

LEVEL CONTROL & PRESSURE SUSTAINING VALVE

with Bi-Level Vertical Float

Model 753-66

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. Reservoir filling is in response to a hydraulically controlled non-modulating bi-level vertical float that opens at a pre-set reservoir low level and shuts off drip-tight at a pre-set high level.

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.



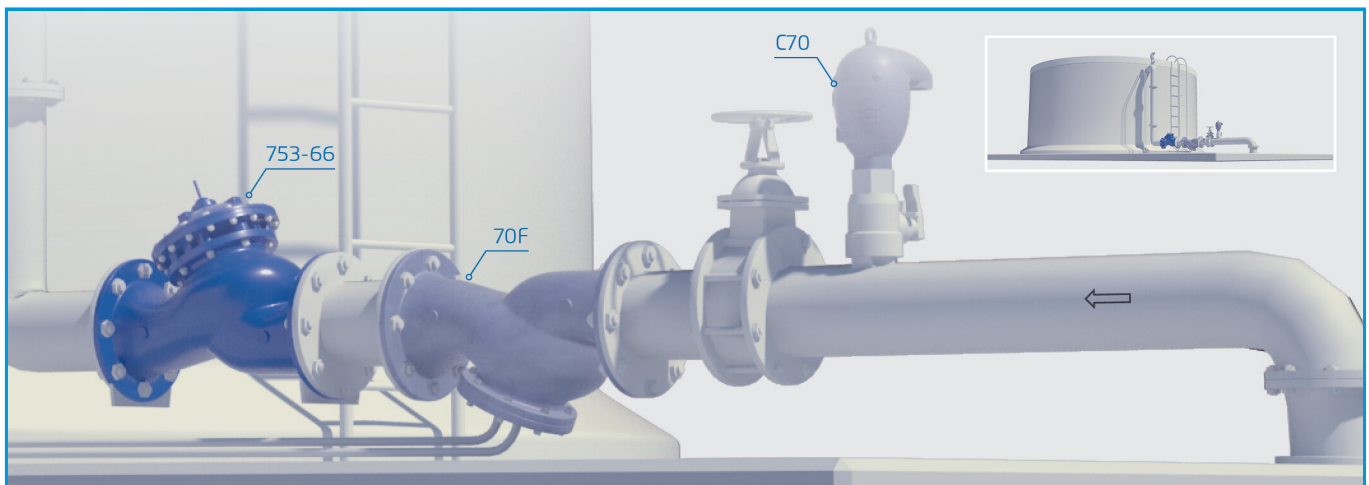
Features & Benefits

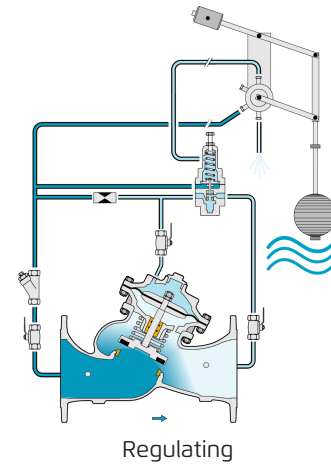
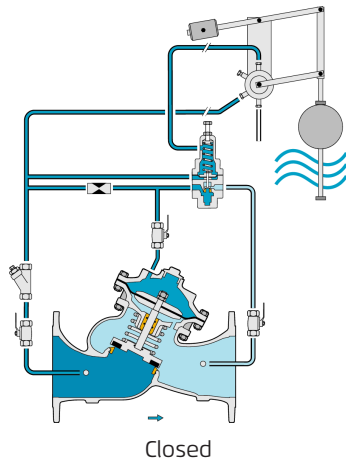
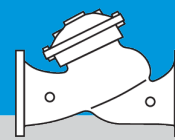
- Designed to - Stand up to the toughest conditions
 - Excellent anti-cavitation properties
 - Wide flow range
 - High stability and accuracy
 - Drip tight sealing
- Double chamber design
 - Moderated valve reaction
 - Protected diaphragm
 - Optional operation in very low pressure
 - Moderated closing 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
- High quality materials
- In-line serviceable - Easy maintenance

Typical Applications

- Level control for water reservoirs
- Bi-Level control for water refreshment
- Water delivery system - Prioritizing upstream over downstream demand
- Serves as a safety valve in tank filling systems
- Potable water, fire protection and grey water

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: Stainless Steel, Bronze & Brass

Elastomers: Synthetic Rubber

Internals and Spring: Stainless Steel

Float standard materials:

Pilot Body: Brass

Elastomers: NBR

Internal Parts: Stainless Steel 316 & Brass

Lever System: Brass

Float: Plastic

Float Rod: Stainless Steel 316

Base Plate: Stainless Steel 316

Float optional materials:

Metal Parts: Stainless Steel 316

Elastomers: EPDM

Notes

- Minimum level differential: 150mm; 6⅝";
- Maximum level differential: 540mm; 21⅝";
- Each extension rod adds 560 mm; 22". One extension rod is supplied.
- Extra counterweight is required if second extension rod is used.
- If inlet pressure is below 0.5 bar / 7psi or above 10 bar / 150 psi, consult factory.
- Inlet Pressure, Outlet Pressure and Flow-rate are required for optimal sizing.
- Recommended maximum flow velocity: 6.0 m/sec; 20 ft/sec.
- See BERMAD float installation recommendation.

For detailed Engineering & Specification data, IOM and CAD Drawings, visit the Model Page on the [BERMAD](https://www.bermad.com) website.