PRESSURE RELIEF / SUSTAINING VALVE

Model 830



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 800 series valves are hydraulically operated, piston actuated globe valves for high pressure. Their full-bore body ensures unobstructed flow, and they are available in various models, sizes, patterns, and end connections.

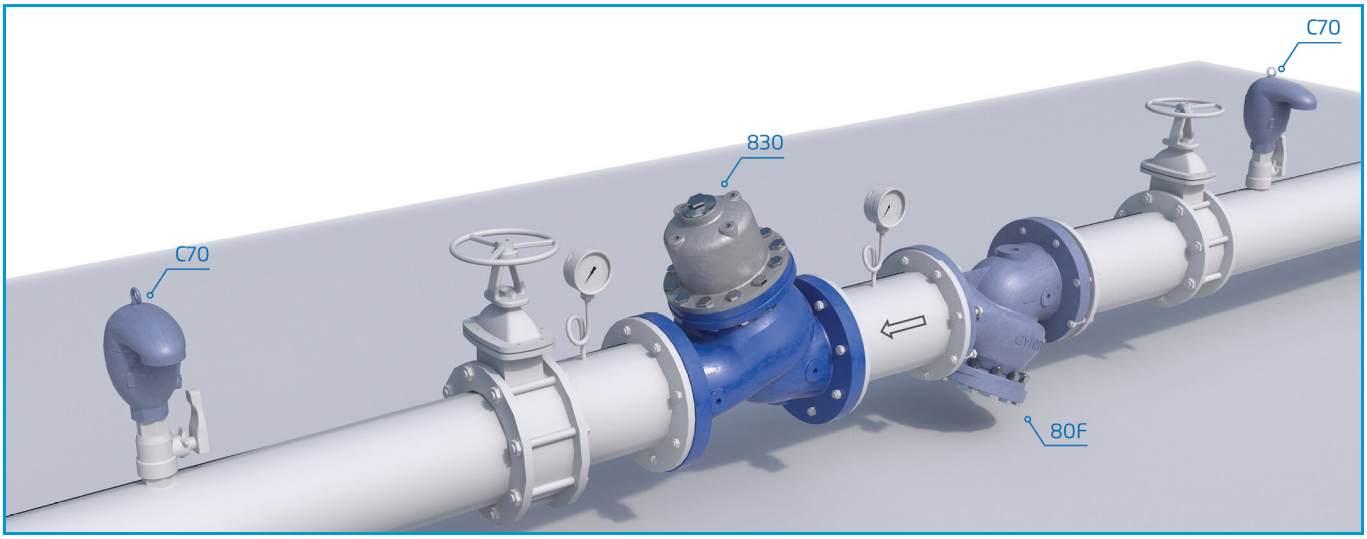
Features & Benefits

- Robust structure, piston actuated – High pressure service
- Line pressure driven – Independent operation
- Elegant simplicity
  - Cost effective
  - Simple to maintain
  - Minimal external accessories
- In-line serviceable - Easy maintenance
- Double chamber design
  - Moderated valve reaction
  - Moderated closing curve
- Flexible design - Easy addition of features
- Semi-straight flow – Non-turbulent flow
- Stainless Steel raised seat - Cavitation damage resistant
- Obstacle free, full bore – Uncompromising reliability
- V-Port throttling plug (optional) - Very stable at low flow

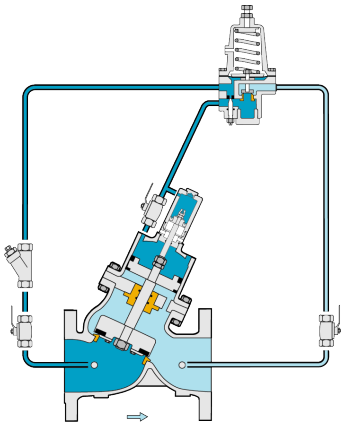
Typical Applications

- Water delivery system - Prioritizing upstream over downstream demand
- Pumping stations - Ensure operating point on pump curve
- Pumping stations - Circulation during low demand
- Filtration system - Sustaining minimum pressure for efficient backflush

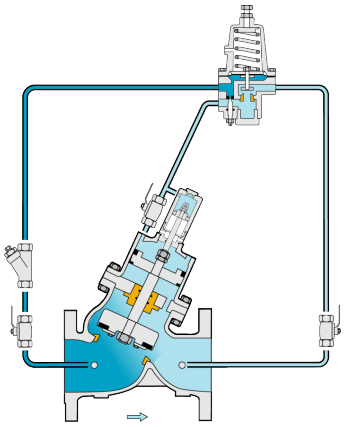
Typical Installation



All images in this catalog are for illustration only



Closed



Regulating

This drawing refers to 1½ – 14"; DN40-350 sized valves only. For other sizes please refer to the Model's IOM.

Main Valve

Size Range: 1½-20"; 40-500 mm
Pattern: "Y" (globe) & "A" (angle)
Pressure Rating: 40 bar
End Connection: Flanged, Grooved
Plug Types: Flat disc, V-port, Cavitation cage
Temperature Rating: 80°C
For 60–80°C consult factory

Standard Materials:

Body & Cover: Ductile Iron (1½-10"; 40-250 mm) ; Cast Steel (12-20"; 300-500 mm) & Stainless Steel Cover
Bolts, Nuts & Studs: Stainless Steel
Internals: Stainless Steel & Tin Bronze
Seals: Synthetic rubber
Coating: Dark blue Fusion bonded epoxy
For other materials contact BERMAD

Control System

Standard Materials:

Accessories: Stainless Steel, Bronze & Brass
Tubing: Stainless Steel or Copper
Fittings: Stainless Steel or Brass

Pilot standard materials:

Body: Stainless Steel, Bronze & Brass
Elastomers: Synthetic Rubber
Internals and Spring: Stainless Steel

Pilot Options:

Various pilots and calibration springs are available.
Select according to valve size and operating conditions.
For more details check relevant pilots product pages.

Notes

- Inlet Pressure, Outlet Pressure and Flow-rate are required for optimal sizing and cavitation analysis.
- Recommended continuous flow velocity: 0.1-6.0 m/sec; 0.3-20 ft/sec.
- Minimum operating pressure: 0.7 bar; 10 psi. For lower pressure requirements consult factory.

For detailed Engineering & Specification data, IOM and CAD Drawings, visit the Model Page on the BERMAD website.

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