

# Pressure Relief / Sustaining Valve

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.

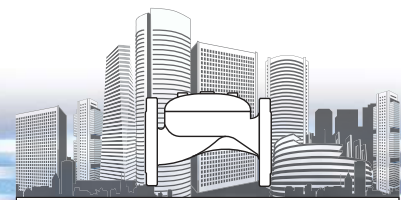
BERMAD 400 series valves are hydraulically operated, simple and reliable, globe valves with full bore hydrodynamic body providing an unobstructed flow path and superior performance. The valves balanced rolling-diaphragm assembly is vulcanized with a rugged radial seal disk construction, performing as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



For illustration only

## 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

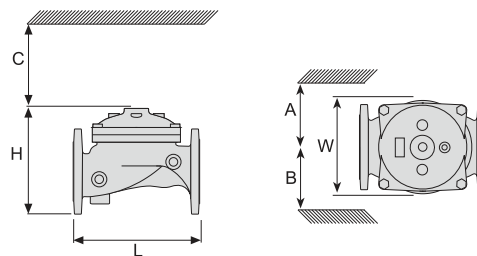


### Features and Benefits

- 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, continuously sensing the downstream pressure and controlling the valve accordingly. Providing stable, reliable and accurate pressure modulation in wide range of flow-rates and varying pressure levels
- Pressure modulation by the line pressure hydraulic force, no external power source is needed
- Pilot and control loop constructed from heavy duty environment friendly materials for long lasting and reliable operation

### Technical Data

Size		Kv	A,B	C	L	H	W			Weight (kg)	
DN	Inch						Thr	Fla	Gro	Th/Fl	Gro
50	2"	57	330	68	205	155	119	155	119	9	5
65	2½"	78	340	110	205	178	129	178	n/a	10.5	10.5
80	3"	136	350	125	250	210	170	200	170	19	10.6
100	4"	204	360	145	320	242	n/a	223	204	28	16.2
150	6"	458	400	205	415	345	n/a	306	306	68	49
200	8"	781	430	260	500	430	n/a	365	n/a	125	125



### End Connections:

**Grooved:** ANSI C606

**Flanged:** ISO 7005-2 (PN10 & 16); ANSI B16.42 (#150)

**Threaded:** ISO-7-Rp or NPT

**Others:** Available on request

**Pressure Rating:** 16 bar (230 psi)

**Valve Pattern:** Globe & Angle (2"-4")

**Working Temperature:** Water up to 60°C (140°F)

### Main Construction Materials:

**Body, Cover and Actuator:** Ductile Iron

**Internals:** Stainless Steel & Elastomer

**Control Trim System:** Brass control components / accessories

Copper & Brass tubing & fittings

Optional: Stainless Steel 316

**Elastomers:** Nylon fabric Reinforced NR with rugged insert

**Coating / colour:** Electrostatic Polyester Powder Blue

Optional: Epoxy Fusion-Bonded Blue

For other optional materials consult BERMAD

### How to Order

Please specify the requested valve in the following sequence:

Size	Model	Category	End Connections
	430	BP	
2" 2½" 3" 4" 6" 8"			<b>Flanged</b> ISO-16 16 ANSI-150 A5 ABNT-16 B6 <b>Threaded</b> BSP BP NPT NP <b>Grooved</b> ANSI C606 V1



For full technical specifications, see Engineering section or consult BERMAD

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