

BURST CONTROL & PRESSURE REDUCING VALVE

Excessive Flow

Model 792-U

Hydraulically operated, diaphragm actuated burst control & pressure reducing control valve with two independent functions: When flow is below setting, it reduces higher upstream pressure to lower pre-set downstream pressure, regardless of varying demand or upstream pressure. Upon sensing flow in excess of setting, it shuts off drip tight and locks until manually reset.

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

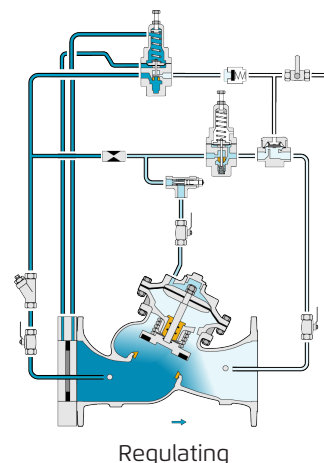
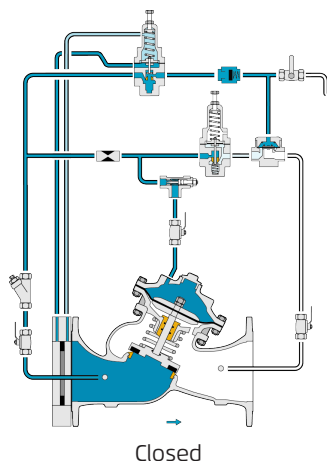
- Designed to - Stand up to the toughest conditions
 - Excellent anti-cavitation properties
 - Wide flow range
 - High stability and accuracy
 - Drip tight sealing
- Double chamber design
 - Moderated valve reaction
 - Protected diaphragm
 - Optional operation in very low pressure
 - Moderated closing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

- Old or sensitive pipe systems - Prevents flooding and water loss

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: 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

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.

Orifice Standard Material: POM-C or Stainless Steel

Notes

- Burst flow settings should be at least 25% higher than the maximum allowed system flow.
- Orifice diameter is calculated for each valve.
- The orifice additional head loss is 0.2 bar ; 2.8 psi
- Orifice adds 20-32mm; 0.8"-1.2" to valve length.
- Recommended continuous flow velocity: 0.3-6.0 m/sec; 1-20 ft/sec.
- Minimum operating pressure: 1.0 bar; 15 psi. For lower pressure requirements consult factory.
- Inlet Pressure, Outlet Pressure and Flow-rate are required for optimal sizing and cavitation analysis.

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