

PRESSURE REDUCING VALVE

with Solenoid Control

Model 720-55

Hydraulically operated, pressure reducing control valve that reduces higher upstream pressure to lower constant downstream pressure, regardless of fluctuating demand or varying upstream pressure. The valve either regulates or shuts off in response to an electric signal.

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

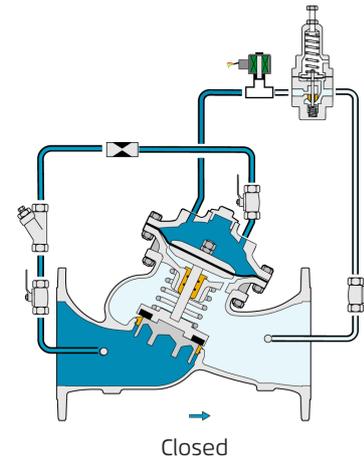
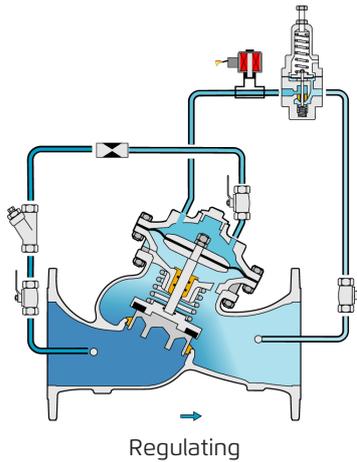
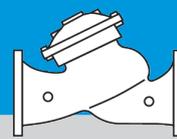
- Designed to - Stand up to the toughest conditions
 - Excellent anti-cavitation properties
 - Wide flow range
 - High stability and accuracy
 - Drip tight sealing
- Double chamber design
 - Moderated valve reaction
 - Protected diaphragm
 - Optional operation in very low pressure
 - Moderated closing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

- National water systems – Backup pressure control valve
- Municipal systems – Pressure reduction in parallel systems
- Irrigation infrastructures – Pressure reduction and isolation

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) & "A" (angle)

Pressure Rating: 250 psi; 400 psi

End Connection: Flanged, Threaded, Grooved

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

Refer to [BERMAD 700 Series Engineering Data](#) for available configurations (pattern, end connections, materials) in each 700 type.

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

Solenoid standard materials:

Body: Brass or Stainless Steel

Elastomers: NBR or FPM

Enclosure: Molded Epoxy

Solenoid Electrical Data:

Voltages:

(AC): 24, 110-120, 220-240, (50-60Hz)

(DC): 12, 24, 110, 220

Power Consumption:

(AC): 30VA, inrush; 15VA (8W), holding or 70VA, inrush; 40VA (17.1W), holding

(DC): 8-11.6W

Values may vary according to specific solenoid model.

For more details check solenoid product page.

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.
- Various pilots and calibration springs are available. Select according to valve size and operating conditions. For more details check relevant pilots product pages.

For detailed Engineering & Specification data, IOM and CAD Drawings, visit the Model Page on the BERMAD website.