

# FLOW CONTROL VALVE

## Model 770-U-M5/M5L/M6

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

The BERMAD 700 Series large size control valves are hydraulically operated, diaphragm actuated type. Unique hydro-dynamic globe valve design with a special open plug provides high flow capabilities. The valves are available in the standard configuration or with an Independent Check Feature code "2S".



[Click here for control accessories](#)

### Features and Benefits

- Hydrodynamic wide globe valve body provides:
  - Higher flow (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:
  - One-way or two-way flow direction
  - V-Port
  - Cavitation cage
  - Visual position indicator
  - Limit switches
  - Analog opening output
  - Large selection of control accessories
  - Double chamber actuation (700-M6)
  - Large inspection and service ports (700-M5L)

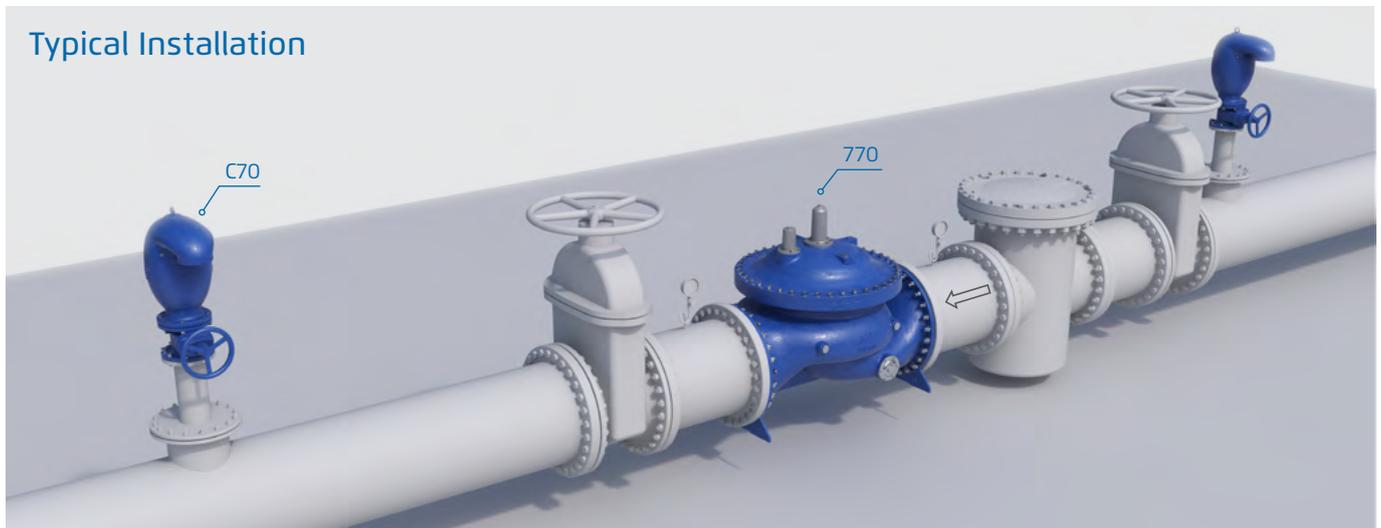
### Major Additional Features

- Solenoid control – 77055-U-M5/M5L/M6
- Solenoid control & check feature – 770-25-U-M5/M5L/M6
- High sensitivity pilot – 770-12-U-M5/M5L/M6
- Pressure Reducing – 772-U-M5/M5L/M6
- Level & flow control valve – 757U-M5/M5L/M6
- Pump & flow control valve – 747U-M5/M5L/M6
- Pump circulation & flow control valve – 749-U-M5/M5L/M6
- Electronic control valve – 718-M5/M5L/M6-03
- Independent Check Feature – 770-U-2S-M5/M5L/M6

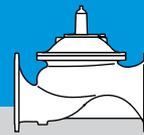
See relevant BERMAD publication



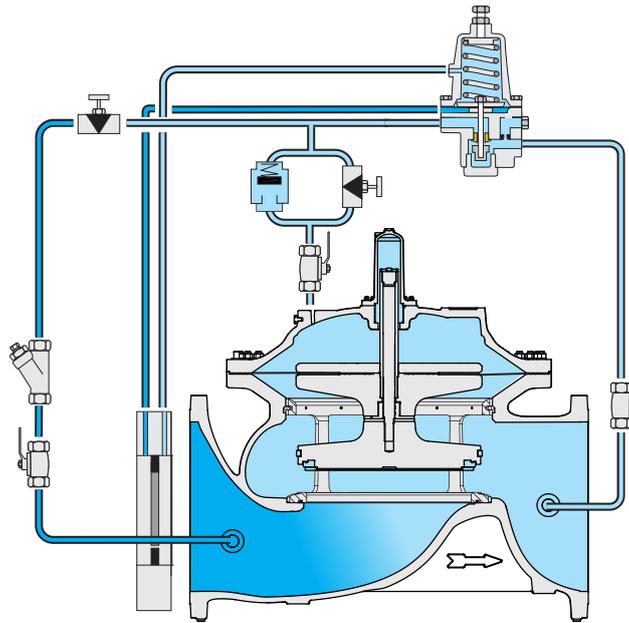
### Typical Installation



All images in this catalog are for illustration only



CLOSED  
Regulating



### Main Valve

**Valve Pattern:** Globe  
**Size Range:** DN 500-1200; 20"-48"  
**Pressure Rating:** 40 bar; 600 psi  
**End Connections:** Flanged  
**Temperature Rating:** 60°C; 140°F for Cold water applications.  
**Optional higher temperature:** Available on request  
**Coating:** Dark blue Fusion bonded epoxy

### 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 or Brass  
**Elastomers:** Synthetic Rubber  
**Spring:** Stainless  
**SteelInternals:** Stainless Steel

**Pilot Options:**  
 Various pilots and calibration springs are available. Select according to valve size and operating conditions. For more details check pressure reducing pilots product pages.

**Orifice Assembly**  
**Body:** Fusion Bonded Epoxy Steel or Stainless Steel  
**Orifice Plate:** Stainless Steel

### Notes

- Orifice diameter is calculated for each valve
- Flow Setting Range: (-)15% & (+)25% from predetermined flow
- The orifice additional head loss is 0.2 bar ; 2.8 psi
- Orifice assembly adds 25mm ; 1" to valve length
- Recommended continuous flow velocity: 0.3-6.0 m/sec ; 1-20 ft/sec
- Minimum operating pressure: 0.7 bar ; 10 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 the Model 770-j equipped with a pitot tube flow sensor and high sensitivity flow pilot #7

