

# BURST CONTROL VALVE, EXCESSIVE FLOW

## with Mechanical Flow Stem

### Model 790-M

Hydraulically operated, diaphragm actuated, burst control valve that senses flow levels. When it senses flow in excess of settings, it shuts off and locks drip tight until manually reset. As long as flow is lower than settings, the valve remains fully open, minimizing head loss. A flow stem enables limiting valve opening stroke, precisely adjusting the required flow through the valve.

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.



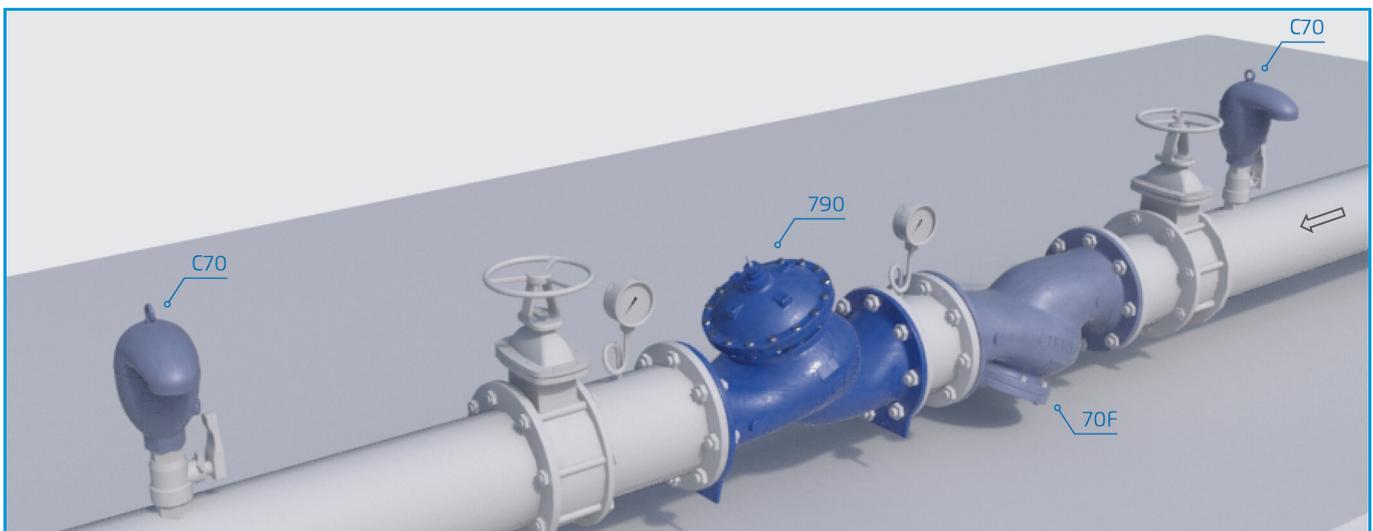
#### Features & Benefits

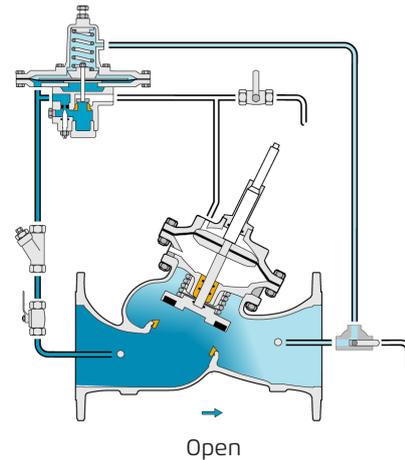
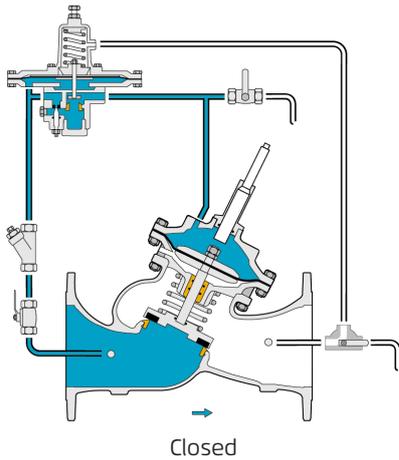
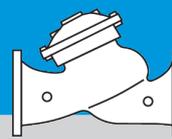
- Designed to - Stand up to the toughest conditions
  - Excellent anti-cavitation properties
  - Wide flow range
  - High stability and accuracy
  - Drip tight sealing
- Double chamber design
  - Moderated valve reaction
  - Protected diaphragm
  - Optional operation in very low pressure
  - Moderated 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 – 16"; 40-400 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.

## Notes

- Burst flow settings should be at least 25% higher than the maximum allowed system flow.
- Inlet Pressure, Outlet Pressure and Flow-rate are required for optimal sizing.
- Recommended maximum flow velocity: 6.0 m/sec; 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](https://www.bermad.com) website.