

PRESSURE SUSTAINING VALVE

Model 730-X

Pressure relief/sustaining hydraulically operated control valve that can fulfill either of two separate functions: When installed in-line, it sustains minimum pre-set, upstream (back) pressure, regardless of fluctuating flow or varying downstream pressure. When installed as a circulation valve, it relieves excessive line pressure when above maximum pre-set. This valve is a double chamber configuration using 3-way control, being extremely responsive regardless of operating conditions, allowing full opening without the risk of hydraulic lock out.

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

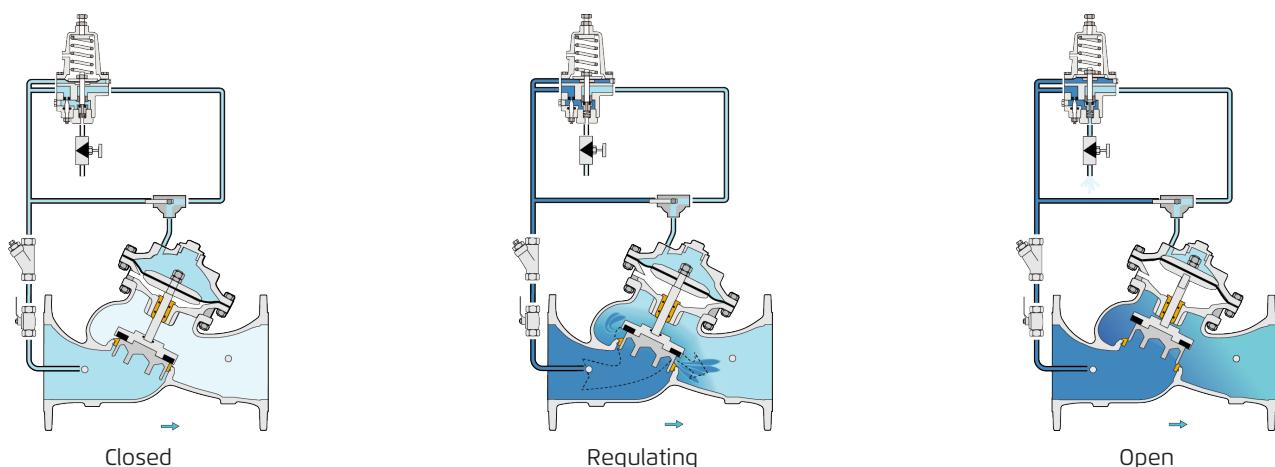
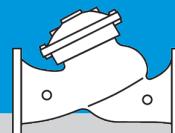
- Certified to functional and drinking water standards: EN-1074, NSF/ANSI 61/372, WRAS, AS 5081 and others
- Designed to - Stand up to the toughest conditions
 - Excellent anti-cavitation properties
 - Wide flow range
 - High stability and accuracy
 - Drip tight sealing
- Double chamber design
 - Moderated 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
- High quality materials
- In-line serviceable - Easy maintenance

Typical Applications

- Water delivery system - Prioritizing upstream over downstream demand
- Pumping stations - Ensure operating point on pump curve
- Pumping stations - Circulation during low demand
- Filtration system - Sustaining minimum pressure for efficient backflush
- Downhill lines emptying prevention

Typical Installation





This drawing refers to 1½" – 12"; 40-300 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: 16 bar; 25 bar

End Connection: Flanged

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

Temperature Rating: 80°C

For 60–80°C 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

Pilot standard materials:

Body: Stainless Steel, Bronze & Brass

Elastomers: Synthetic Rubber

Internals and Spring: 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.

Control System

Standard Materials:

Accessories: Stainless Steel, Bronze & Brass

Tubing: Stainless Steel or Copper

Fittings: Stainless Steel or Brass

Notes

- Inlet Pressure, Outlet Pressure and Flow-rate are required for optimal sizing and cavitation analysis.
- Recommended continuous flow velocity: 0.1-6.0 m/sec; 0.3-20 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.