

# LEVEL CONTROL & PRESSURE SUSTAINING VALVE

## With Altitude Pilot

### Model 753-80

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 SIGMA EN/ES series valves are hydraulic globe valves with a raised seat and double chamber actuator. They provide unobstructed flow, effective high-pressure modulation, and minimal cavitation, complying with various potable water standards.



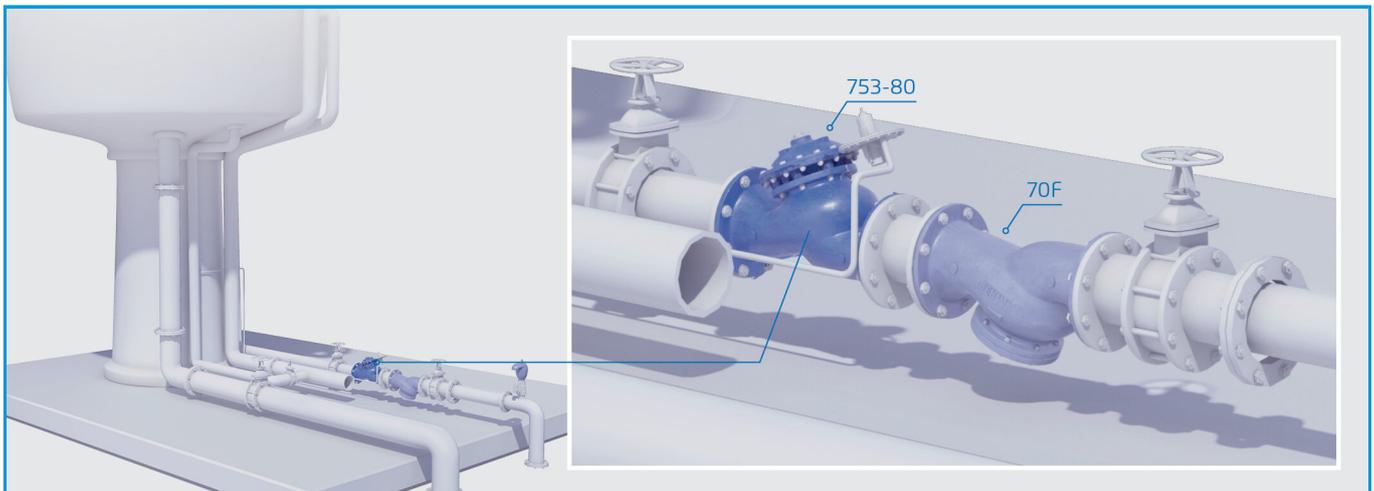
#### Features & Benefits

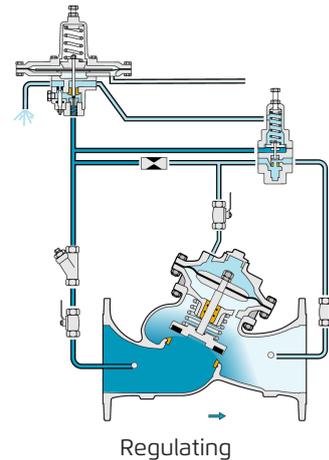
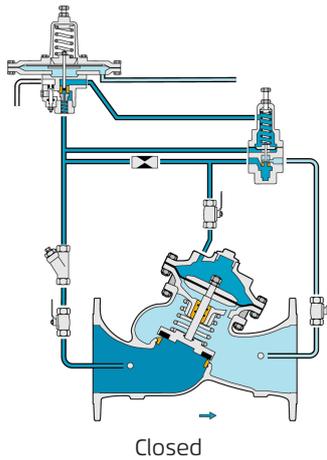
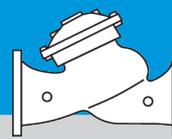
- Designed to - Stand up to the toughest conditions
  - Excellent anti-cavitation properties
  - Wide flow range
  - High stability and accuracy
  - Drip tight sealing
- Double chamber design
  - Moderated valve reaction
  - Protected diaphragm
  - Optional operation in very low pressure
  - Moderated closing curve
- Flexible design - Easy addition of features
- Obstacle free flow pass
- V-Port throttling plug (optional) - Very stable at low flow
- Compatible with various standards
- In-line serviceable - Easy maintenance

#### 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
- Potable water and fire protection

#### Typical Installation





This drawing refers to 1½ – 8"; 40-200 mm sized valves only. For other sizes please refer to the Model's IOM.

### Main Valve

**Size Range:**

**EN Series:** 1½"-16"; DN40-400

**ES Series:** 2½"-24"; DN65-600

**Pattern:** "Y" (globe)

**Pressure Rating:** 250 psi; 400 psi

**End Connection:** Flanged

**Plug Types:** Flat disc, V-port, Cavitation cage

**Temperature Rating:** 180°F

*For 140-180°F consult factory*

**Standard Materials:**

**Body & Cover:** Ductile Iron

**Bolts, Nuts & Studs:** Stainless Steel

**Internals:** Stainless Steel, Tin Bronze, Coated Steel & POM

**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.