

PRESSURE REDUCING SYSTEM

with "Watchdog" Hydraulic Backup Valve

Model 72S-H

Hydraulically operated, diaphragm actuated pressure reducing system, consisting of a BERMAD 720 PRV and an integral "Watchdog" backup valve. The system reduces a high upstream pressure to a lower, constant downstream pressure, regardless of fluctuating demand or varying upstream pressure. The "Watchdog" backup valve is fully open in normal operation. Should pressure rise downstream of the BERMAD 720 because of valve failure, the "Watchdog" quickly responds and triggers an alarm, while providing stable pressure to consumers until the PRV is repaired.

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

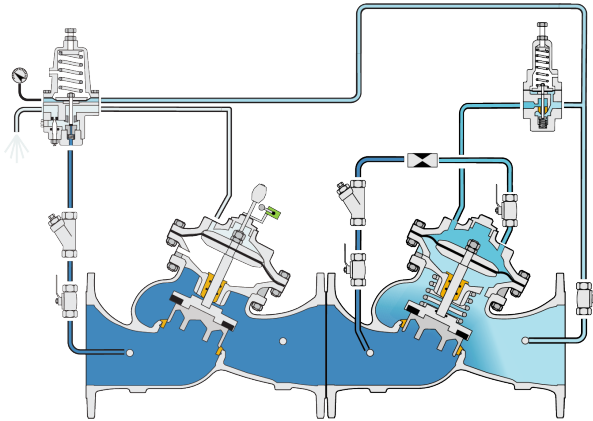
- Designed to - Stand up to the toughest conditions
 - Excellent anti-cavitation properties
 - Wide flow range
 - High stability and accuracy
 - Drip tight sealing
- Double chamber design
- V-Port throttling plug - Very stable at low flow
- Compatible with various standards
- In-line serviceable - Easy maintenance

Typical Applications

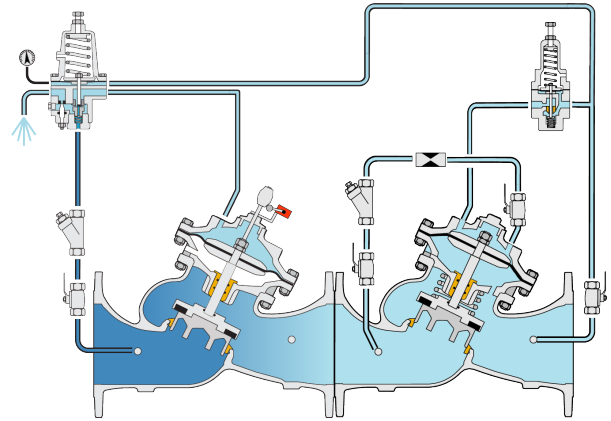
- Highrise and midrise residential buildings - Reducing pressure at the pressure zone inlet
- Municipal systems - Reducing pressure at potable water connections to buildings and structures

Typical Installation





Watchdog Standing-By



Watchdog Activated

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"-8"; DN40-200

ES Series: 2½"-10"; DN65-250

Pattern: "Y" (globe)

Pressure Rating: 250 psi; 400 psi

End Connection: Grooved, Flanged

Plug Types: V-port

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

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.

Notes

- Backup pressure settings: 1 bar; 15 psi above PRV.

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