

# BERMAD 700-M5 24", DN600 Hydraulic Control Valve

## A New Generation in Water Control

- Large scale pumping systems
- National and municipal water networks
- Reservoir and dam water level control
- Industrial water systems



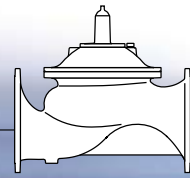
BERMAD 700-M5, 24";DN600 Control Valve is a hydraulically operated, diaphragm actuated globe pattern valve. A unique hydro-dynamic globe valve design with a special Open Plug provide high flow capabilities. The basic valve is available in the standard configuration or with an Independent Flow Check model 700-M5-2S

### 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**
- **Wide range of options and accessories**
  - One-way or two-way flow direction
  - Large selection of control accessories easily added on-site
  - Independent action non-slam inner check feature

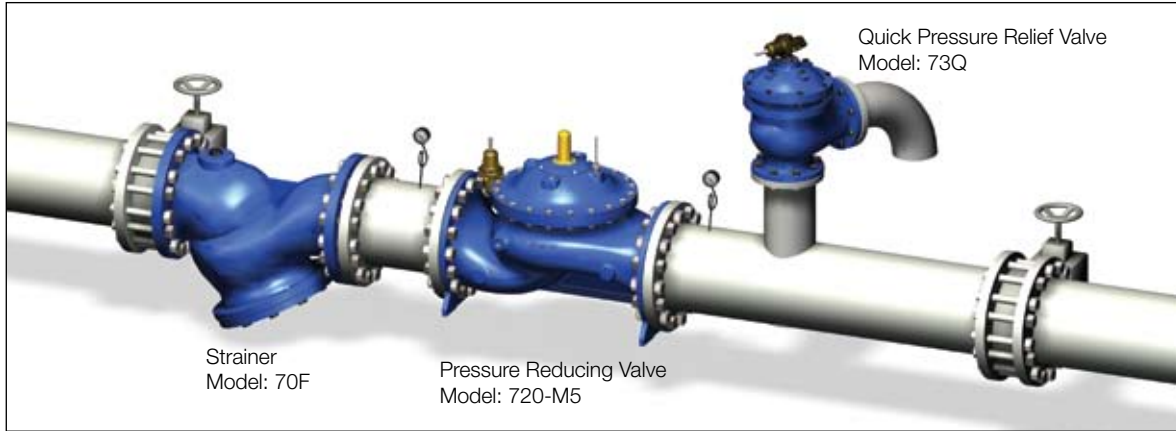
### Major Models

- Solenoid Controlled Valve – **710-M5**
- Pressure Reducing Valve – **720-M5**
- Pressure Sustaining/Relief Valve – **730-M5**
- Surge Anticipating Valve – **735-M5**
- Pump Control Valve – **740-M5-2S**
- Pump Circulation Control Valve – **748-M5**
- Level Control Valve – **750-M5**
- Mechanical Check Valve – **705-M5-2S**
- Flow Control Valve – **770-M5-U**
- Burst Control Valve – **790-M5**
- Combined function valves

