600
Pattern: Globe
Pressure Rating: 400 psi
End Connection: Flanged
Temperature Rating: 180°F
For 140–180°F consult factory

Standard Materials:

Body & Cover: Ductile Iron
Cover Bolts: Stainless Steel
Internals: Epoxy coated Ductile Iron, Stainless Steel & Tin Bronze
Diaphragm: Fabric-reinforced synthetic rubber
Seals: Synthetic rubber
Coating: Dark blue Fusion bonded epoxy
For other materials contact BERMAD

Control System

Standard Materials:

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

Pilot standard materials:

Body & Cover: Brass or Stainless Steel 316
Elastomers: Synthetic Rubber
Spring: Stainless Steel or Galvanized Steel
Internal Parts: Stainless Steel & Brass
Diaphragm Covers: Fusion Bonded Epoxy Coated Steel or Stainless Steel

Pilot Options:

Various pilots and calibration springs are available.
Select according to valve size and operating conditions.
For more details check relevant pilots product pages.

Altitude Adjustment Range:

Code	Meter	Feet
M1	2-6	7-20
M6	2-14	7-46
M5	5-22	17-72
M4	15-35	49-115
M8	25-70	82-230

Orifice Standard Material: POM-C or Stainless Steel

Notes

- Orifice diameter is calculated for each valve.
- Flow Setting Range: (-)15% and (+)25% from predetermined flow.
- Orifice adds 20-32mm; 0.8"-1.2" to valve length.
- Shut-off level repeatability: 100mm; 4"
- Re-opening level: approx. 1m; 3ft below shut-off level.
- Inlet Pressure, Outlet Pressure and Flow-rate are required for optimal sizing and cavitation analysis.
- Recommended maximum flow velocity: 6.0 m/sec; 20 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.