# **BERMAD** Buildings & Construction

Potable Water • Pressure Control

700 Series Model 735-M

# SURGE ANTICIPATING CONTROL VALVE

Model 735-M

The Model 735-M Surge Anticipating Valve is an off-line, hydraulically operated, diaphragm actuated valve. The valve, sensing line pressure, opens in response to the pressure drop associated with abrupt pump stoppage. The pre-opened valve dissipates the returning high pressure wave, eliminating the surge.

The Model 735-M smoothly closes drip tight as quickly as the relief feature allows, while preventing closing surge. The valve also relieves excessive system pressure.

BERMAD 700 series valves are hydraulic, oblique pattern, globe valves with double chamber unitized actuator, that can be disassembled from the body as a separate integral unit. The valves hydrodynamic body is designed for unobstructed flow path and provides excellent and highly effective modulation capacity for high differential pressure applications.





A soft start/stop pump station with emergency surge protection - in a case of power failure sudden pressure drop due to column separation will activate the 735-M to open and anticipate any returning surge from the riser, thus reducing water hammer damage and prolonging equipment lifetime.

# **Typical Application**

- Transfer pumps systems
- Direct supply pumps
- Includes excessive pressure relief

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## Features and Benefits

- Replaces surge air vessels Economy of space, lower investment and maintenance costs
- High Quality Construction Materials Reliable, resilient and long lasting operation
- Robust Design Suitable for constant, intense operation
- In-Line Serviceable Quick and easy maintenance and service
- Line Pressure Driven Independent operation, no external power needed
- Unitized Actuator Assembly Minimal downtime
- Hydrodynamic Body with Unobstructed Flow Path Minimal noise and cavitation damage
- Protected Diaphragm Minimizes chance of damage caused by debris in the pipeline
- Adjustable Anticipating and Excessive Pressures Pilots Easy field pressure setting and calibration

### **Technical Data** General:

#### End connections:

Grooved / Flanged / Threaded Pressure Rating: 400 psi; PN25 Valve Pattern: Y (Oblique) / Angle Working Temperature: Cold Water up to 140°F; 60°C **Optional Higher Temperatures:** Available on request

#### Main Valve Materials:

Body, Cover and Partition: Standard: Ductile Iron Optional: Stainless Steel 316 Seat: Stainless Steel Internals: Stainless Steel, Tin Bronze & Coated Steel, POM Diaphragm: Fabric-reinforced synthetic rubber Seals: Synthetic rubber **Coating:** Blue Fusion bonded epoxy

#### **Control Trim Materials:**

**Control Accessories:** Stainless Steel / Bronze & Brass Tubing: Stainless Steel / Copper Fittings: Stainless Steel / Brass

Note: the model comes equipped with flow stem for sizing flexibility

\* For other optional material consult BERMAD. \*\* Materials may vary according to sanitary standard.

AWWA C530-12 Requirements

### How To Order

NSF 61/372

USA

Bulgarkontrola

Bulgaria

ACS

France

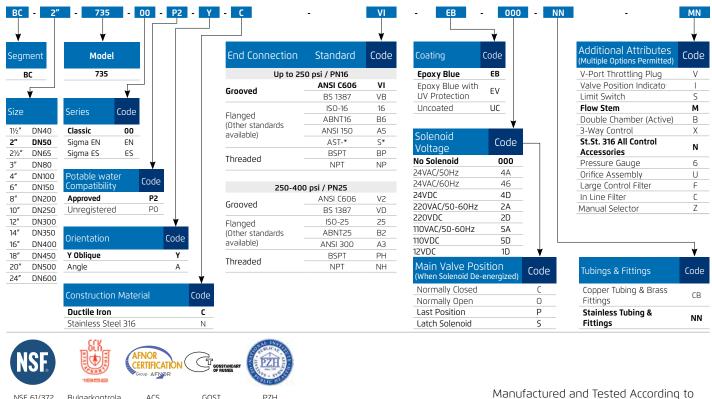
GOST

Russia

P7H

Poland

Please Specify the requested valve in the following sequence:



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