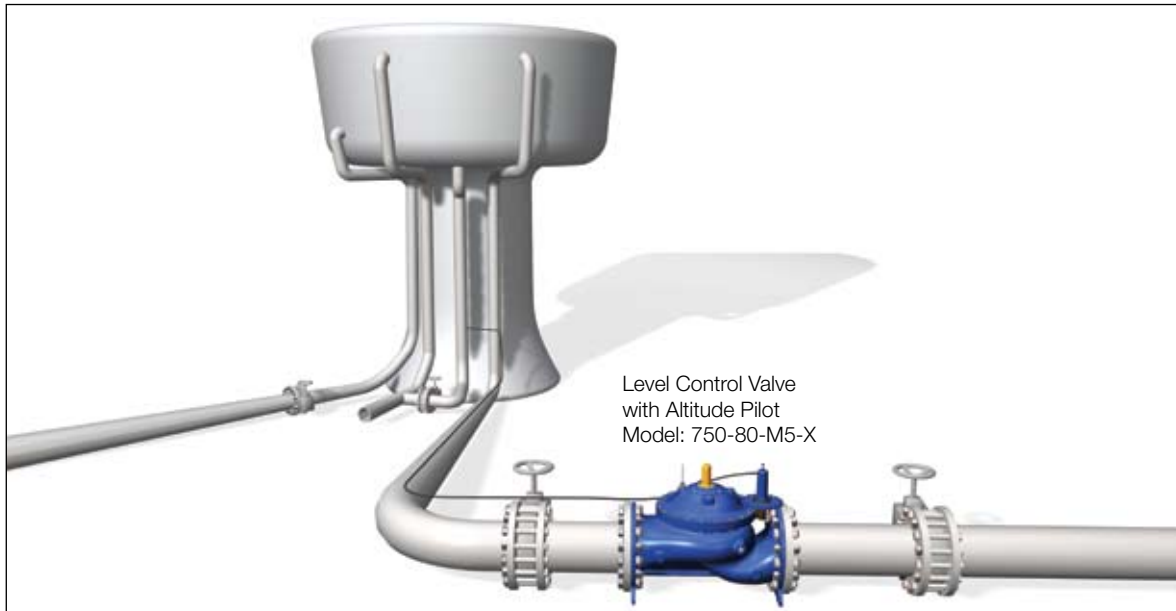


#### Typical Applications

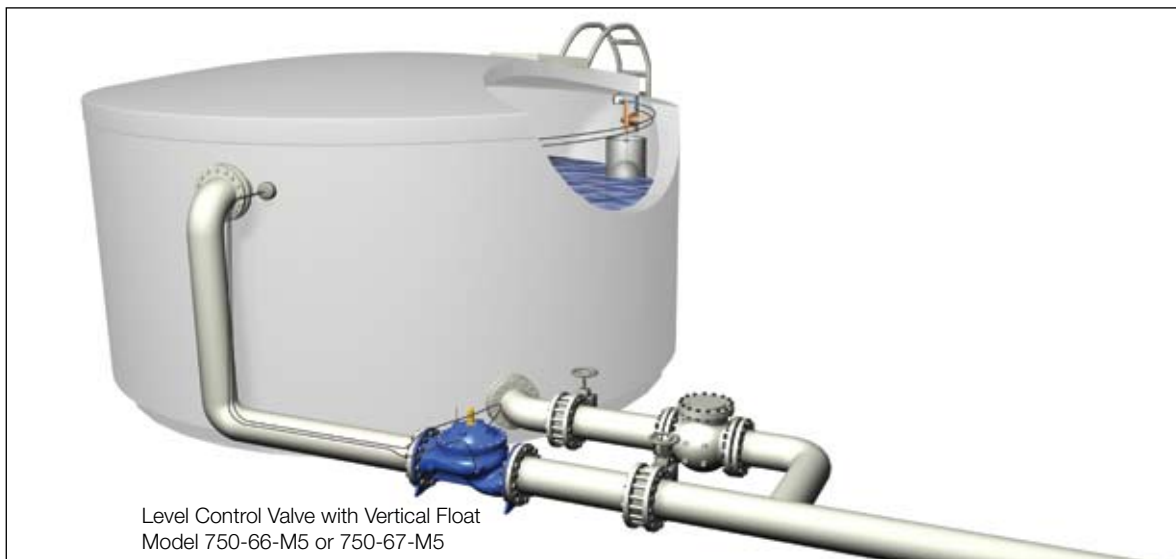
##### Pressure Reducing System

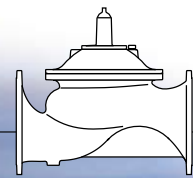


##### Water Tower Filling Control



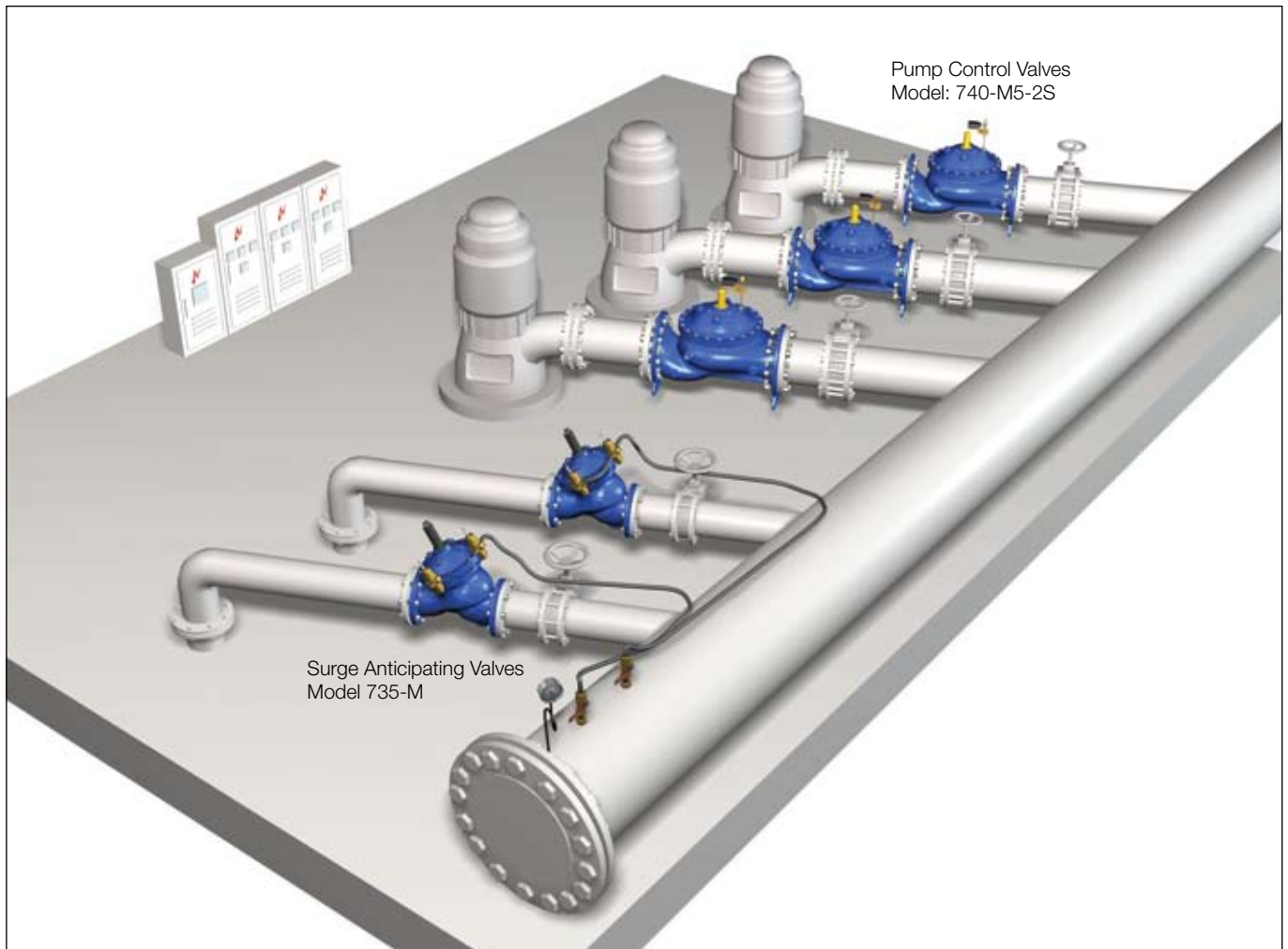
##### Water Reservoir Level Control





### Typical Applications

Pumps station with Pump Control Valves and Surge Anticipating valves



### Engineer Specifications

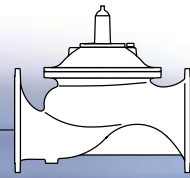
**Main Valve:** The main valve shall be a PN25 diaphragm actuated globe valve. The valve body shall consist of a replaceable, raised, stainless steel patent pending Cage Seat™. The valve shall be top guided by a bearing in the cover and bottom guided by the Cage Seat™. The valve will be capable of accepting a static, non-moving, V-Port or Cavitation-cage installed over the seat. The valve shall consist of a visual valve position indicator. "Flange to Flange" length shall be according to EN 558-1. The main Valve body and cover shall be 250-350 μ thickness fusion bonded epoxy coated Ductile Iron. Valve flange shall be with flats for vertical support. Internal parts shall be made of Stainless Steel. All external bolts and nuts shall be made of Stainless Steel.

All valve components shall be accessible and serviceable without removing the valve from the pipeline.

**Valve Trim:** The diaphragm shall not be used as a sealing surface. Sealing shall be drip-tight using a combination of elastomeric and metal to metal sealing. The diaphragm shall be made of nylon fabric-reinforced synthetic rubber.

**Control System:** The Control System shall be suited for high capacity control flow with at least 1/2" diameter flow path. All fittings shall be forged brass or stainless steel.

**Quality Control:** Prior to shipment, the valve shall be tested a complete functional test performed under dynamic conditions. The valve manufacturer quality system shall be certified according to the ISO 9001-2000 Quality Assurance Standard.

