



## PRESSURE REDUCING SYSTEM

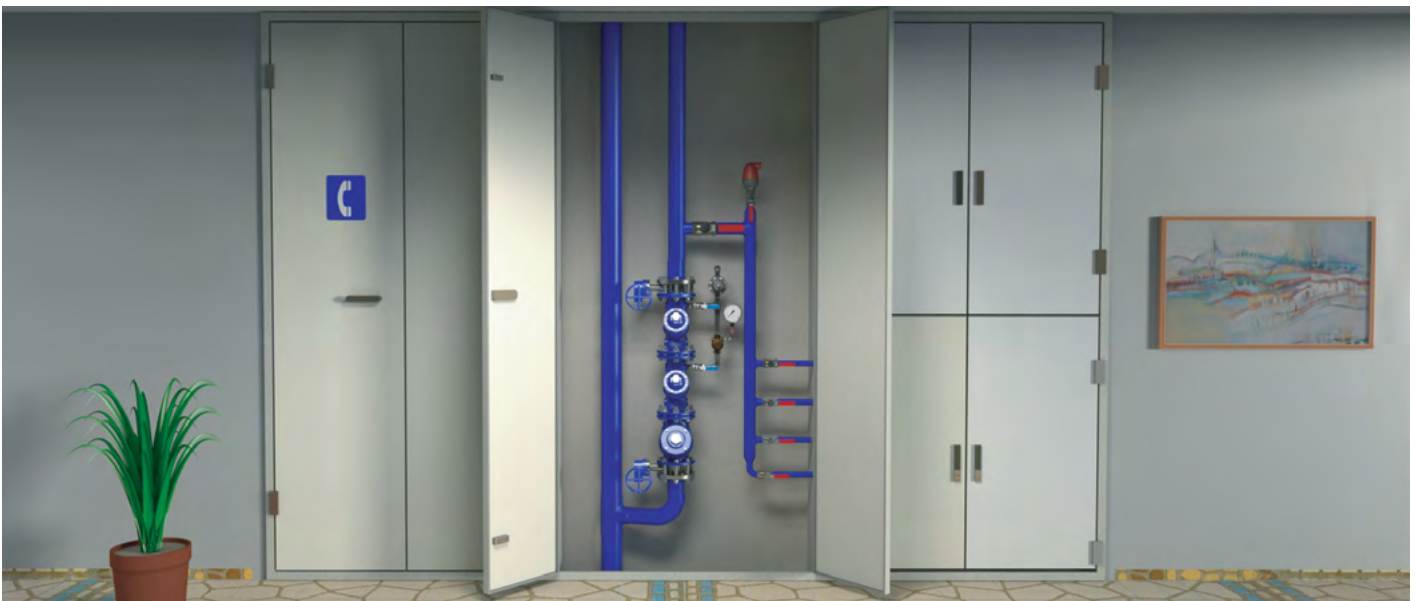
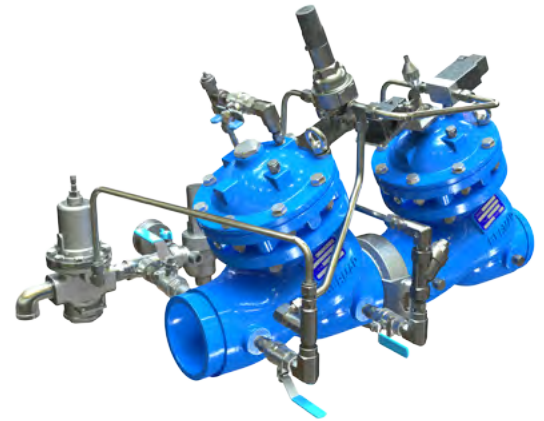
With Electric Back-up Valve, Low Flow Bypass and Pressure Relief Valve

### Model BC-72S-B2E-P

72S-B2E is potable water pressure reducing system that combines electrically operated emergency backup valve, relief device and integral off peak flow modulation. The system reduces higher upstream pressure to lower constant downstream pressure regardless of fluctuating demand or varying upstream pressure. It protects the consumers from excessive pressure and ensures continues water supply in emergency situations.

The 72S-B2E system consists of BERMAD 700 valves and combines main pressure reducing valve with a "hot backup" PRV that kicks over to operation by an electrical signal and switches an alarm signal in case of main PRV malfunction.

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-B2E-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



## 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 with external back-up command
- 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
- 3-way solenoid control - Provides full opening of the backup valve
- 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               | Solenoid   |           |   |            |  |
|-----------------------------------|---|----------------|----------------|---|--|-----------|---|------------|--|
| <b>BC</b>                         |   | <b>72S-B2E</b> |                |   |  |           |   |            |  |
| <b>Buildings And Construction</b> | 1½"<br>2"<br>2½"<br>3"<br>4"<br>6"<br>8"<br>10"<br>12"<br>Larger sizes available on request |                | <b>P1</b>      | Potable Water<br>Grooved<br>Flanged<br>Threaded | Solenoid Configuration<br>Normally Closed*<br>Normally Open* |           |   |            |  |
|                                   |   |                |                | WRAS  | ANSI C606  | <b>VI</b> | AC 50HZ                                       | <b>4AC</b> |  |
|                                   |   |                |                | DVGW  | BS 1378  | <b>VB</b> | AC 60HZ                                       | <b>46C</b> |  |
|                                   |   |                |                | ACS   | ISO-16   | <b>16</b> | DC  | <b>4DC</b> |  |
|                                   |   |                |                | GOST  | ABNT16   | <b>B6</b> | AC 50HZ                                       | <b>4A0</b> |  |
|                                   |   |                |                | BELGAQUA  | ANSI150  | <b>A5</b> | AC 60HZ                                       | <b>460</b> |  |
|                                   |   |                |                | PZH   | JIS-16   | <b>J6</b> | DC  | <b>4D0</b> |  |
|                                   |   |                |                | BULGARCONTROLA                                  | BSP  | <b>BP</b> | *Valve Position when Solenoid is De-Energized |            |  |
|                                   |   |                |                | SVGW  | NPT  | <b>NP</b> | **Other voltage available                     |            |  |
|                                   |   |                |                | NSF 61/372                                      | <b>250-400 PSI / PN25</b>                                    |           |   |            |  |
|                                   |   |                |                | AS 5081   | Grooved  | ANSI C606 | <b>V2</b>                                     |            |  |
|                                   |   |                |                | WATER MARK                                      | Grooved  | BS 1378   | <b>VD</b>                                     |            |  |
| Unregistered                      | <b>P0</b>   | Flanged        | ISO-25         | <b>25</b>                                       |  |           |   |            |  |
|                                   |   | Flanged        | ABNT25         | <b>B2</b>                                       |  |           |   |            |  |
|                                   |   | Threaded       | ANSI300        | <b>A3</b>                                       |  |           |   |            |  |
|                                   |   | Threaded       | BSP            | <b>PH</b>                                       |  |           |   |            |  |
|                                   |   | Threaded       | NPT            | <b>NH</b>                                       |  |           |   |            |  |

