

# LEVEL CONTROL & PRESSURE SUSTAINING VALVE

## With 3-Way Altitude Pilot

### Model 753-80-M5-M5M-M5L

Hydraulically operated, level control and pressure sustaining control valve that controls reservoir filling and reservoir level. During filling the valve sustains minimum upstream pressure regardless of fluctuating flow or reservoir level.

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.



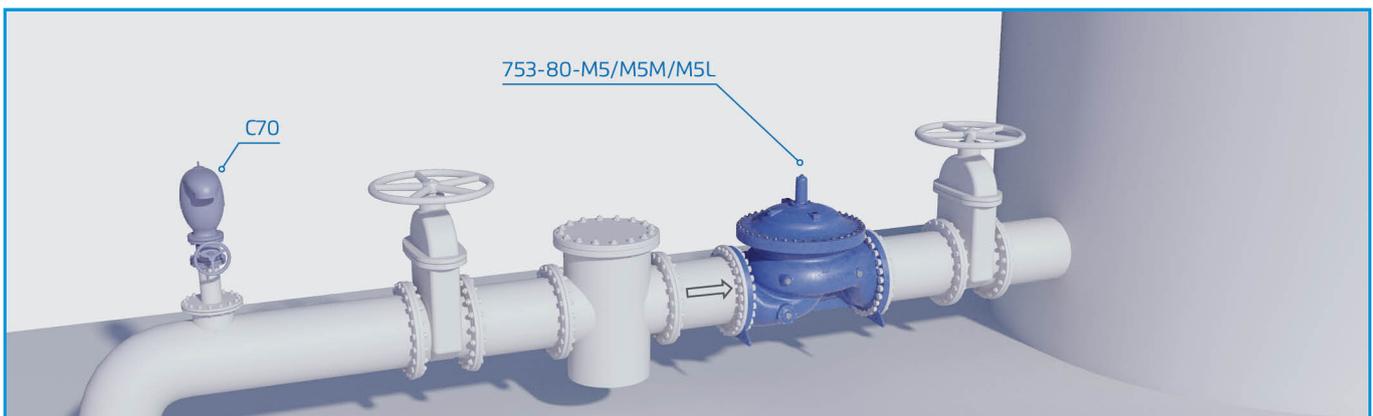
#### Features & Benefits

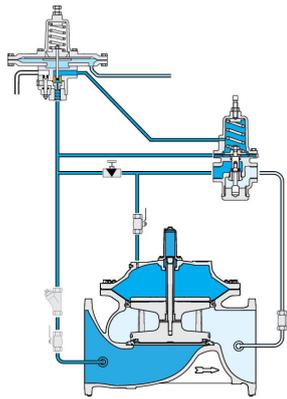
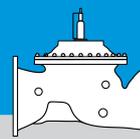
- Hydrodynamic wide globe valve body provides:
  - Higher flow coefficient (Kv; Cv) than standard globe valves
  - Higher resistance to cavitation damage
- In-line serviceable
- Valves are suitable for working with all types of command: Hydraulic, Electric and Pneumatic.
- Self-operated valves that can 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

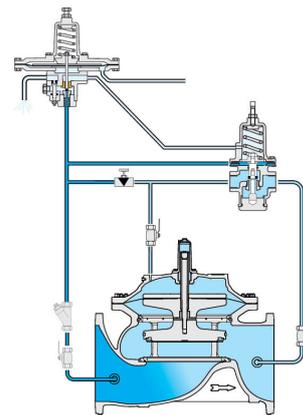
- Municipal systems - Level control for water towers and elevated reservoirs
- Bi-Level control for water refreshment
- Water delivery system - Prioritizing upstream over reservoir filling
- District Cooling Plants (DCP) - Process control

#### Typical Installation





Closed



Regulating

## Main Valve

**Size Range:** 20"-36"; DN500-900

**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

### 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

## Notes

- Shut-off level repeatability: 100mm; 4&#34;
- Re-opening level: approx. 1m; 3ft below shut-off level.
- Inlet Pressure, Outlet Pressure and Flow-rate are required for optimal sizing.
- 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](http://www.bermad.com) website.