

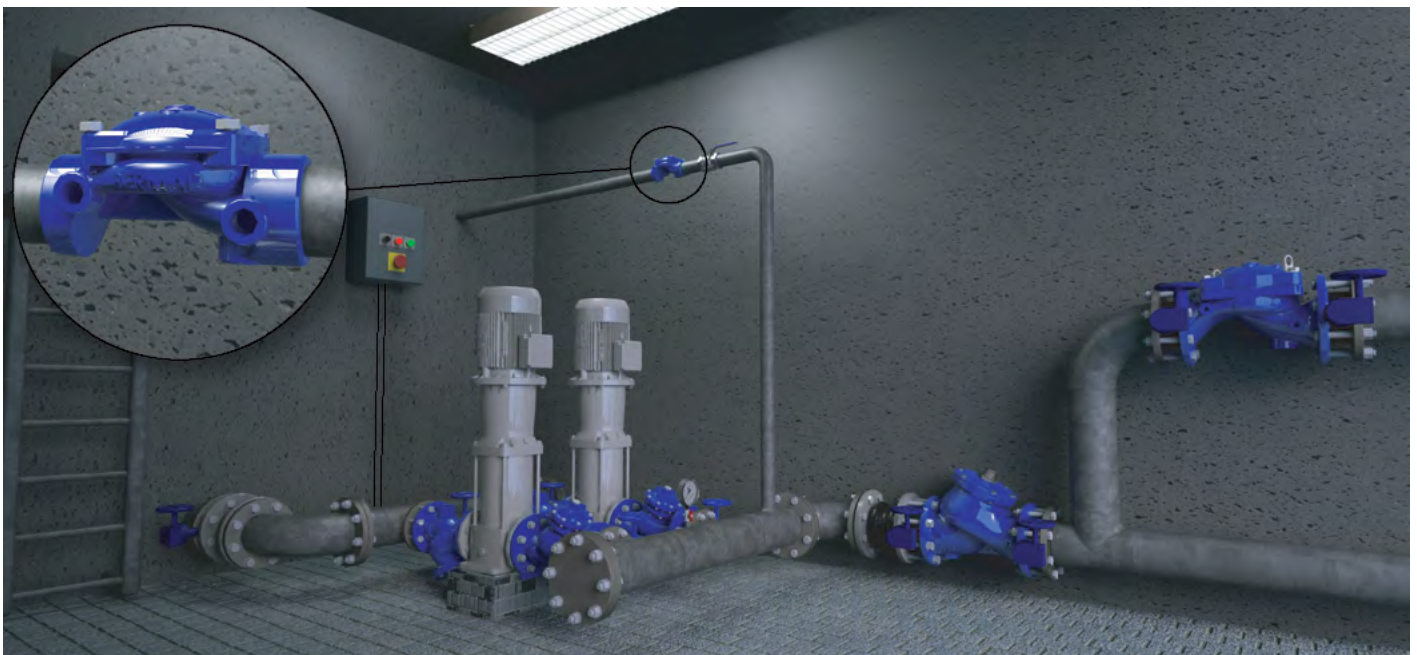


## PRESSURE RELIEF / SUSTAINING VALVE

### Model BC-430-P

Pressure relief/sustaining hydraulically operated control valve that can fulfill either of two separate functions: When installed in-line, it sustains minimum pre-set, upstream (back) pressure regardless of fluctuating flow or varying downstream pressure. When installed as a “branched from the line” circulation valve it relieves excessive line pressure when above maximum pre-set.

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.



The BERMAD BC-430-P As a pressure sustaining valve that recycles water back to the reservoir at stagnate pump operation, it will remain close when raiser pressure is normal. In an event where the pump works at low flows and high head, the BC-430-P will open to allow

sufficient water circulation and pump cooling. Also featured is the BC-740-P Active-Check Valve that coordinates start / stop functions simultaneously with the pump controller.

### Typical Application

- Protection from the effects of bursts and extreme pressure in buildings potable water systems
- High pressure safety relief valve in potable water pressure reduction systems
- Pressure sustaining control of buildings reservoir filling systems such as: basement, roof-top, pressure breaking and emergency tanks, where the supply line also feeds additional high priority users
- Pressure sustaining control in buildings pressure zones which contain various prioritized users
- As a safety device for pumping stations temporarily operated out of their regular regime, where stable and constant pressure relief is 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 upstream 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 <sup>1</sup>	Model	Approval Group	End Connections & Pressure Rating	Ordering code would be																																																	
BC	3"	430	P0	16	BC-3"-430-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 colspan="2">Potable Water<sup>2</sup></th> </tr> </thead> <tbody> <tr> <td>European Standards</td> <td><b>P1</b></td> </tr> <tr> <td>NSF 61/372</td> <td><b>P2</b></td> </tr> <tr> <td>Australia Standards</td> <td><b>P3</b></td> </tr> <tr> <td>Unregistered</td> <td><b>P0</b></td> </tr> </tbody> </table>	Potable Water <sup>2</sup>		European Standards	<b>P1</b>	NSF 61/372	<b>P2</b>	Australia Standards	<b>P3</b>	Unregistered	<b>P0</b>	<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><b>VI</b></td> </tr> <tr> <td>BS 1387</td> <td><b>VB</b></td> </tr> <tr> <td rowspan="3">Flanged</td> <td>ISO-16</td> <td><b>16</b></td> </tr> <tr> <td>ABNT16</td> <td><b>B6</b></td> </tr> <tr> <td>ANSI 150 AST-*</td> <td><b>A5</b> <b>S*</b></td> </tr> <tr> <td rowspan="2">Threaded</td> <td>BSP</td> <td><b>BP</b></td> </tr> <tr> <td>NPT</td> <td><b>NP</b></td> </tr> </tbody> </table>	Up to 250 psi / PN16			Grooved	ANSI C606	<b>VI</b>	BS 1387	<b>VB</b>	Flanged	ISO-16	<b>16</b>	ABNT16	<b>B6</b>	ANSI 150 AST-*	<b>A5</b> <b>S*</b>	Threaded	BSP	<b>BP</b>	NPT	<b>NP</b>	<ol style="list-style-type: none"> <li>1. Larger sizes available on request</li> <li>2. BERMAD complies with a wide range of international potable water standards. Please consult with BERMAD about compliance.</li> </ol>
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Manufactured and Tested According to AWWA C530-12 Requirements