

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.

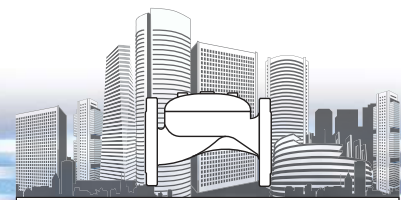
BERMAD 400 series valves are hydraulically operated, simple and reliable, globe valves with full bore hydrodynamic body providing an unobstructed flow path and superior performance. The valves balanced rolling-diaphragm assembly is vulcanized with a rugged radial seal disk construction, performing as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

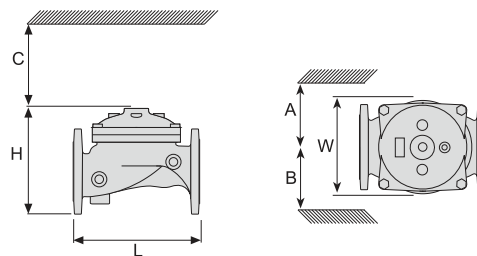


Features and Benefits

- 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 |
|------|-------|----------|----------------------|
| 2" | 430 | BP | Flanged ISO-16 16 |
| 2½" | | | ANSI-150 A5 |
| 3" | | | ABNT-16 B6 |
| 4" | | | Threaded BSP BP |
| 6" | | | NPT NP |
| 8" | | | Grooved ANSI C606 V1 |



For full technical specifications, see Engineering section or consult BERMAD

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