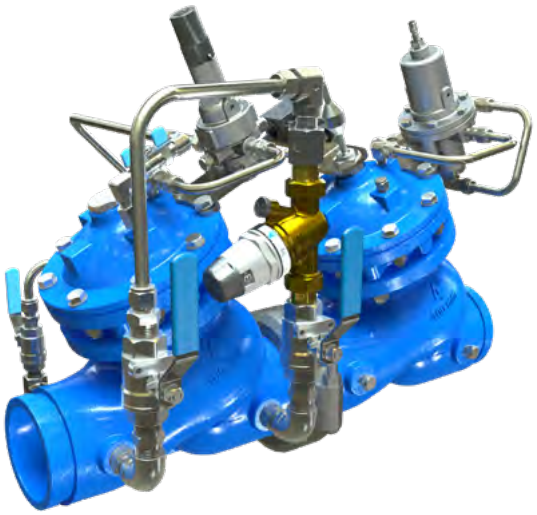
PRESSURE REDUCING SYSTEM

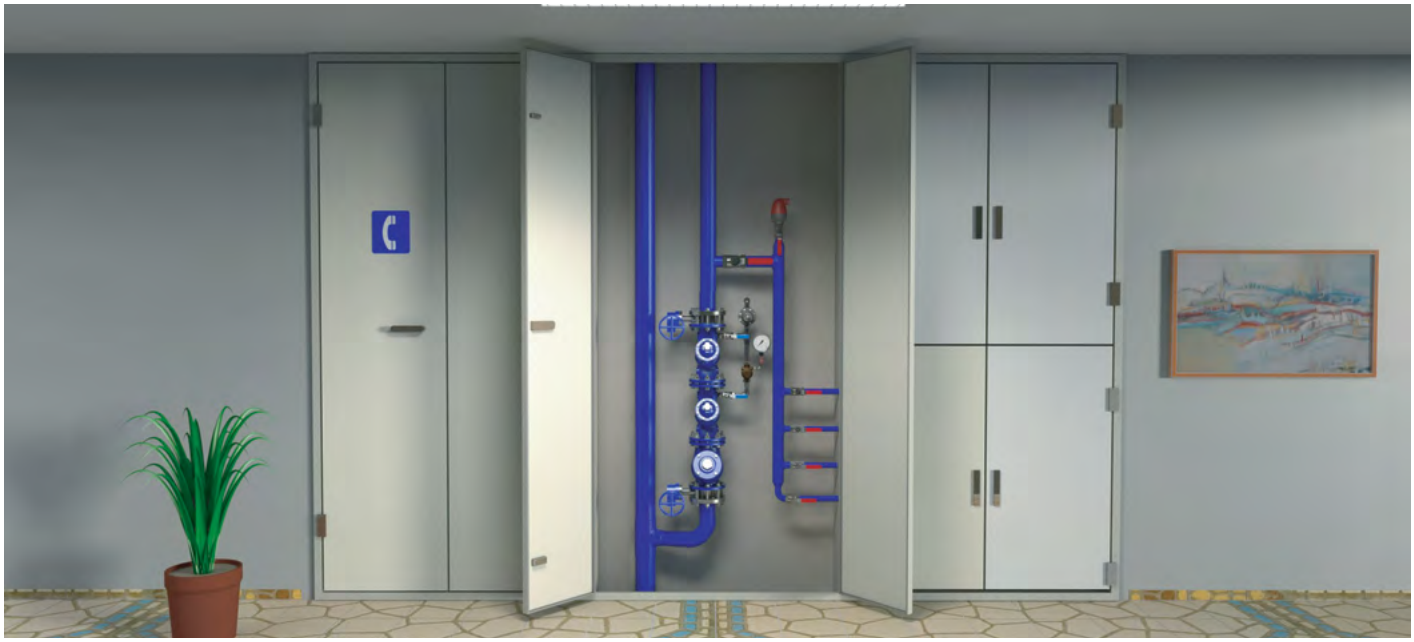
With "Watchdog" Hydraulic Backup Valve and Off-Peak Flows Bypass

Model 72S-2B-H



Hydraulically operated, diaphragm actuated pressure reducing system, consisting of a BERMAD 720-2B PRV with off-peak flow bypass 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 720-2B 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.



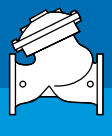
Pressure Reducing System, featuring a BERMAD 72S-2B-H system to reduce high incoming pressure to a lower downstream set-point while minimizing the possibility of total water shut-off with integrated low flow bypass branch for low demand operation. For information on the other BERMAD products in this 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

All images in this catalog are for illustration only

BERMAD Buildings & Construction



700 Series

Potable Water • Pressure Control

Model 72S-2B-H

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
- Integrated by-pass and V-Port Throttling Plug - stability in wide range of flows
- 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 140ºF; 60ºC
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

Note: Outlet pressure range 1-6 bar; 15-90 psi.

* For other optional material consult BERMAD.
** Materials may vary according to sanitary standard.

How To Order

Additional Configurations & Options >

Please Specify the requested valve in the following sequence:

BC - 2" - 72S-2B-H - 00 - P2 - Y - C - VI - EB - 000 - NN - VN

Segment
BC

Size	
1½"	DN40
2"	**DN50**
2½"	DN65
3"	DN80
4"	DN100
6"	DN150
8"	DN200
10"	DN250
12"	DN300
14"	DN350
16"	DN400
18"	DN450
20"	DN500
24"	DN600

Model
72S-2B-H

Series	Code
Classic	**00**
Sigma EN	EN
Sigma ES	ES

Potable water Compatibility	Code
Approved	**P2**
Unregistered	P0

Orientation	Code
Y Oblique	**Y**
Angle	A

Construction Material	Code
Ductile Iron	**C**
Stainless Steel 316	N

End Connection	Standard	Code
Up to 250 psi / PN16		
Grooved	**ANSI C606**	**VI**
	BS 1387	VB
Flanged (Other standards available)	ISO-16	16
	ABNT16	B6
	ANSI 150	A5
	AST-*	S*
Threaded	BSPT	BP
	NPT	NP
250-400 psi / PN25		
Grooved	ANSI C606	V2
	BS 1387	VD
Flanged (Other standards available)	ISO-25	25
	ABNT25	B2
	ANSI 300	A3
Threaded	BSPT	PH
	NPT	NH

Coating	Code
Epoxy Blue	**EB**
Epoxy Blue with UV Protection	EV
Uncoated	UC

Solenoid Voltage	Code
No Solenoid	**000**
24VAC/50Hz	4A
24VAC/60Hz	46
24VDC	4D
220VAC/50-60Hz	2A
220VDC	2D
110VAC/50-60Hz	5A
110VDC	5D
12VDC	1D

Main Valve Position (When Solenoid De-energized)	Code
Normally Closed	C
Normally Open	O
Last Position	P
Latch Solenoid	S

Additional Attributes (Multiple Options Permitted)	Code
V-Port Throttling Plug	**V**
Valve Position Indicato	I
Limit Switch	S
Flow Stem	M
Double Chamber (Active)	B
3-Way Control	X
St.St. 316 All Control Accessories	**N**
Pressure Gauge	6
Orifice Assembly	U
Large Control Filter	F
In Line Filter	C
Manual Selector	Z

Tubings & Fittings	Code
Copper Tubing & Brass Fittings	CB
Stainless Tubing & Fittings	**NN**

NSF 61/372 USA
Bulgarkontrola Bulgaria
ACS France
GOST Russia
PZH Poland

Manufactured and Tested According to AWWA C530-12 Requirements