# **BERMAD** Buildings & Construction

Potable Water • Pressure Control



# PRESSURE REDUCING SYSTEM

# With "Watchdog" Valve, Low Flow Bypass and Pressure Relief Valve

## Model BC-72S-B2H-P

Hydraulically operated, diaphragm actuated pressure reducing system, consisting of a BERMAD BC-720-P PRV, an integral "Watchdog" backup valve, low flow bypass and relief device. 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, should pressure rise downstream of the BERMAD BC-720-P, the "Watchdog" quickly responds and triggers an alarm, while providing stable pressure to consumers until the PRV is repaired.

BERMAD water control systems for buildings combine valves and control elements into one compact, factory assembled and calibrated integral structure, designed to perform a specific water control task. These control systems provide builders and engineers with simple water control solutions that are easy to install, inspect and maintain.





**Pressure Reducing System,** featuring a BERMAD BC-72S-B2H-P system to reduce high incoming pressure to a lower downstream set-point while minimizing the possibility of total water shut-off, a low flow bypass for

off peak demand operation and integrated relief device. For information on other BERMAD products in this system please see the product data sheet for the BERMAD BC-70F-P and the BERMAD BC-A30-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 malfunction
- Suitable for wide range of flow regimes
- Allows for both "on floor" and "mechanical floor" installations to provide the most convenient access

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# 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
- 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 Pilot Easy field pressure setting and calibration
- Compact Structure Installation in confined spaces
- Integrated Low Flow and Relief Devices unitized factory assembled unit
- Built-in Redundancy Safe and continuous water supply
- Backup Valve Operation Indication Immediate notification to maintenance personnel
- Double Chamber Actuator Rapid response to system changes with no hammer effect
- V-Port Throttling Plug Low flow stability

# **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:

	Size	Model	Approval Group		End Connections & Pressure Rating		
ВС		72S-B2H	_				
	<b>\rightarrow</b>		Potable Water		Up to 250 PSI / PN16		
Buildings And Construction	11/2"		WRAS	P1	Grooved	ANSI C606	VI
	2"		DVGW			BS 1378	VB
	21/2"		ACS		Flanged	ISO-16	16
	3"		GOST			ABNT16	В6
	4"		BELGAQUA			ANSI150	A5
	6"		PZH			JIS-16	J6
	8"		BULGARCONTROLA		Threaded	BSP	ВР
	10"		SVGW			NPT	NP
	12"		NSF 61/372	P2	250-400 PSI / PN25		;
			AS 5081	Р3	Grooved	ANSI C606	V2
	Larger sizes available on		WATER MARK			BS 1378	VD
			Unregistered	PO	Flanged	ISO-25	25
						ABNT25	B2
	request					ANSI300	АЗ
					Threaded	BSP	PH
						NPT	NH

























NSF 61/372

DVGW Germany

France

GOST Russia BELGAQUA Belgium

AS 5081 Australia

Australia

Poland

Bulgaria

**SVGW** Switzerland

ISO 9001 - 2008