

FLOW CONTROL VALVE

with Opening and Closing Speed Controls

Model 770-03-U-M5-M5M

Hydraulically operated flow control valve that maintains pre-set maximum flow, regardless of fluctuating demand or varying system pressure.

The BERMAD 700 Series large control valves are hydraulically operated and diaphragm actuated. Their unique hydro-dynamic globe design with an open plug ensures high flow capabilities.



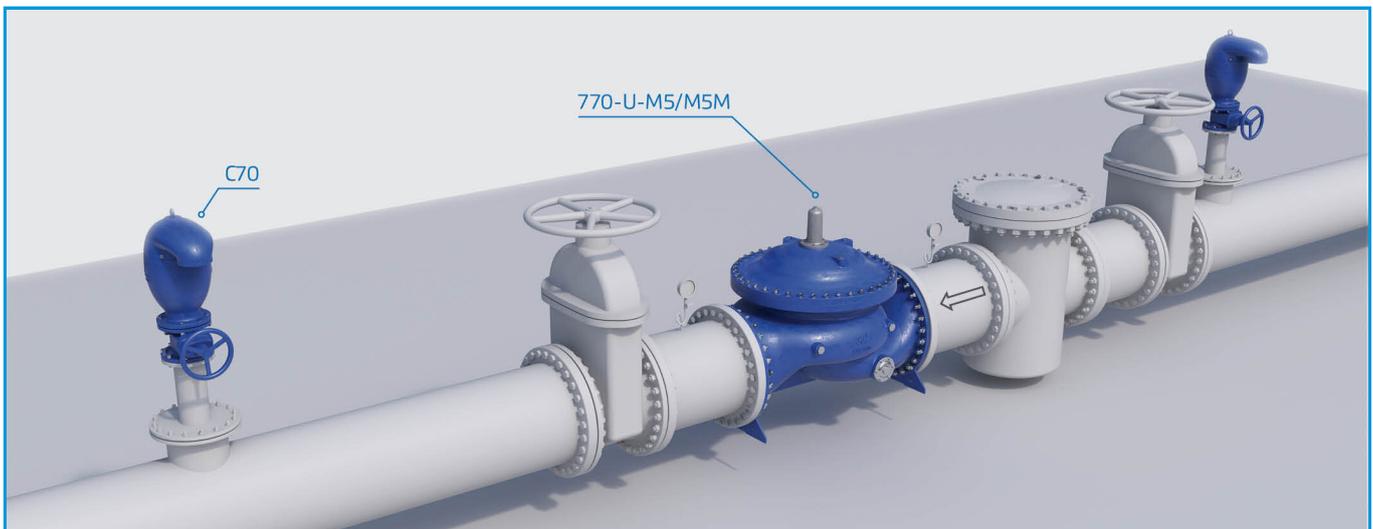
Features & Benefits

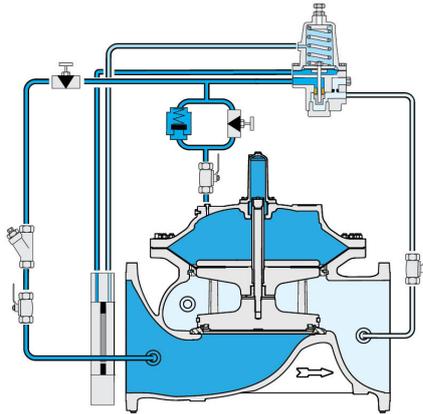
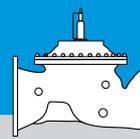
- Hydrodynamic wide globe valve body provides:
 - Higher flow coefficient (Kv; Cv) than standard globe valves
 - Higher resistance to cavitation damage
- In-line serviceable
- Valves are suitable for working with all types of command: Hydraulic, Electric and Pneumatic.
- Self-operated valves that can work without an external source of power
- Wide range of options and accessories:
 - Visual position indicator
 - Limit switches
 - Analog opening output
 - Large selection of control accessories
 - Large inspection and service ports (700-M5L)

Typical Applications

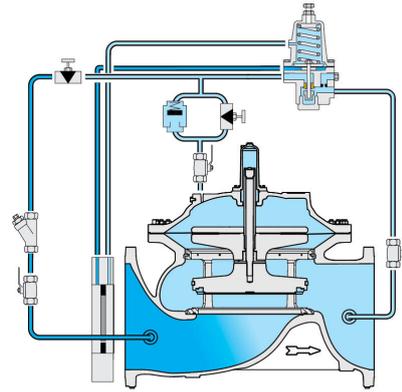
- Water delivery systems - Balancing supply capacity with demand

Typical Installation





Closed



Regulating

Main Valve

Size Range: 20"-24"; DN500-600

Pattern: Globe

Pressure Rating: 25 bar

End Connection: Flanged

Temperature Rating: 80°C

For 60-80°C consult factory

Standard Materials:

Body & Cover: Ductile Iron

Cover Bolts: Stainless Steel

Internals: Epoxy coated Ductile Iron, Stainless Steel & Tin Bronze

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.
- 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.
- When diameter size is above 24"±; DN600 or minimum head loss is essential and flow velocity is higher than 1.0 m-sec, consider using a pitot tube flow sensor (770-J), and high sensitivity flow pilot #82-HC-DR.

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