

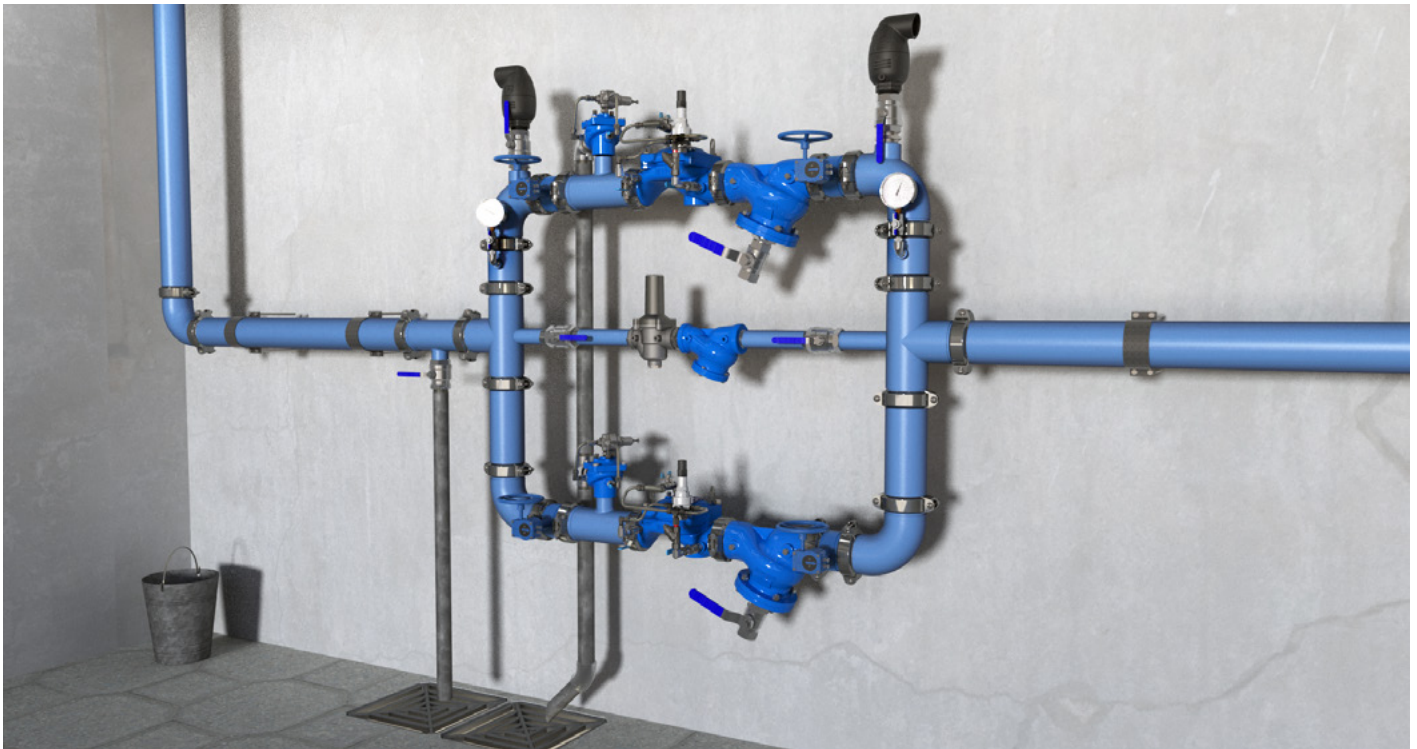


PRESSURE REDUCING VALVE

Model BC-420-P

Hydraulically operated, pressure reducing control valve that reduces higher upstream pressure to lower constant downstream pressure, regardless of fluctuating demand or varying upstream pressure

BERMAD 400 series valves are hydraulically operated, simple and reliable, globe valves with full bore hydrodynamic body providing an unobstructed flow path and superior performance. The valves balanced rolling-diaphragm assembly is vulcanized with a rugged radial seal disk construction, performing as the valves only moving part.



Pressure Reducing Station, featuring BERMAD BC-420-P valves to reduce high incoming pressure to a lower downstream set-point, a redundant, parallel branch to minimize 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-43Q-P and BERMAD BC-70F-P.

