



## PRESSURE REDUCING SYSTEM

With "Watchdog" Hydraulic Backup Valve

### Model BC-725-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-725-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
- 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 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:

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 |                    |         |           |    |
|----------------------------|------|-----------------------------------|----------------|-----------------------------------|--------------------|---------|-----------|----|
| BC                         |      | 725-H                             |                |                                   |                    |         |           |    |
| Buildings And Construction | 1½"  | Larger sizes available on request | Potable Water  | Grooved                           | ANSI C606          | VI      |           |    |
|                            | 2"   |                                   |                |                                   | BS 1378            | VB      |           |    |
|                            | 2½"  |                                   |                |                                   | ISO-16             | 16      |           |    |
|                            | 3"   |                                   |                |                                   | ABNT16             | B6      |           |    |
|                            | 4"   |                                   |                |                                   | ANSI150            | A5      |           |    |
|                            | 6"   |                                   |                |                                   | JIS-16             | J6      |           |    |
|                            | 8"   |                                   |                | Threaded                          | BSP                | BP      |           |    |
|                            | 10"  |                                   |                |                                   | NPT                | NP      |           |    |
|                            | 12"  |                                   |                |                                   | 250-400 PSI / PN25 |         |           |    |
|                            |      |                                   |                | NSF 61/372                        | P2                 | Grooved | ANSI C606 | V2 |
|                            |      |                                   |                | AS 5081                           | P3                 |         | BS 1378   | VD |
|                            |      |                                   |                | WATER MARK                        | P3                 |         | ISO-25    | 25 |
|                            |      |                                   |                | Unregistered                      | P0                 | Flanged | ABNT25    | B2 |
|                            |      |                                   | ANSI300        | A3                                |                    |         |           |    |
|                            |      |                                   | BSP            | PH                                |                    |         |           |    |
|                            |      |                                   | Threaded       | NPT                               | NH                 |         |           |    |



NSF 61/372  
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ISO 9001 - 2008