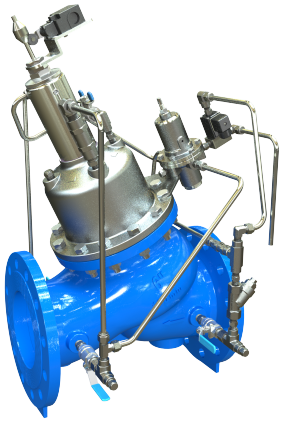
BOOSTER PUMP CONTROL AND PRESSURE SUSTAINING VALVE

with Active Check Valve

Model 843

Hydraulically operated, piston-actuated, active check, pump control & pressure sustaining valve with two independents functions: It opens fully or shuts off in response to electric signals, isolating the pump from the system during pump startup and shutdown, thereby preventing pipeline surges. While open, it sustains minimum pump discharge pressure regardless of fluctuating flow, and prevents the pump from exceeding its designed flow or power consumption.

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

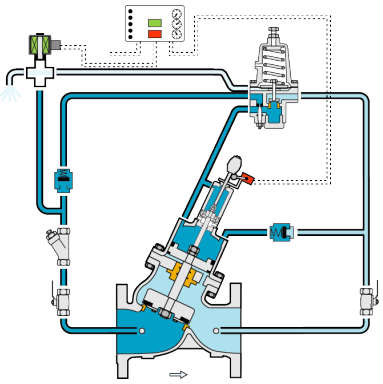
Typical Applications

- Pumping stations - Controls pump start-up and shut-down
- Pumping stations - Ensure operating point on pump curve

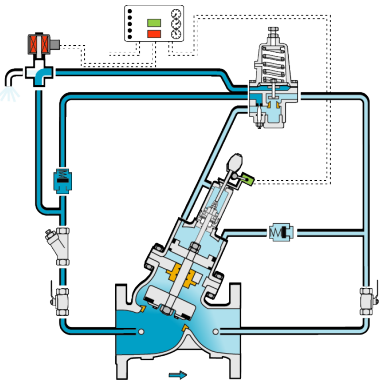
Typical Installation



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

Solenoid standard materials:

Body: Brass or Stainless Steel
Elastomers: NBR or FPM
Enclosure: Molded Epoxy

Solenoid Electrical Data:

Voltages:
(AC): 24, 110-120, 220-240, (50-60Hz)
(DC): 12, 24, 110, 220
Power Consumption:
(AC): 30VA, inrush; 15VA (8W), holding or 70VA, inrush; 40VA (17.1W), holding
(DC): 8-11.6W
Values may vary according to specific solenoid model.
For more details check solenoid product page.

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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