



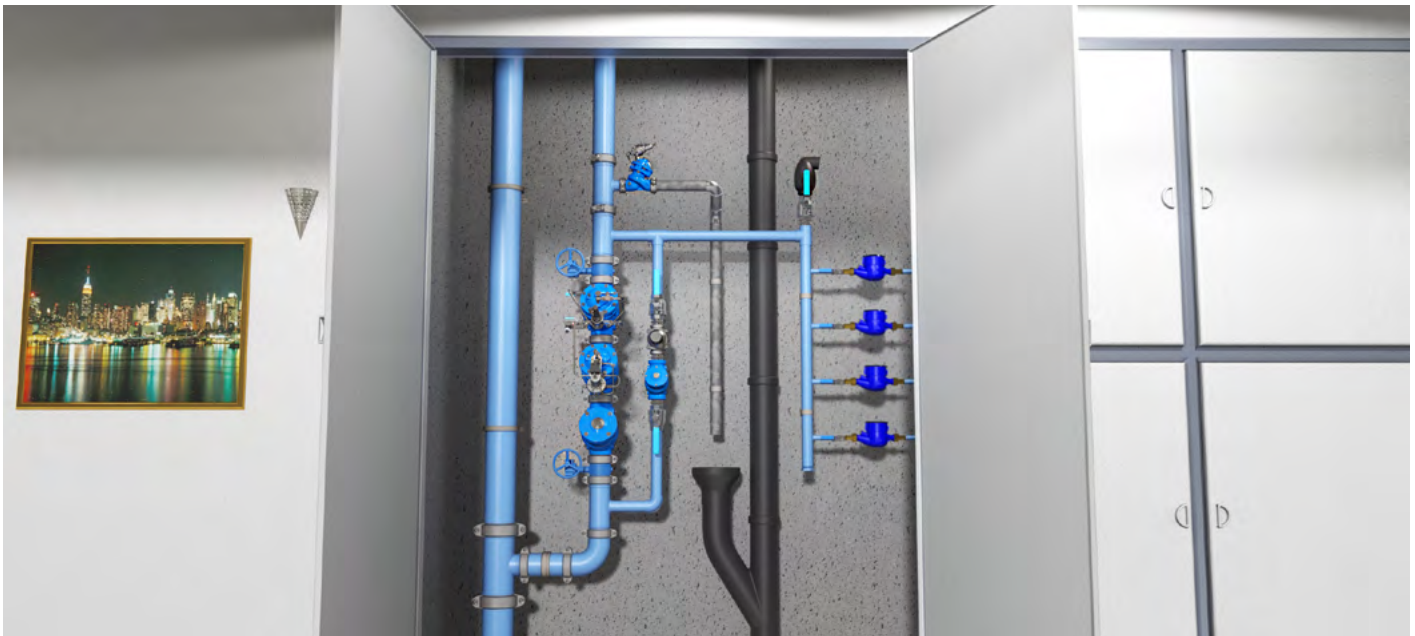
## PRESSURE REDUCING SYSTEM

### With "Watchdog" Hydraulic Backup Valve

#### Model 72S-H

Hydraulically operated, diaphragm actuated pressure reducing system, consisting of a BERMAD 720 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 720 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 72S-H 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 73Q and BERMAD 70F.

### 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, POM

**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:

BC - 2" - 725-H - 00 - P2 - Y - C - VI - EB - 000 - NN - VN

Segment	Model	End Connection	Standard	Code	Coating	Code	Additional Attributes (Multiple Options Permitted)	Code
BC	725-H	Up to 250 psi / PN16	ANSI C606	VI	Epoxy Blue	EB	V-Port Throttling Plug	V
Size	Series	Grooved	BS 1387	VB	Epoxy Blue with UV Protection	EV	Valve Position Indicator	I
1½" DN40	Classic	Flanged (Other standards available)	ISO-16	16	Uncoated	UC	Limit Switch	S
2" DN50	Sigma EN	Threaded	ABNT16	B6			Flow Stem	M
2½" DN65	Sigma ES		ANSI 150	A5			Double Chamber (Active)	B
3" DN80			AST-*	S*			3-Way Control	X
4" DN100	Potable water Compatibility		BSPT	BP	Solenoid Voltage		St.St. 316 All Control Accessories	N
6" DN150	Code		NPT	NP	No Solenoid	000	Pressure Gauge	6
8" DN200	Approved				24VAC/50Hz	4A	Orifice Assembly	U
10" DN250	Unregistered				24VAC/60Hz	46	Large Control Filter	F
12" DN300					24VDC	4D	In Line Filter	C
14" DN350	Orientation				220VAC/50-60Hz	2A	Manual Selector	Z
16" DN400	Code				220VDC	2D		
18" DN450	Y Oblique				110VAC/50-60Hz	5A		
20" DN500	Angle				110VDC	5D		
24" DN600					12VDC	1D		
	Construction Material				Main Valve Position (When Solenoid De-energized)		Tubings & Fittings	
	Ductile Iron				Normally Closed	C	Copper Tubing & Brass Fittings	CB
	Stainless Steel 316				Normally Open	O	Stainless Tubing & Fittings	NN
					Last Position	P		
					Latch Solenoid	S		



NSF 61/372 USA



Bulgarkontrola Bulgaria



ACS France



GOST Russia



PZH Poland

Manufactured and Tested According to AWWA C530-12 Requirements