

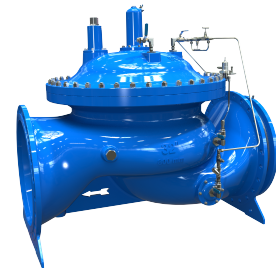
# FLOW CONTROL VALVE

## 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.



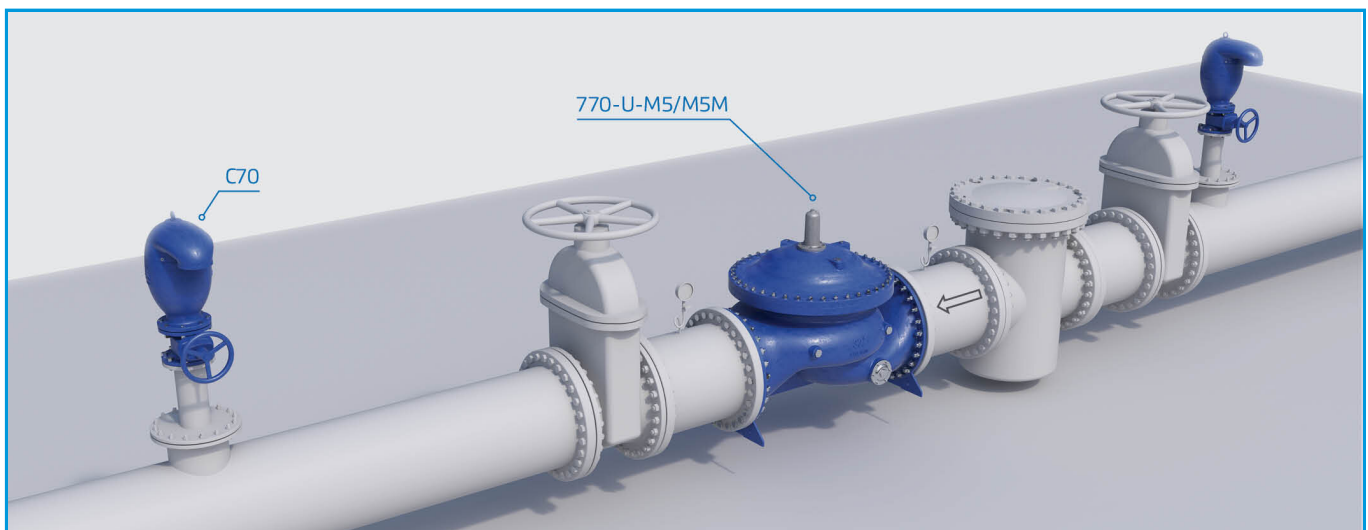
#### Features & Benefits

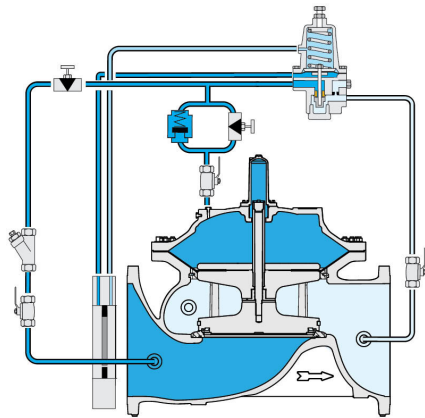
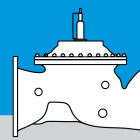
- Hydrodynamic wide globe valve body provides:
  - Higher flow coefficient (Kv; Cv) than standard globe valves
  - Higher resistance to cavitation damage
- In-line serviceable
- Valves are suitable for working with all types of command: Hydraulic, Electric and Pneumatic.
- Self-operated valves that can 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

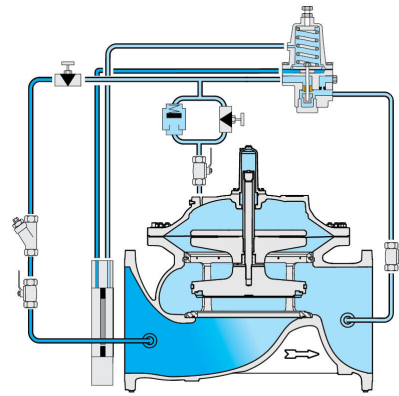
- Water delivery systems - Balancing supply capacity with demand

#### Typical Installation





Closed



Regulating

## Main Valve

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

**Pattern:** Globe

**Pressure Rating:** 400 psi

**End Connection:** Flanged

**Temperature Rating:** 180°F

*For 140–180°F 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.



[www.bermad.com](https://www.bermad.com)

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