



SURGE ANTICIPATING CONTROL VALVE

with Solenoid Control

Model BC-735-55-P

The Model BC-735-55-P Surge Anticipating Valve with Solenoid Control is an off-line, hydraulically operated, diaphragm actuated valve. The valve immediately opens in direct response to any power failure even prior to the pressure drop associated with abrupt pump stoppage. The pre-opened valve dissipates the returning high pressure wave, eliminating the surge. The BC-735-55-P, sensing line pressure, 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 globe style control valves available in either standard Y (oblique) or angle pattern configurations. They have a full bore hydrodynamic body providing an unobstructed flow path, with a seat assembly and double chamber unitized actuator that can be removed from the body as a separate integral unit.



A soft start/stop pump station with emergency surge protection - in a case of power failure the UPS backed controller will activate the 735-55

to open immediately 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
- Where discharge line is short and wave critical time is less than 3 seconds
- Includes excessive pressure relief



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 with solenoid trigger
- 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 Excessive Pressure Pilot – Easy field pressure setting and calibration

Technical Data

End Connections: Grooved, Flanged, Threaded

Pressure Rating: 250, 400 psi, PN16, 25

Valve Pattern: Y (Oblique) and Angle

Working Temperature: Water up to 140°F, 60°C

Main Valve Materials:

Body, Cover and Partition:

Standard: Ductile Iron

Optional: Stainless Steel 316

Internals:

Stainless Steel, Bronze and Coated Steel

Control Accessories:

Stainless Steel 316 / Bronze and Brass

Tubing & Fittings:

Stainless Steel 316 / Copper and Brass / Reinforced Nylon and Brass

Diaphragm:

EPDM, Nylon Fabric-Reinforced

O-Rings:

EPDM

Seal:

NBR

Coating: Blue Fusion bonded epoxy

* For other optional material consult BERMAD

How to Order

Please Specify the requested valve in the following sequence:

BC	Size	Model	Approval Group	End Connections & Pressure Rating	Solenoid			
BC		735-55						
Buildings And Construction	1½" 2" 2½" 3" 4" 6" 8" 10" 12" Larger sizes available on request		Potable Water			Solenoid Configuration		
			P1	Grooved	ANSI C606		VI	24V Normally Closed* AC 50Hz AC 60Hz DC Normally Open* AC 50Hz AC 60Hz DC
					BS 1378		VB	
					ISO-16		16	
				Flanged	ABNT16		B6	
					ANSI150		A5	
					JIS-16		J6	
			Threaded	BSP	BP		*Valve Position when Solenoid is De-Energized **Other voltage available	
				NPT	NP			
				250-400 PSI / PN25				
			P2	Grooved	ANSI C606		V2	
					BS 1378		VD	
ISO-25	25							
Flanged	ABNT25	B2						
	ANSI300	A3						
	BSP	PH						
Threaded	NPT	NH						
	P3	Grooved	AS 5081					
			WATER MARK					
P0	Unregistered							