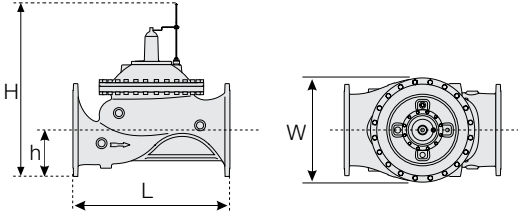


## 700-M5 Series

24", DN600

### Technical Data

#### Dimensions and Weights



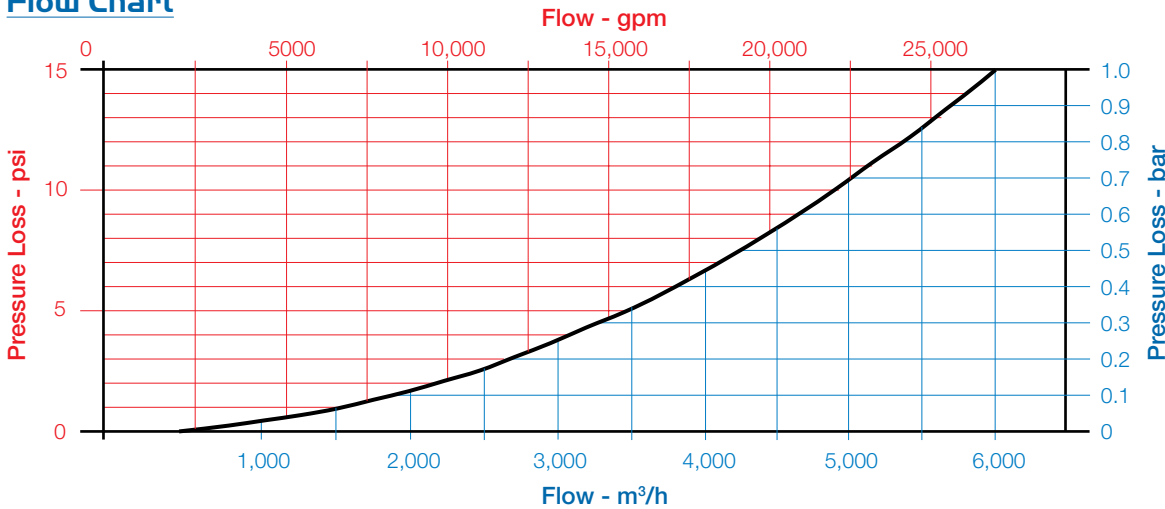
**SI** Metric

	600
L (mm)	1,450
W (mm)	965
h (mm)	435
H (mm)	1,350
Weight (Kg)	1,580

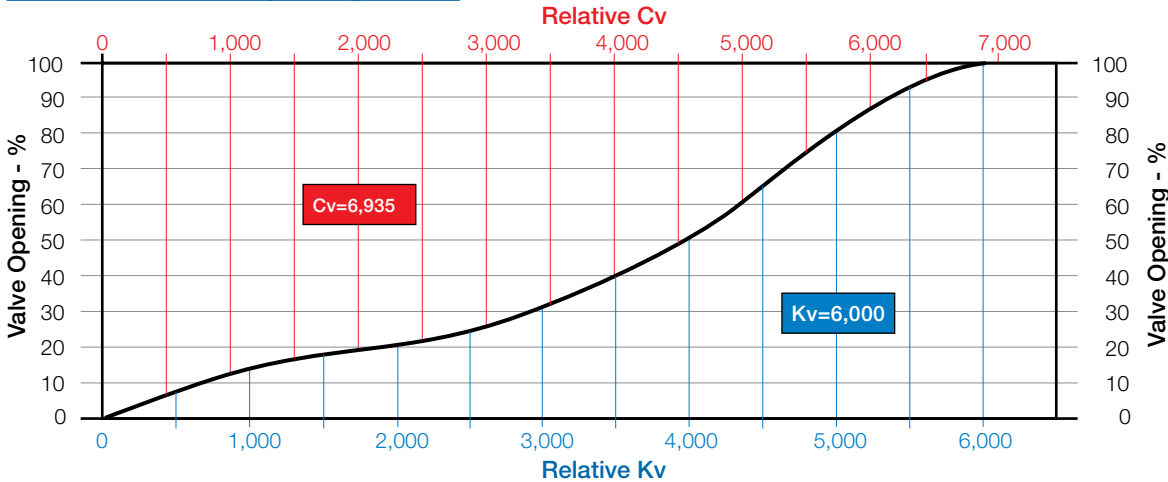
**US** English

	24"
L (inch)	57
W (inch)	38
h (inch)	17.1
H (inch)	53.1
Weight (lb)	3,483

### Flow Chart



### Kv ; Cv to Valve Opening Chart



### Specifications

#### Main Valve

**Valve Pattern:** Globe  
**Size Range:** 24"; DN600  
**End Connections (Pressure Ratings):** Flanged: ISO PN16, PN25; ANSI Class 150, 300  
**Others:** Available on request  
**Working Temperature:** Water up to 80°C; 180°F  
**Control Chamber Displacement:** 60 Liters; 15 Gallons

#### Standard Materials:

**Body & Cover:** Ductile Iron  
**Internals:** Stainless Steel, Bronze & coated Steel  
**Diaphragm:** Synthetic Rubber Nylon fabric-reinforced  
**Seals:** Synthetic Rubber  
**Bolts & nuts:** Stainless Steel  
**Coating:** Fusion Bonded Epoxy, RAL 5005 (Blue) certified for drinking water applications

#### Control System

##### Standard Materials:

**Accessories:** Bronze, Brass, Stainless Steel & Synthetic Rubber  
**Tubing:** Copper or Stainless Steel  
**Fittings:** Forged Brass or Stainless Steel  
**Pilot Standard Materials:**  
**Body:** Brass, Bronze or Stainless Steel  
**Elastomers:** Synthetic Rubber  
**Springs:** Galvanized Steel or Stainless Steel  
**Internals:** Stainless Steel

