



SURGE ANTICIPATING CONTROL VALVE

Model BC-735-P

The Model BC-735-P 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 BC-735-P 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 valve's 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 BC-735-P 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



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.

How to Order

Please Specify the requested valve in the following sequence:

BERMAD Segment	Size ¹	Model	Series	Approval Group	End Connections & Pressure Rating	
BC	4"	735	EN	P1	16	
Buildings & Constructions	Inch mm	Series	Potable Water²		Up to 250 psi / PN16	
	1½" 40	Classic 00	European Standards	P1	Grooved	ANSI C606 VI
	2" 50	Sigma EN EN	NSF 61/372	P2		BS 1387 VB
	2½" 65	Sigma ES ES	Australia Standards	P3	Flanged	ISO-16 16
	3" 80		Unregistered	P0		ABNT16 B6
	4" 100					ANSI 150 A5
	6" 150					AST-* S*
	8" 200				Threaded	BSP BP
	10" 250					NPT NP
	12" 300					
					250-400 psi / PN25	
				Grooved	ANSI C606 V2	
					BS 1387 VB	
				Flanged	ISO-25 Z5	
					ABNT25 B2	
					ANSI 300 A3	
				Threaded	BSP PH	
					NPT NH	

Ordering code would be

BC-4"-735-EN-P1-16

1. Larger sizes available on request
2. BERMAD complies with a wide range of international potable water standards. Please consult with BERMAD about compliance.



NSF 61/372 USA



Bulgarkontrola Bulgaria



ACS France



GOST Russia



PZH Poland

Manufactured and Tested According to AWWA C530-12 Requirements