



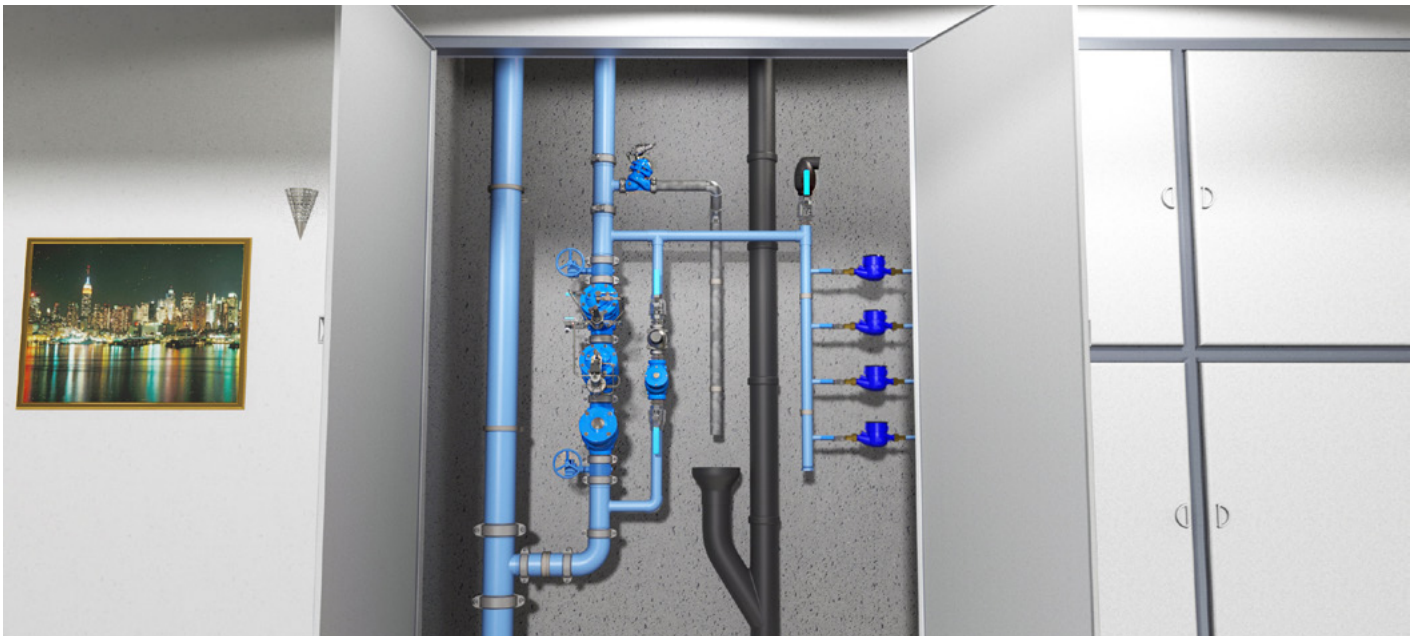
## PRESSURE REDUCING SYSTEM

### With "Watchdog" Hydraulic Backup Valve

#### Model BC-72S-H-P

Hydraulically operated, diaphragm actuated pressure reducing system, consisting of a BERMAD BC-720-P PRV and an integral "Watchdog" backup valve. The system reduces a high upstream pressure to a lower, constant downstream pressure, regardless of fluctuating demand or varying upstream pressure. The "Watchdog" backup valve is fully open in normal operation due to its double chamber configuration, minimizing head loss and maximizing flow through the valve. Should pressure rise downstream of the BERMAD BC-720-P because of valve failure, the "Watchdog" quickly responds and triggers an alarm, while providing stable pressure to consumers until the PRV is repaired.

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.



Pressure Reducing System, featuring a BERMAD BC-72S-H-P system to reduce high incoming pressure to a lower downstream set-point while minimizing the possibility of total water shut-off and a low flow

bypass branch for low demand operation. For information on the other BERMAD products in this system please see the product data sheet for the BERMAD BC-73Q-P and BERMAD BC-70F-P.

### Typical Application

- Reduces pressure for separate pressure zones in hi-rise buildings
- Reduces incoming pressure from municipal water supply
- Minimizes water supply disruption due to PRV failure
- Allows for both "on floor" and "mechanical floor" installations to provide the most convenient access



## Features and Benefits

- 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
- V-Port Throttling Plug - Low flow stability
- 2-Way Control Loop - Immediate, accurate response to sudden system variations
- Adjustable Pilot - Easy field pressure setting and calibration
- Compact Structure - Installation in confined spaces
- Built-in Redundancy - Safe and continuous water supply
- System Failure Indication - Immediate notification to maintenance personnel

## 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  
**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

\* 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 <sup>1</sup>	Model	Series	Approval Group	End Connections & Pressure Rating
BC	4"	72S-H	EN	P1	16
Buildings & Constructions	Inch mm		Series	Potable Water <sup>2</sup>	Up to 250 psi / PN16
	1½" 40		Classic <b>00</b>	European Standards <b>P1</b>	Grooved ANSI C606 <b>VI</b>
	2" 50		Sigma EN <b>EN</b>	NSF 61/372 <b>P2</b>	BS 1378 <b>VB</b>
	2½" 65		Sigma ES <b>ES</b>	Australia Standards <b>P3</b>	ISO-16 <b>16</b>
	3" 80			Unregistered <b>P0</b>	ABNT16 <b>B6</b>
	4" 100				ANSI 150 <b>A5</b>
	6" 150				AST-* <b>S*</b>
	8" 200				Threaded BSP <b>BP</b>
	10" 250				NPT <b>NP</b>
	12" 300				250-400 psi / PN25
					Grooved ANSI C606 <b>V2</b>
					BS 1378 <b>VB</b>
				ISO-25 <b>25</b>	
				Flanged ABNT25 <b>B2</b>	
				ANSI 300 <b>A3</b>	
				Threaded BSP <b>PH</b>	
				NPT <b>NH</b>	

Ordering code would be

BC-4"-72S-H-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