FLOW CONTROL & PRESSURE REDUCING

with Opening and Closing Speed Controls

Model 772-03-U

Hydraulically operated flow control & pressure reducing valve, that either maintains pre-set maximum flow and reduces higher upstream pressure to lower constant downstream pressure, regardless of fluctuating demand or varying system pressure.

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.



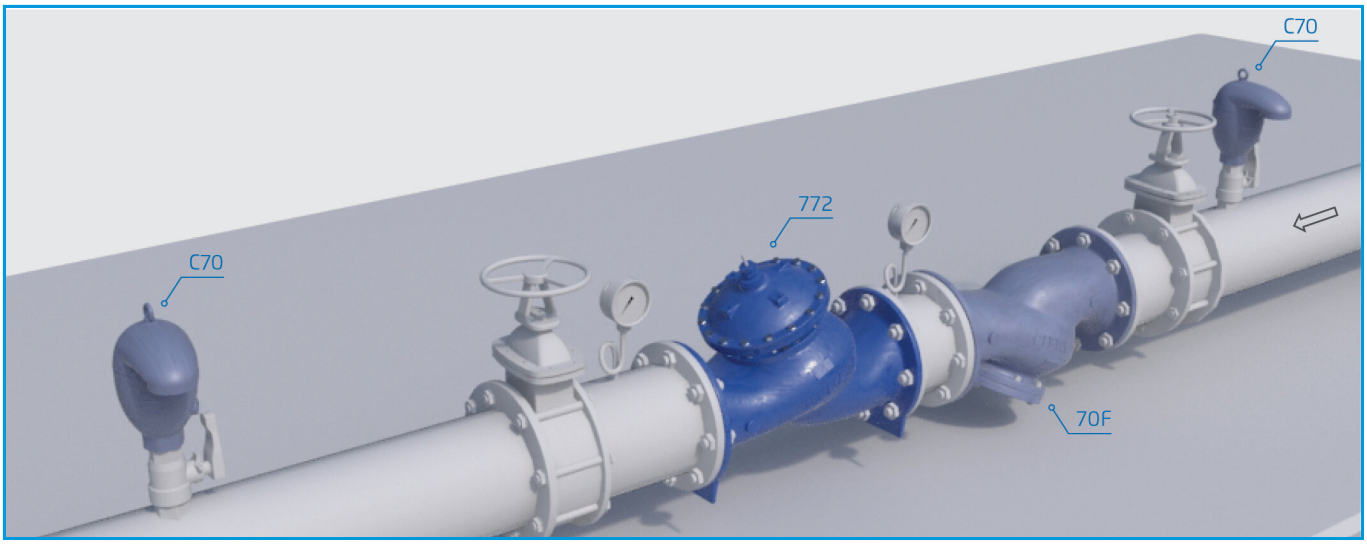
Features & Benefits

- 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

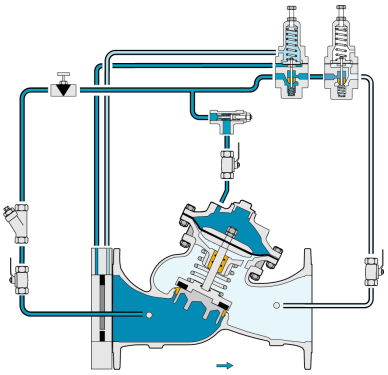
Typical Applications

- Water delivery systems - Balancing supply capacity with demand
- HVAC Systems - Flow limiting to maintain efficiency and ensure optimal performance
- Filtration system - Process flow control in filtration applications

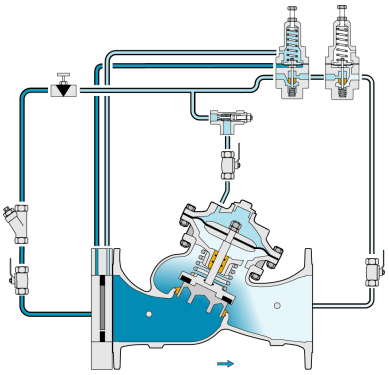
Typical Installation



All images in this catalog are for illustration only



Closed



Regulating

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

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

- Orifice diameter is calculated for each valve.
- Flow Setting Range: (-)15% and (+)25% from predetermined flow.
- Orifice adds 20-32mm; 0.8"-1.2" to valve length.
- The orifice additional head loss is 0.2 bar ; 2.8 psi
- 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.
- When minimum head loss is essential and flow velocity is higher than 1.0 m/sec, consider using model 770-J.

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

The information contained herein may be changed by BERMAD without notice. BERMAD shall not be held liable for any errors.
© Copyright 2016-2026 BERMAD CS Ltd