Typical Application

- Pressure control of potable water supply lines in building operating under moderate conditions
- Excessive pressure protection of low-grade plastic supply lines in buildings
- Protection of main supply lines of high-rise buildings where the building's lower zones are exposed to excessive pressure
- Protection of high pressure zones and emergency systems of high-rise buildings
- In parallel, redundant and duty cycled branches where uninterrupted water supply systems are required



Features and Benefits

- High quality construction materials ensure reliable, long lasting operation
- Full bore valve port area and hydrodynamic body ensure unobstructed flow path; minimal pressure loss with low cavitation damage
- Fully supported and balanced rolling diaphragm - low actuation pressure and excellent low flow regulation performance
- Ensured operation after long standby periods
- Straightforward three major components design - easy and simple on-site inline maintenance with minimal down time
- 2-way pilot and control loop that continuously sense downstream pressure and immediately control the valve accordingly, providing stable, reliable and accurate pressure modulation under a wide range of flow-rate and pressure conditions
- Line Pressure Driven - Independent operation, no external power needed
- On-site adjustable pilot allows simple and easy calibration of required pressure level

Technical Data

General:

End connections:

- Grooved: 2", 3"-8"
- Flanged: 1½"-14"
- Threaded: 1½"-3"

Pressure Rating: 230 psi; PN16

Valve Pattern: Y (Oblique) / Angle

Working Temperature:

Cold Water up to 122°F; 50°C

Optional Higher Temperatures:

Available on request

Main Valve Materials:

Body, Cover and Partition:

- Standard: Ductile Iron
- Optional: Stainless Steel 316

Spring: Stainless Steel

Diaphragm Assembly:

NR / EPDM with Reinforcing Vulcanized

Radial Seal Disk:

- 1½"-6": Plastic
- 8"- 10": Iron
- 12"-14": Iron with St.St Upper Guide

Coating: Blue Fusion bonded epoxy

Control Trim Materials:

Control Accessories:

- Stainless Steel / Bronze & Brass
- NBR / EPDM

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:

BERMAD Segment	Size ¹	Model	Approval Group	End Connections & Pressure Rating	Ordering code would be																																																				
BC	3"	420	P0	16	BC-3"-420-P0-16																																																				
Buildings & Constructions	<table border="1"> <thead> <tr> <th>Inch</th> <th>mm</th> </tr> </thead> <tbody> <tr><td>1½"</td><td>40</td></tr> <tr><td>2"</td><td>50</td></tr> <tr><td>2½"</td><td>65</td></tr> <tr><td>3"</td><td>80</td></tr> <tr><td>4"</td><td>100</td></tr> <tr><td>6"</td><td>150</td></tr> <tr><td>8"</td><td>200</td></tr> <tr><td>10"</td><td>250</td></tr> <tr><td>12"</td><td>300</td></tr> </tbody> </table>	Inch	mm	1½"	40	2"	50	2½"	65	3"	80	4"	100	6"	150	8"	200	10"	250	12"	300	<table border="1"> <thead> <tr> <th>Potable Water²</th> <th></th> </tr> </thead> <tbody> <tr> <td>European Standards</td> <td>P1</td> </tr> <tr> <td>NSF 61/372</td> <td>P2</td> </tr> <tr> <td>Australia Standards</td> <td>P3</td> </tr> <tr> <td>Unregistered</td> <td>P0</td> </tr> </tbody> </table>	Potable Water ²		European Standards	P1	NSF 61/372	P2	Australia Standards	P3	Unregistered	P0	<table border="1"> <thead> <tr> <th colspan="3">Up to 250 psi / PN16</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Grooved</td> <td>ANSI C606</td> <td>VI</td> </tr> <tr> <td>BS 1378</td> <td>VB</td> </tr> <tr> <td rowspan="3">Flanged</td> <td>ISO-16</td> <td>16</td> </tr> <tr> <td>ABNT16</td> <td>B6</td> </tr> <tr> <td>ANSI 150</td> <td>A5</td> </tr> <tr> <td rowspan="2">Threaded</td> <td>AST-*</td> <td>S*</td> </tr> <tr> <td>BSP</td> <td>BP</td> </tr> <tr> <td></td> <td>NPT</td> <td>NP</td> </tr> </tbody> </table>	Up to 250 psi / PN16			Grooved	ANSI C606	VI	BS 1378	VB	Flanged	ISO-16	16	ABNT16	B6	ANSI 150	A5	Threaded	AST-*	S*	BSP	BP		NPT	NP	<ol style="list-style-type: none"> Larger sizes available on request BERMAD complies with a wide range of international potable water standards. Please consult with BERMAD about compliance.
Inch	mm																																																								
1½"	40																																																								
2"	50																																																								
2½"	65																																																								
3"	80																																																								
4"	100																																																								
6"	150																																																								
8"	200																																																								
10"	250																																																								
12"	300																																																								
Potable Water ²																																																									
European Standards	P1																																																								
NSF 61/372	P2																																																								
Australia Standards	P3																																																								
Unregistered	P0																																																								
Up to 250 psi / PN16																																																									
Grooved	ANSI C606	VI																																																							
	BS 1378	VB																																																							
Flanged	ISO-16	16																																																							
	ABNT16	B6																																																							
	ANSI 150	A5																																																							
Threaded	AST-*	S*																																																							
	BSP	BP																																																							
	NPT	NP																																																							

