# **BERMAD** Buildings & Construction



700 Series

Pressure Control

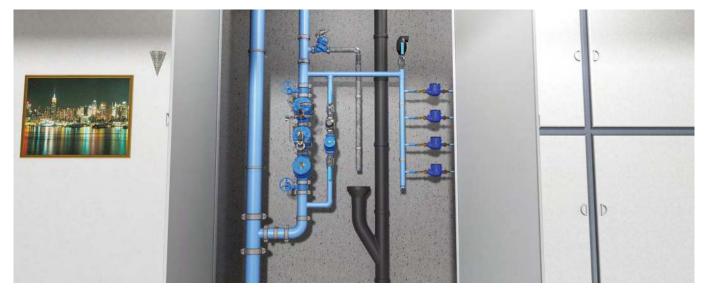
# Pressure Reducing System with "Watchdog" Hydraulic Backup Valve

## 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 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 contractors and engineers with simple water control solutions that are easy to install, inspect and maintain.





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

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**Pressure Control** 

#### 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
- Protected Diaphragm Minimizes chance of damage caused by debris in the pipeline
- 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
- 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 180°F; 80°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

**OR** Bronze and Brass

Tubing & Fittings: Stainless Steel 316

**OR** Copper and Brass

**OR** Reinforced Nylon and Brass

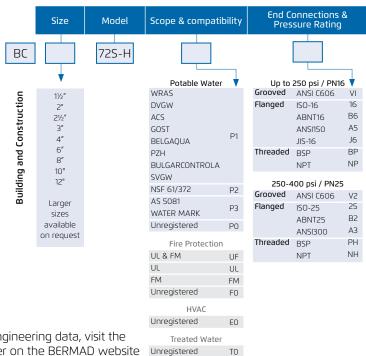
Diaphragm: EPDM, Nylon Fabric-Reinforced

O-Rings: EPDM Seal: NBR

Coating: Fusion Bonded Epoxy, RAL 5017 (Blue)

## How to Order

Please specify the requested valve in the following sequence:



For other optional materials consult BERMAD

For Dimensions & Weights, IOM and more other detailed engineering data, visit the Series Engineering Documentation or the Downloads Center on the BERMAD website

## Drinking Water Standards, Approvals & Certification:

























NSF 61/372 USA

DVGW

GOST

BELGAQUA

AS 5081 Australia

Watermark

Bulgarcontrola Bulgaria

SVGW Switzerland ISO 9001 - 2008



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